City of St. John's

Rennies River Flood Mitigation

Long Pond Flow Control Structure and Flood Mitigation

Environmental Assessment Registration Document

CBCL

ST. JOHN'S

Project No. 213023 • January 2022

	Final	L. Hardwick	2022/01/14	M. Rutherford A Coldham
	Draft	L. Hardwick	2021/09/13	M. Rutherford A Coldham
Issue or Revision		**Reviewed By:**	**Date**	**Issued By:**

This document was prepared for the party indicated herein. The material and information in the document reflect CBCL Limited's opinion and best judgment based on the information available at the time of preparation. Any use of this document or reliance on its content by third parties is the responsibility of the third party. CBCL Limited accepts no responsibility for any damages suffered as a result of third-party use of this document.

Report: 213023.00

CBCL
Solutions today | Tomorrow IN mind
187 Kenmount Road, St. John's, NL A1B 3P9
709-364-8623 | CBCL.ca | info@CBCL.ca

CANADA BEST MANAGED COMPANIES
Platinum member

January 14, 2022

Joanne Sweeney
Dept. of Environment and Climate Change
PO Box 8700
St. John's, NL A1B 4J6

Dear Ms. Sweeney:

RE: City of St. John's – Long Pond Flow Control Structure and Flood Mitigation Environmental Assessment (EA) Registration Document
CBCL Project # 213023.00

Enclosed is our application and associated materials required for your review of the Environmental Assessment Registration Document for the above noted project. If you have any questions or require clarification, please contact us.

Yours very truly,

CBCL Limited

Prepared by:
Melissa Rutherford
Environmental Scientist
Direct: 902-421-7241 Ext. 2574
E-Mail: mrutherford@cbcl.ca

Reviewed by:
Greg Sheppard, P. Eng.
Senior Civil Engineer
Direct: 709-364-8623
E-Mail: gregs@cbcl.ca

Project No: 213023.00

Contents

Tables

Figures

Appendices

Table of Concordance

Checklist for Prescribed Information

Please see the report sections indicated in the table below to find the required information for registration of an undertaking pursuant to the *Environmental Protection Act* and the *Environmental Assessment Regulations*.

Required Information	Section
Name of Undertaking	Chapter 1
Project Name	Chapter 1
Proponent	Chapter 1
(i) Name of Corporate Body	Section 1.1
(ii) Address	Section 1.1
(iii) Chief Executive Officer and contact information	Section 1.1
(iv) Principal Contact Persons for purposes of environmental assessment and contact information	Section 1.1
The Undertaking	
(i) Name of the Undertaking	Chapter 1 and Section 2.1
(ii) Purpose/Rationale/Need for the Undertaking	Section 2.2
Description of the Undertaking	Chapter 3
(i) Geographical Location	Section 3.1 Figure 3.1
a. Description of the proposed site	Section 3.1
b. Map at large scale (e.g., 1:12,500) original base map(s) and/or recent air photos. The National Topographic Survey edition should be affixed to the map(s).	Figure 3.2
(ii) Physical Features	Section 3.2
a. Major physical features of the undertaking	Section 3.2.1
b. Area to be affected by the undertaking	Section 3.2.1
c. Conceptual drawing layout	Figure 3.3 Appendix B
d. Physical and biological environments within the area potentially affected by the project	Section 3.2.2 Appendix A Appendix C Appendix D Appendix E Appendix F
(iii) Construction	Section 3.3
a. Approximate Construction Stages and total construction period	Section 3.3 Chapter 5
b. Date of first proposed physical construction related activity on site	Section 3.3 Chapter 5
c. Potential sources of pollutants during the construction period(s)	Section 3.3.1
d. Potential causes of resource conflicts	Section 3.3.2

Required Information		Section
(iv)	Operation	Section 3.4
	a. Description of how the undertaking will operate	Section 3.4
	b. Period of operation, if not a permanent facility	Section 3.4
	c. Potential sources of pollutants during the operating period	Section 3.4.1
	d. Potential causes of resource conflicts	Section 3.4.2
(v)	Occupations	Section 3.5
	a. Estimate the number of employees required for the construction and operation of the project, including the expected duration of employment	Section 3.5.1, and 3.5.2
	b. Enumeration and breakdown of occupations according to the National Occupational Classification	Section 3.5.1, and 3.5.2
	c. Identification of employment type (direct hiring and/or contracting out.)	Section 3.5.1, and 3.5.2
	d. Approach to employment equity will be addressed relative to age and gender.	Section 3.5.3
(vi)	Project Related Documents:	Section 3.7
	a. Bibliography of all project-related documents	Section 3.7.1
	b. Copies of reports on environmental studies and surveys.	Section 3.7.2
Approval of the Undertaking		
(i)	Main permits, licences, approvals, and authorizations required for the undertaking, including issuing authorities	Chapter 4
Schedule		
(i)	Project Schedule including construction and operations	Chapter 5
(ii)	Rational for the selection of Project Schedule	Chapter 5
Funding		
(i)	Government agencies (federal, provincial, or other) providing funding, including name and address of the department or agency from which funds have been requested.	Chapter 6
(ii)	Estimate of the capital costs of the project	Chapter 6
Additional Information		
Floodplain mapping for the following annual exceedance probability (AEP) scenarios without the flow control structure or additional structures; and with the flow control structure and additional structures (6 modelled floodplains): 1:20 year Climate Change 1:100-year Climate Change 1:100-year Climate Change AEP flow plus 30 per cent		Appendix A Figure 3.5 Figure 3.6 Figure 3.7
Descriptions of any consultations undertaken prior to application		Section 3.6, Appendix H
Alternatives to the Project		Section 2.3
Mitigation Measures		Appendix G

Chapter 1 Introduction

The City of St. John's (the City) is proposing to construct a flow control structure and associated flood mitigation infrastructure (the Project or Undertaking) as part of the overall stormwater management along Rennies River in St. John's, Newfoundland and Labrador (NL). The primary objective of the Project is to provide protection from flooding that occurs because of extreme precipitation events and reduce potential damage to infrastructure and properties.

CBCL Limited (CBCL) has prepared this document for submission to NL Environment, Climate Change and Municipalities (NLECCM) as an Environmental Assessment Registration Document (EARD) to meet, or exceed, the requirements of the NL *Environmental Protection Act* (EPA) and *Environmental Assessment Regulations* (EA Regulations). The EA Regulations designate undertakings that must be registered, including construction of a dyke, levee, or other flood control structure. For this Project, a flow control structure is proposed at the outlet of Long Pond, and a cast-in-place concrete wall and two earth berms (dykes or levees) are proposed between Clinch Crescent and Prince Philip Drive.

1.1 Project and Proponent Information

The proposed Project title is the "Rennies River Flood Mitigation Project – Long Pond Flow Control Structure". The contact information for the proponent is provided in Table 1.1 and contact information for the consultant of this EARD is provide in Table 1.2.

Table 1.1 Proponent Contact Information

Role	Name / Title	Address/Contact Info
Proponent	City of St. John's	10 New Gower Street St. John's, NL A1C 5M2
Principal Contact Representative	Scott Winsor, P. Eng. Director of Engineering	10 New Gower Street, St. John's, NL A1C 5M2 Telephone No: 709-576-8258 Email: swinsor@stjohns.ca
Mayor	Danny Breen Mayor	10 New Gower Street, St. John's, NL A1C 5M2 Telephone No: 709-576-8477 E-mail: mayor@stjohns.ca

Table 1.2 Project Consultant Contact Information

Role	Name / Title	Address/Contact Info
CBCL Limited Project Lead	Greg Sheppard Senior Civil Engineer	187 Kenmount Rd St. John's, NL A1B 3P9 Telephone No: 709-364-8623 Email: gregs@cbcl.ca
CBCL Limited Regulatory and Environmental Lead	Melissa Rutherford Environmental Scientist	1505 Barrington Street, Suite 901 Box 606 Halifax, NS B3J 2R7 Telephone No: 902-421-7241 x 2574 Email: mrutherford@cbcl.ca

Chapter 2 The Undertaking

The City is proposing to carry out this Undertaking to reduce flooding and associated effects along Rennies River from Clinch Crescent to Quidi Vidi Lake.

2.1 Name of the Undertaking

The City of St. John's Rennies River Flood Mitigation Project – Long Pond Flow Control Structure.

2.2 Purpose/Rationale/Need for the Undertaking

The Undertaking consists of one flow control structure at the outlet of Long Pond (earth berm with an inverted, open-bottom, box-shaped culvert opening) and associated flood mitigation infrastructure (one cast-in-place concrete wall and two earth berms). The works take place within the section of Clinch Crescent East to the west side of Prince Philip Drive (Section 3.2.1) of the 32 km^2 Rennies River watershed. The flow control structure at the outlet of Long Pond is a crucial component of flood protection improvement in the watershed. Constructing the flow control structure will result in the temporary storage of water in Long Pond during a storm event as water will be released downstream into Rennie's River at a reduced flow rate. The storage capacity of Long Pond will be increased temporarily during a storm event but will return to its normal level a short time after the end of a storm (CBCL, 2014).

The Rennies River watershed has been subject to major flood events caused by river flooding. One of the earlier major flood events recorded was in 1986, when 110 mm of rainfall caused flooding along Leary's Brook and Rennies River (CBCL, 2014). Increasing urbanization in the Rennies River watershed, more frequent and intense precipitation events, and anticipated increase in precipitation frequency and intensity due to climate change are expected to result in an increase in risk of flood damage along Rennies River (NSECCM, 2014). To reduce flood risk and take action to safeguard residential dwellings and community infrastructure against potential economic loss, the City is proposing to construct a flow control structure across the outlet of Long Pond to protect areas downstream of Long Pond from flooding created by a 1:100 annual exceedance probability

(AEP) climate change (CC) event. The additional infrastructure (cast-in-place wall and two earth berms) are intended to mitigate flood damage to nearby infrastructure due to water retention created by the flow control structure during a storm event.

In April 2014, on behalf of the City, CBCL completed the Rennies River Catchment Stormwater Management Plan (RRCSMP). The RRCSMP identified that during significant rainfall events, flooding occurs at locations along Rennies River, as well as Ken Brook and Leary's Brook, at times resulting in major public and private property damage (CBCL, 2014). The RRCSMP identified a prioritized list of flood protection infrastructure improvements including the Long Pond flow control structure. The City and other stakeholders have elected to proceed with the implementation of flood protection works in phases, including the flood protection berms around the Health Sciences Centre (currently under construction), and flood protection berms downstream of Long Pond (Rennies River Flood Mitigation Project: Kings Bridge Road to Portugal Cove Road, currently undergoing the environmental assessment process).

A weir along the downstream side of Long Pond, upstream of Allandale Road, was initially registered in February 2015. The City is now proposing the submission of an EARD for a revised passive flow control structure located between Allandale Road and Prince Phillip Drive, along with additional flood mitigation infrastructure between Clinch Crescent and Prince Philip Drive.

2.3 Alternatives

The 2014 RRCSMP identified flood protection measures based on field surveys, and hydrologic and hydraulic models. Flood flows corresponding to the 1:20 and 1:100 AEP precipitation events, including the effects of climate change, were estimated with a hydrologic model. Model inputs included watershed areas, slopes, percentage of impervious land, surface roughness, infiltration parameters, and rainfall hyetographs (precipitation time series). The physical characteristics of each sub-catchment were estimated using topographical survey data, aerial imagery, and LiDAR data. Conceptual designs and preliminary cost estimates for optimum flood and erosion control were also identified as part of the RRCSMP.

The City is in the process of implementing the measures as identified in the RRCSMP. However, sequencing of the measures have varied to meet the immediate needs for protection of important infrastructure, such as the Health Science Centre Berms and residential properties, such as the Rennies River Flood Mitigation Portugal Cove Road to Kings Bridge Road project, due to safety concerns. The construction of other flood mitigation measures is dependant on the construction of a flow control structure at the outlet of Long Pond (as included in the EARD), as well as available funding and overall priorities. The City also intends to develop the other aspects of the overall Rennies River Flood Mitigation strategy as identified in the RRCSMP, pending available funding.

Structural methods of preventing flooding were assessed as alternatives to the Project. Table 2.1 describes the potential alternatives and the preferred option investigated within the assessment area of Clinch Crescent West to Quidi Vidi Lake (Assessment Area), derived from hydrologic and hydraulic models including the following:

Containment

- Berms or Levees

Storage Capacity to Control Flow

- Flow Control Structures on existing waterbodies (selected option supported by Containment options)
- Flood Control Reservoirs

Conveyance Capacity Upgrades

- Channel Modifications

Relocation and/or Raising of Vulnerable Structures

- Relocation and/or Raising of Vulnerable Structures

The proposed Project was ultimately selected as it provided the most significant reduction of flooding within the Assessment Area, by temporarily storing water within Long Pond and allowing water to be released at a slower rate through the flow control structure, than without a flow control structure in place. The temporary storage of water results in the development of additional encroachment of the floodplain toward roads, and other infrastructure upstream of the flow control structure; therefore, additional berms have been identified as mitigations to additional potential flooding.

An added benefit of the Project is that, following the approval and construction of the Long Pond flow control structure, additional flood protection berms can be constructed downstream with the following advantages:

- Reduce the required berm heights and areas (i.e., footprint) for future additional berms.
- Reduce the potential of fish habitat alteration or loss.
- Reduce potential removal of mature trees along the riverbanks.
- Reduce encroachment of berms on recreational areas, such as park and tennis courts.
- Reduce the need to acquire properties or portions of properties.

Upon evaluation of the alternatives (Table 2.1), the other options were impractical due to a combination of factors such as space limitations within the watershed, land ownership, and potential damage to the natural environment.

Table 2.1 Alterative Assessment

Proposed Improvements	Purpose / Requirements	Advantages	Disadvantages	Overall Assessment of Alternative
Null	N/A	• Does not require additional effort, resources, or funding.	• Does not provide flood projection within the Rennies River Watershed. • Flooding effects are likely to increase with climate change. • Could result in negative effects to land use, vegetation, fish and fish habitat, wildlife, and other land-users.	• Not selected as it does not improve flooding.

Berms or Levees	• Flood mitigation berms or levees are engineered berms used to restrict surplus water to a smaller area, reducing or controlling an area than would be flooded in absence of their protection.
	• Typically installed near watercourses, or wetlands, and other areas prone to flooding risk.
	• Various types of structures available, such as:
	  ○ Earth berm with an engineered slope
	  ○ Case-in-place concrete wall
	  ○ Segmented concrete wall
	• Design will need to consider that it does not result increased flow velocities from the containment water.
		• Berms can temporarily contain flooding.
		• Engineered slopes of earth berms can be vegetated to blend into the existing environment.
		• Engineered walls, such as retaining walls and hydraulic rip rap, require less space.
		• The height of the structure can be increased in phases in the future when water levels exceed the height of the proposed improvements.
			• Alterative could result in increased flooding in the localized area or upstream of the structure.
			• Structures are typically constructed adjacent to watercourse and can result in potential alteration of riparian areas or waterbodies.
			• Sufficient space is required to install an engineered slope to mitigate release of materials that may be harmful to fish habitat.
			• Could result in negative effects to surface water and surface water management; land use; vegetation; fish and fish habitat; wildlife and other land-users without appropriate mitigation measures.
				• Not selected as primary method for improving flooding or reducing effects of flooding, as installing berms along the entire watercourse is not possible due to the required space, cost, and potential effects to the watercourse.
				• Berm or Levees should be considered in combination with other flood control measures, as the number of berms and required heights and sizes can be reduced.

Flow Control Structure on a waterbody (SELECTED ALTERATIVE)	• A flow control structure on waterbody would allow water to be temporarily stored during a storm event and released at a lower flow rate than the flow rate would be without a flow control structure in place. • Requires a waterbody, with storage capacity, where water could be temporarily stored, such as Long Pond.	• Highest reduction of flooding potential (CBCL, 2014). • The major benefit is that the peak flows downstream of Long Pond will be reduced. • Reduction of flows and temporary retention of water can result in reduced costs associated with the implementation of flood control options at locations downstream. For example, berms or walls proposed at locations downstream of Long Pond. • Only requires an increase in water storage for a short period of time during a storm event that will return to normal water levels a short time after the end of a storm.	• Flow control structure alone does not reduce flow enough to prevent downstream flooding. Option will need to be implemented with other flooding mitigation alternatives. • Structures are typically constructed adjacent to watercourse and can result in potential alteration of riparian areas or waterbodies. • Alterative could result in increased flooding in the localized area or upstream of the structure. • Could result in negative effects to surface water and surface water management; land use; vegetation; wetlands, fish, and fish habitat; wildlife and other land-users without appropriate mitigation measures.	• Selected as primary method for improving flooding or reduction of effects of flooding. • The structure was proposed to include the incorporation of an earth berm represent more natural conditions and provide erosion protection. • Structure was proposed after the outlet of Long Pond to minimize effect to Long Pond. • These methods when considered in combination with other flood control measures, such as berms, reduce risks of flooding downstream. Additionally, it may reduce the number of berms and required heights and sizes.

Proposed Improvements	Purpose / Requirements	Advantages	Disadvantages	Overall Assessment of Alternative
Flood Control Reservoirs	• A constructed flood control reservoir can be used to temporary store flood waters, reducing the magnitude of the peak discharge and peak stages downstream of the reservoir. • This alterative requires space for installation of the reservoirs and is dependant on the amount of water required to be held. Further, suitable topography is required.	• An advantage is reducing the magnitude of the peak discharge downstream of the reservoir. • Reduction of flows, and temporary retention of water can result in reduced costs associated with the implementation of flood control options at locations downstream. For example, berms or walls. • Storage only required a short period of time during a storm.	• There was little space between Clinch Crescent and Quidi Vidi Lake suitable for water retention by use of a flood–control reservoir (CBCL, 2014).	• This option was not selected as there are no available areas to allow for the construction of a Flood Control reservoir around the flooding impacted area. • A site located west of Clinch Crescent was suggested as an option during previous consultation, unfortunately, the location demonstrated little water retention capacity as the space already floods (CBCL 2014) and is at a similar elevation to the surrounding areas. As a result, this alternative was given no further consideration.
Channel Modification	• Channel modifications, such as deepening and/ or widening, can increase the capacity of a stream channel, which may result in lower water levels at the area of concern. • Construction would require the channel modifications to the Rennies River and Leary's Brook, using activities such as dredging or channel widening.	• Increasing the flow capacity of the channel which passes water through the system more quickly.	• May result in higher flows reaching the downstream areas, increasing the risks of flooding at these locations. • Channel modifications would be required in the whole river system and could result in impacts to the aquatic and riparian zones, such as removal of naturally graded rock and gravel, and modifications of the natural low flow pool and riffle system which is critical for fish survival during summer low flows. • Additional upgrade to bridges and culvert may be required if velocities increase. • Could result in negative effects to vegetation, wetlands, wildlife, and other land-users without appropriate mitigation measures.	• Not selected as primary method for improving flooding or reduction of effects of flooding which is likely to result in acceptable effects to Fish and fish habitat.
Relocation and/or Raising of Vulnerable Structures	• Relocation and/or raising of vulnerable structures, such as roads, properties, relocation of infrastructure, or procurement of homes within the affected areas. • The requirement may vary depending on the structures being raised or relocated.	• Reduces the number of vulnerable structures at risk.	• The alternative would be costly for the raising of properties and infrastructure, and potential procurement of properties. • Modification could result in additional flooding elsewhere within the surrounding areas. • The requirement for raising properties and relocation of structures at risk would likely not be well received by the community.	• This option was not selected as it was not considered viable, due to cost and reception by the community.

Chapter 3 Description of the Undertaking

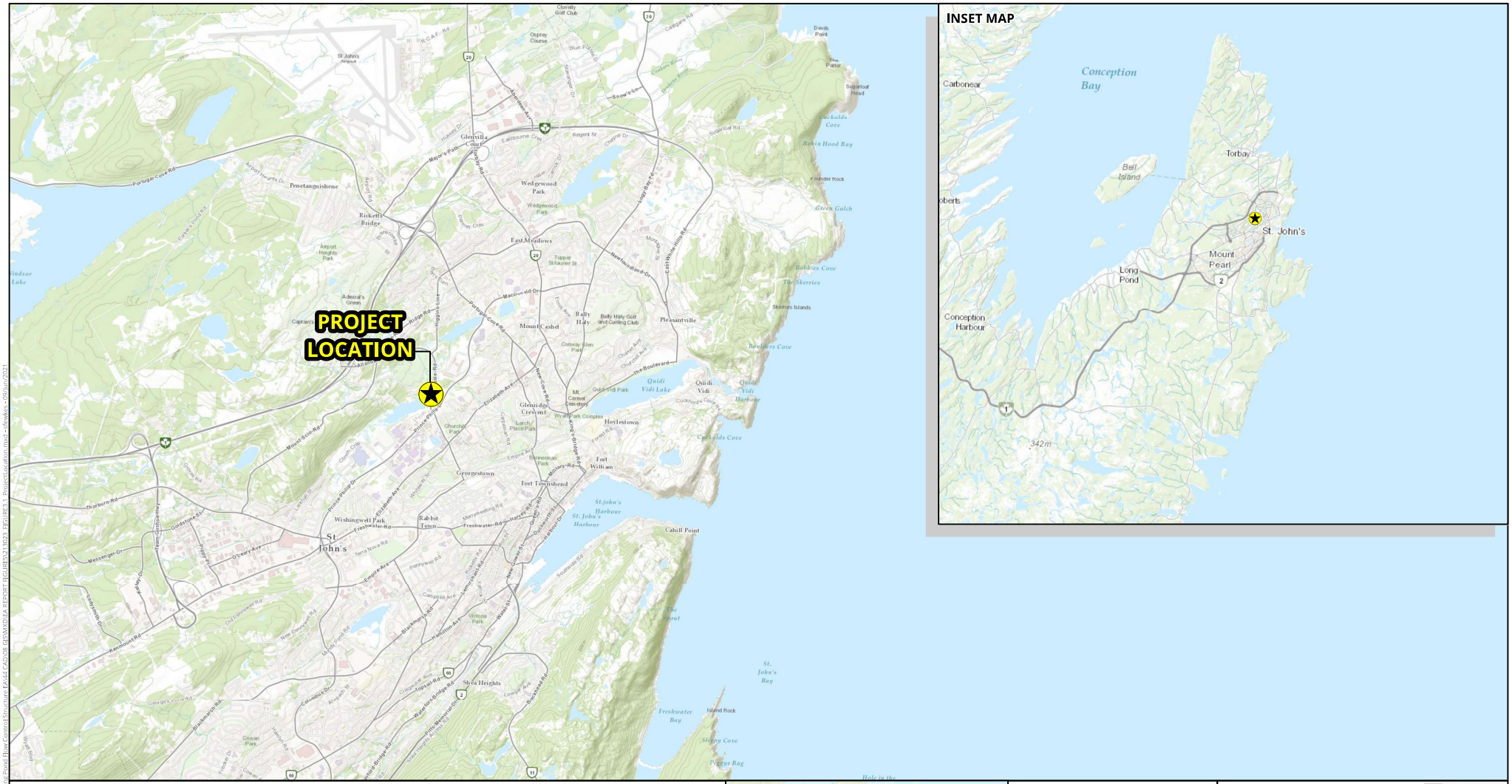
The Project consists of one flow control structure at the outlet of Long Pond, one cast-in-place concrete wall, one earth berm upstream of Long Pond, and one earth berm downstream of Long Pond along Prince Philip Drive. The berm locations were selected based on the results of hydraulic modelling.

3.1 Geographic Location

The Project is in St. John's, NL (Figure 3.1). The Project area extends along the north side of Clinch Crescent adjacent to the Health Sciences Centre to the west side of Prince Philip Drive, approximately 1,500 m along Leary's Brook, Long Pond, and Rennies River (Figure 3.2).

From Clinch Crescent, Leary's Brook flows around the south of the Health Sciences Centre, where it turns north / northwest around the National Research Council of Canada (NRC) Building before it flows northeast and enters Long Pond, a 4,000 m^2 waterbody. Long Pond extends approximately 775 m east to west from the mouth of Leary's Brook to the beginning of the Rennies River, with a maximum width of approximately 200 m. On the south side of Long Pond, the Rennies River flows under the Allandale Drive bridge and the Prince Philip Drive bridge before heading downstream to a residential area and entering Quidi Vidi Lake (Figure 3.2).

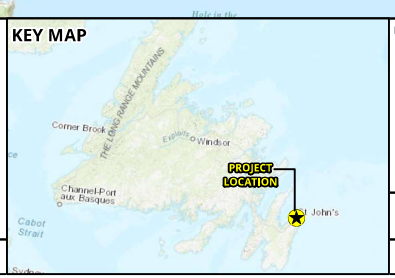
The geographical coordinates of the flow control structure and associated flood mitigation infrastructure are provided in Table 3.1. The flow control structure is located at the east end of (i.e., the outlet of) Long Pond, slightly east of the Allandale Road Bridge. The cast-in-place concrete wall is located on the northeastern side of Clinch Crescent. One earth berm will be constructed northeast of the NRC building and the other is located parallel to Prince Philip Drive on the north side of Rennies River, downstream of Long Pond.



LEGEND

0 1,150 2,300 4,600 6,900 9,200 Metres

KEY MAP



NOTES:

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

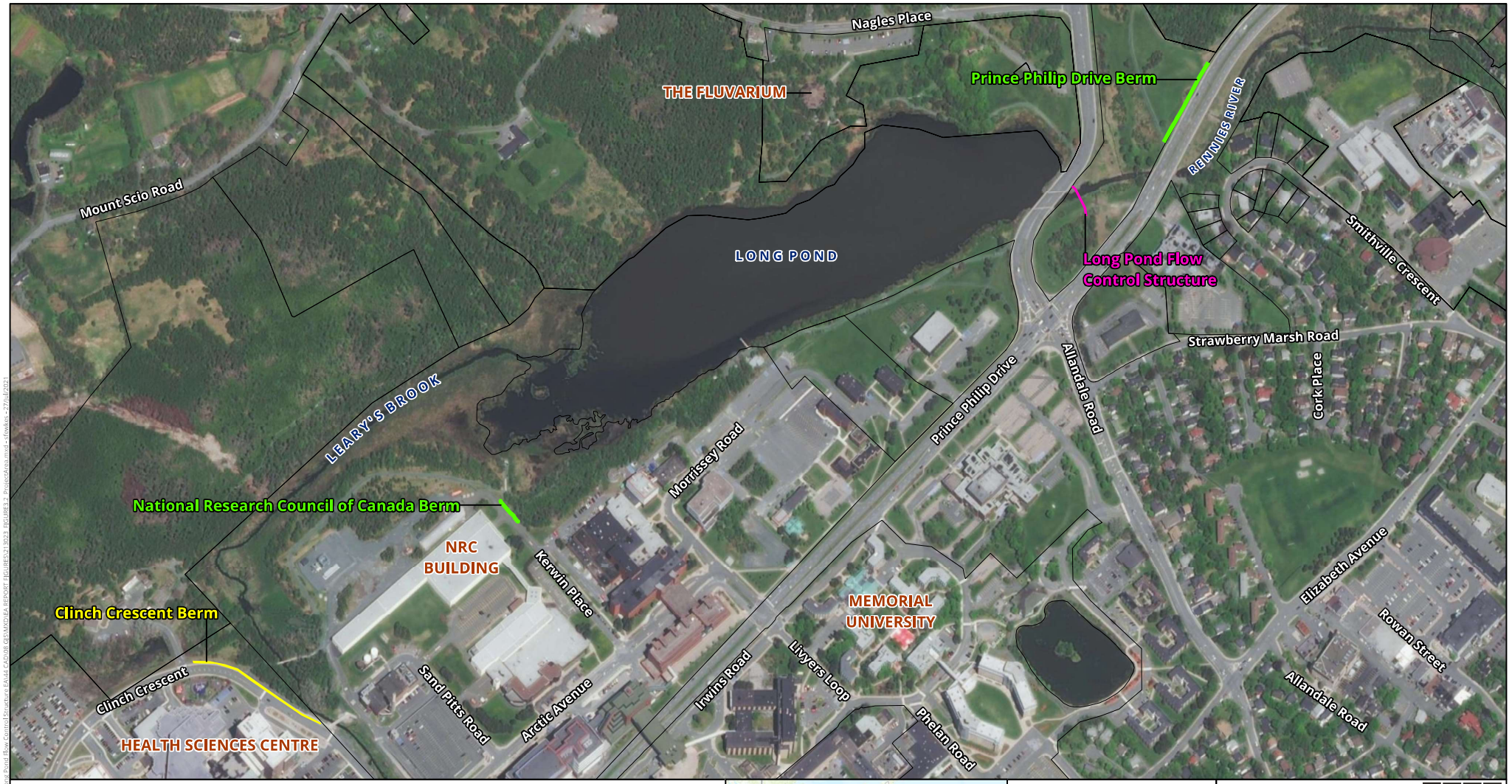
CSJ LONG POND FLOW CONTROL STRUCTURE EA

Project Location

PROJECT N°: 213023 | FIGURE: 3.1

SCALE:1:50,000 | DATE: Jun 2021

Document Path: Y:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3.1_ProjectLocation.mxd - sfewkes - 09/Jun/2021

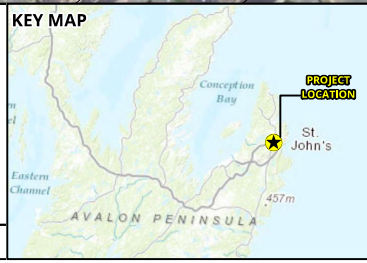


LEGEND

- Earth Berm
- Earth Berm With Concrete Opening
- Cast-In-Place Concrete Wall
- Property Boundaries

0 100 200 400 600 800 Metres

KEY MAP



NOTES:

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

Project Area & Location of Infrastructure

PROJECT N°: 213023	FIGURE: 3.2
SCALE:1:4,300	DATE: Jul 2021

Document Path: X:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3 ProjectArea.mxd - sfewkes - 27/Jul/2021

Table 3.1 Flood Mitigation Structure Coordinates

Structure ID	Structure Type	Coordinates NAD 1983 MTM 1 (End 1)	Coordinates NAD 1983 MTM 1(End 2)
Long Pond Flow Control Structure	Earth Berm with Concrete Opening	370022.78 m E 5270952.24 m N	370039.26 m E 5270916.35 m N
Clinch Crescent	Cast-In-Place Concrete Wall	368976.82 m E 5270386.08 m N	369128.97 m E 5270312.79 m N
NRC	Earth Berm	369341.37 m E 5270579.70 m N	369365.15 m E 5270551.46 m N
Prince Philip Drive	Earth Berm	370184.87 m E 5271099.43 m N	370131.72 m E 5271004.52 m N

The design of the cast-in-place concrete wall and two earth berms will be constructed to reflect the curvature of the roads beside which they will be constructed (Figure 3.2).

3.2 Physical Features of the Undertaking

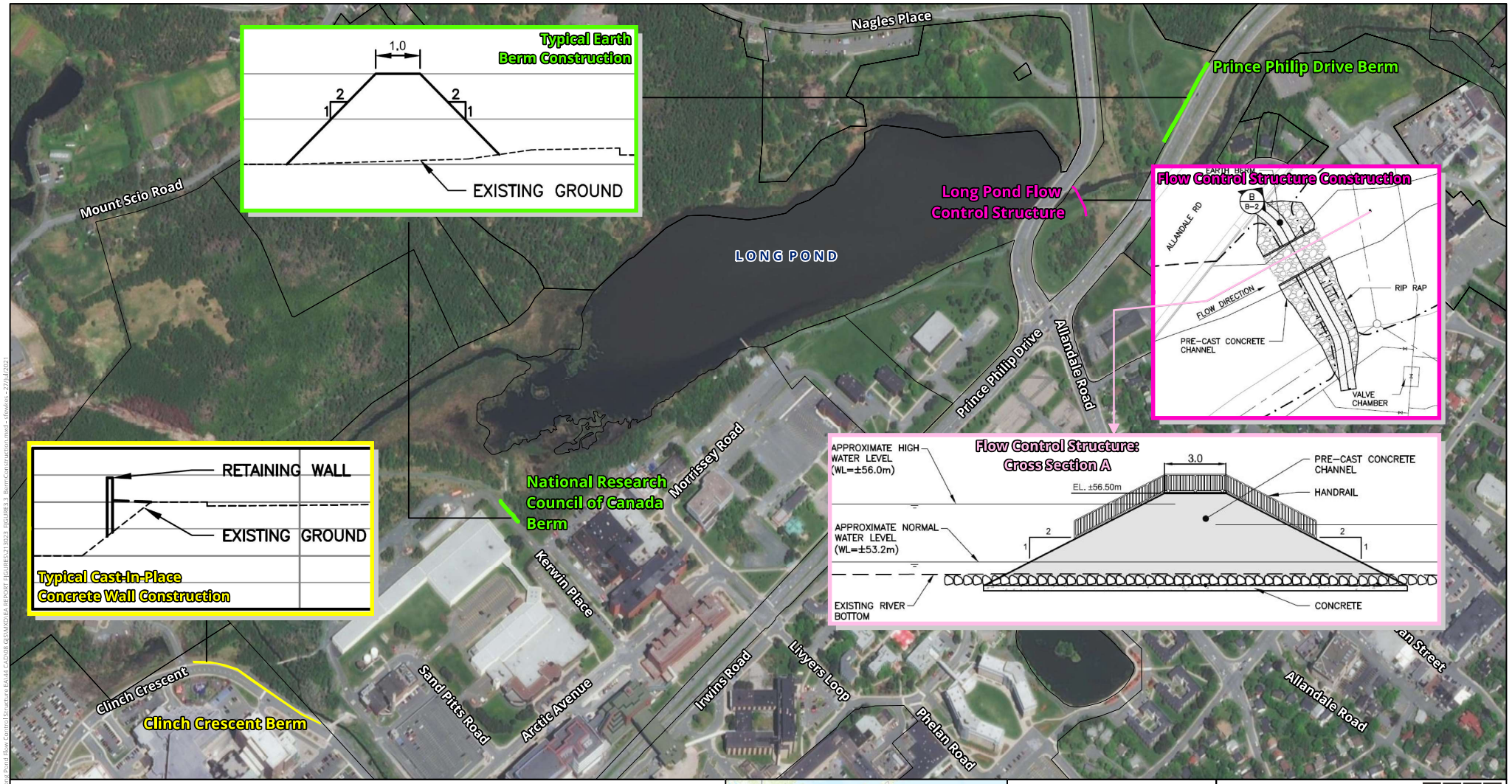
The following section outlines the physical features of the undertaking including a description of the Project, and physical and biological setting of the Project area.

3.2.1 Description of the Project

The Project includes the following main pieces of infrastructure (Figure 3.3):

- Flow control structure
- Prince Phillip Drive Earth Berm
- NRC Earth Berm
- Clinch Crescent Cast-in-place

The flow control structure and berms upstream of the flow control structure (NRC Earth Berm and Clinch Crescent Cast-in-place) are designed to accommodate a 1:100 AEP CC plus 30% flow event, and the Prince Phillip Drive Earth Berm to accommodate a 1:100 AEP CC flow event. The exact area required for each structure/berm will be determined following further design. The dimensions of each individual structure/berm will vary laterally and vertically and will depend on the nature of the sited location. A summary of the lengths and sizes for each structure/berm are provided in Table 3.2. The infrastructure will be designed to prevent erosion and the release of material that may harm fish and fish habitat.

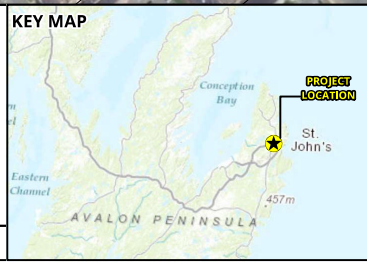


LEGEND

- Earth Berm
- Earth Berm With Concrete Opening
- Cast-In-Place Concrete Wall
- Property Boundaries

0 100 200 400 600 800 Metres

KEY MAP



NOTES:

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

Construction Details

PROJECT N°: 213023	FIGURE: 3.3
SCALE:1:4,300	DATE: Jul 2021

Table 3.2 Conceptual Flood Mitigation Infrastructure

Structure ID	Structure /Berm Type	Proposed Materials	Approximate Length (m)	Approximate Height of Structure (m)
Long Pond Flow Control Structure	Earth Berm with Concrete Opening	Granular Fill, Concrete, Rip Rap	108	0.6 m
Clinch Crescent	Cast-in-place Wall	Concrete	173	0.6 m
NRC	Earth Berm	Granular Fill	36	0.6 m
Prince Philip Drive	Earth Berm	Granular Fill	40	0.6 m

The flow control structure is designed to reduce the flow rate of water entering Rennies River from Long Pond. The structure will include two earth berm segments on either side of an inverted, open-bottom, box-shaped concrete culvert. The culvert will allow light into the structure. The earth berm will be covered with armour stone to provide additional protection from erosion. The berm designs will include an engineered slope, landscaping, and rock stabilization techniques (Appendix B).

The berms will be constructed with an approximately 2:1 side slope. However, depending on the final design, slopes may vary and could be installed with additional stabilization techniques. The earth berms portion of the flow control structure will generally be constructed of a typical sand and gravel mixture containing approximately 10 to 15% fines content where the berm is greater than 15 m away from the watercourse. Where work adjacent to a watercourse is required (within 15 m) earth berms will be constructed with clean rockfill. The size of the material will be determined in future stages of design. The culvert will be installed during the summer low flow period (May 1 to September 30) to avoid sensitive life stages of aquatic life (from October 1 to May 31). Cobble and gravels will be placed on the bottom of the culvert. The earth berm will then be back filled to support the side of the culvert. Following construction of the berm and placement of the culvert, the side slopes of the structure will be covered in armour stone to provide additional stability and erosion protection.

Similar to the flow control structure, two earth berms will be constructed to mitigate additional potential effects of flooding. The proposed location of the NRC Berm will offer protection of the northeast building entrance. The berm at Prince Philip Drive will provide protection to the road and the neighbouring residential area. The earth berms will be designed with an engineered slope similar to that of the flow control structure berms. Following construction of the berm, the side slopes of the earth berms will be covered using topsoil and a mix of hydroseed and/or sod.

The cast-in-place structure was selected in place of a berm on Clinch Crescent due to space limitations and to reduce impact to the adjacent waterbody. The proposed cast-in-place concrete wall at the Health Sciences Centre along Clinch Crescent will extend from a location where the road is closest to Leary's Brook to the access road for commercial buildings along the northwest. The cast-in-place structure will be installed along the shoulder of the Clinch Crescent. The structure will be 0.3 m wide, and heights of the structure will vary depending on the final design. The cast-in-place structure will be stabilized with the concrete footing installed along the roadbed.

An Environmental Protection Plan (EPP), including erosion and sediment control, will be implemented for construction by the contactor during construction.

3.2.2 Physical and Biological Setting

The following section identifies the physical and biological setting within and along the periphery of the Project area.

3.2.2.1 Setting and Vegetation

The project is in the Pippy Park Land Use area. The existing environment is set within the Southeastern Barrens Subregion of the Maritime Barrens Ecoregion (NLFFA, 2021a). The area is within the City and has largely been developed, therefore does not reflect the original ecoregion characteristics. Construction will take place adjacent to and as required within the riparian, and uplands region of the Rennies River watershed parallel to existing civil roads (Appendix C).

A reconnaissance was conducted by CBCL in 2017 in the wetland and upland area surrounding Long Pond and downstream to the Health Sciences Centre, including Clinch Crescent. This effort yielded an inventory of 129 species, of which 50 (38.8%) were exotic species (Appendix D). The area was occupied by marsh/fen wetlands (Section 3.2.2.2). The wetland was also determined to be colonized by exotic species, several which were strongly dominant in some locations. Reed Canary Grass (*Phalaris arundinacea*) was ubiquitous throughout the wetland. Several other exotic species were also scattered through the body of the wetland, including climbing nightshade (*Solanum dulcamara*), purple loosestrife (*Lythrum salicaria*), policeman's helmet (*Impatiens glandulifera*), and marsh hedge-nettle (*Stachys palustris*).

At the time, several species of conservation concern were observed within these survey areas, as noted below:

- Bayonet rush (*Juncus militaris*) – Ranked S3

An abundance of exotic forb species occupied the upland area immediately adjacent to the wetland and include species such as Japanese knotweed (*Polygonum cuspidatum*), butter and eggs (*Linaria vulgaris*), black starthistle (*Centaurea nigra*), St. John's wort (*Hypericum perforatum),* sheep sorrel (*Rumex acetosella*), sticky groundsel (*Senecio viscosus*),

dandelion (*Taraxacum officinale*), coltsfoot (*Tussilago farfara*), various clovers (*Trifolium* spp.), among many other species.

A reconnaissance-level site visit was completed downstream of the Project area along Rennies River adjacent to Prince Philip Drive in October 2020. The area adjacent to the roadway has been previously disturbed. The area was highly disturbed, and the proportion of native species is low (NAACAP, 2015). The reconnaissance identified native and non-native vegetation species. Non-native species identified include black knapweed (*Centaurea nigra*). Past the riverbanks into the upland region, vegetation primarily consists of mature trees such as birch, alder, maple, and spruce (CBCL, 2014).

3.2.2.2 Wetlands

In 2017, the wetland area around Long Pond was classified as a riparian fen/marsh complex. The physical extent of the wetland extends from Wicklow Street in the downstream direction to the periphery of Long Pond.

The St. John's Map Viewer shows a marsh wetland north of Kerwin Place, between the roadway and Long Pond. The proposed earth berm is not expected to be constructed within the wetland; however, it is located within the 50 m buffer zone around the wetland. Similarly, the cast-in-place wall is proposed to be located outside of the wetland but will intersect the identified 50 m buffer zone around the wetland area identified to the north along Leary's Brook (City of St. John's, 2021).

3.2.2.3 Forestry

The Project area is within Forest Management District 1 of the Eastern Region of Newfoundland (NLFFA, 2021b). There are no known timber harvest rights for the Project area.

3.2.2.4 Soils and Surficial Geology

The surficial geology of the region is composed of a thin, discontinuous sheet of poorly sorted sediment containing a mixture of grain-sizes from clay to boulders (Government of Newfoundland and Labrador Industry, Energy and Technology, 1994). Assessments within the vicinity of the project area identified that surficial soils are composed of fill underlain with a layer of compacted till, which ranges from well-graded sand with gravel to a silty sand with gravel, with occasional cobbles and boulders (Stantec, 2016). Soils downstream of Long Pond around the upper course of Rennies River are consistent with those upstream (Golder Associates, 2014).

3.2.2.5 Climate

The Maritime Barrens ecoregion has the lowest summer temperatures of the Newfoundland ecoregions (Government of Newfoundland and Labrador, 2020b) and many days are accompanied by fog and strong winds. The winters are generally mild with intermittent snow cover. The coldest month on average is February (daily average of

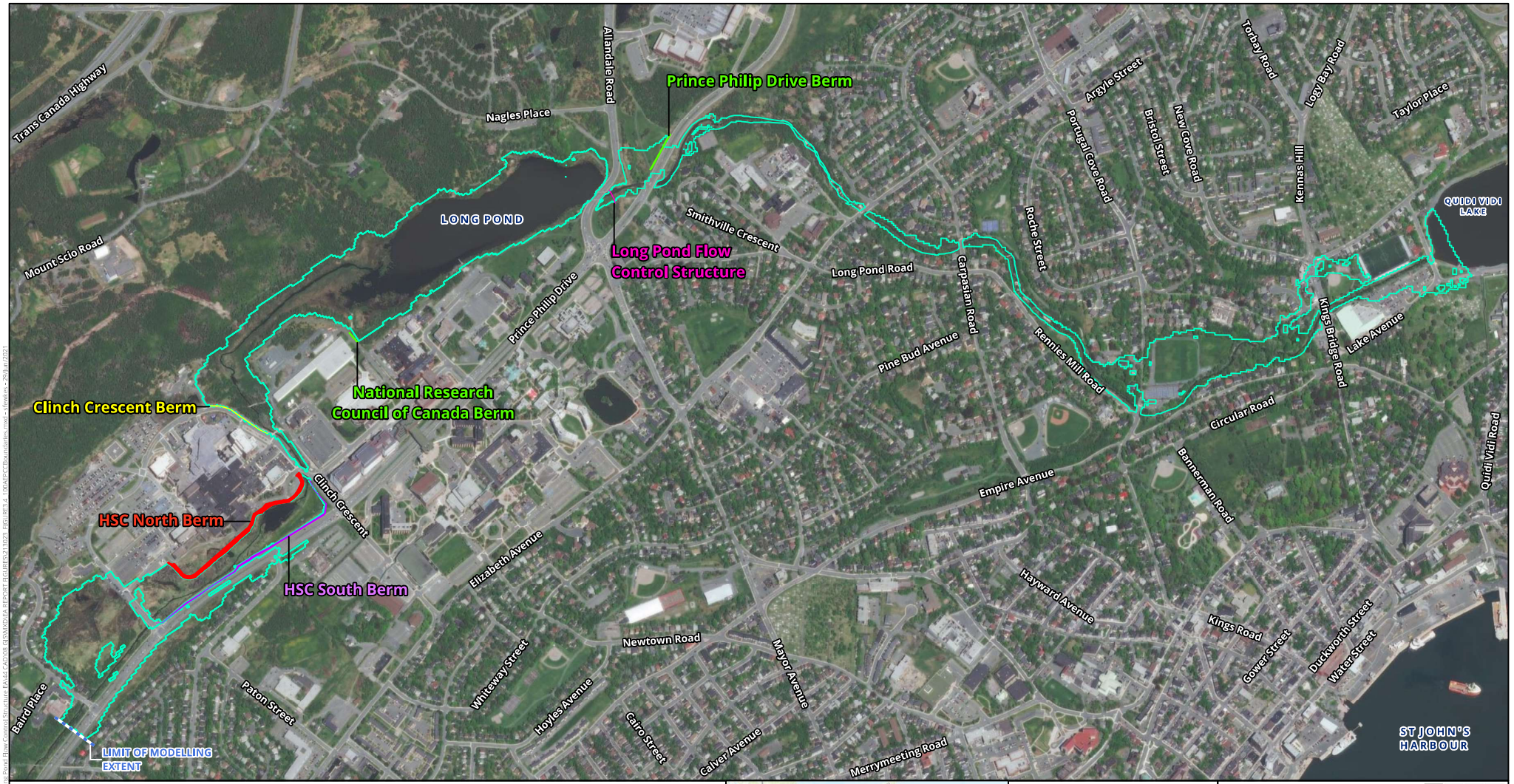
-4.9°C), with the highest average summer temperature observed in August (16.1°C, Government of Canada, 2020). Average annual precipitation is 1,534.2 mm, with most precipitation occurring as rain. The highest precipitation is recorded in December with an average of 164.8 mm and the lowest precipitation is recorded in July with an average of 91.6 mm (Government of Canada, 2020). Average monthly rain was recorded to be more than 125 mm from September to November, with the highest monthly average of rain occurring in October with 153.7 mm (Government of Canada, 2020). Within Newfoundland, hurricanes can occur from June 1st to November 30th with a climatological peak each season at approximately September 10th, however tropical storms may occur in other months as well (Wood, 2020).

3.2.2.6 Hydraulics of Leary's Brook, Long Pond, and Rennie's River

The Rennies River watershed is one of the largest drainage basins in St. John's. It joins many tributaries including Ken Brook, Yellow Marsh Stream, Leary's Brook, Carty's Stream, Nagel's Brook, and other unnamed streams (NAACAP, 2015). Leary's Brook enters Long Pond. Long Pond has a normal water level of 53.2 m. From Long Pond, it then becomes the Rennies River, the most downstream river in the watershed. An unnamed watercourse, oriented parallel to Allandale Road flows south to the Rennies River, just east of the proposed location of the flow control structure. Rennies River then flows downstream to Quidi Vidi Lake, and ultimately discharges to the Atlantic Ocean.

Hydraulic modelling of Leary's Brook, Long Pond, and Rennies River was performed using XP Solution's Storm Water Management Model (XPSWMM) software (Appendix A). The hydraulic model was used to estimate water levels in the river channel, through structures (i.e., culverts and bridges) along the river reach, and in the floodplains. The 1:100 AEP climate change floodplain for the existing condition of the river (i.e., without mitigative measures in place) was prepared during the RRCSMP and updated in 2021 to include berms at the Health Sciences Centre, by CBCL (Figure 3.4). The floodplain demonstrates anticipated flooding impacts to adjacent lands.

Inputs consisted of river channel invert elevations, channel and floodplain roughness coefficients, LiDAR information, hydraulic structure dimensions, and inflow hydrographs. The model structure is a 1D network representing the hydraulic structures (and the channel for the 2020/2021 assessment) nested within a 2D domain (grid) representing the floodplain. Hurricane Igor (September 2010) was used as the calibration event for the hydraulic model.

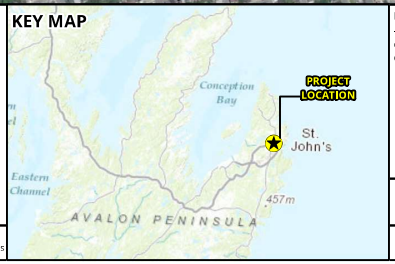


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- Earth Berm
- Earth Berm With Concrete Opening
- Cast-In-Place Concrete Wall
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 225 450 900 1,350 1,800 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries

PROJECT N°: 213023	FIGURE: 3.4
SCALE:1:9,500	DATE: Jun 2021

Document Path: Y:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3_4_100AEPCCBoundaries_mxd - sfewkes - 29/Jun/2021

The model predicted that the Project area is susceptible to localized flooding during 1:100 AEP CC events (as illustrated in Figure 3.4). From north of Wicklow Street, flooding is observed surrounding Leary's Brook, and as it flows under the roadway the flood extent expands to within the area between Wicklow to Clinch Crescent. As Leary's brook flows northeast past the Health Sciences Centre following Prince Phillip Drive, the flooding extent will be contained within the north and south Health Sciences Centre Berms which are in the process of completion. As Leary's Brook continues, the flooding is contained within an area between Clinch Crescent and Memorial University and other buildings (NRC). As Leary's Brook flows east into Long Pond, the flooding expands into the wetland around Long Pond, and intersects portions of the walking trails around Long Pond. During 1:100 AEP CC events, approximately 935 m of the trails around Long Pond are affected by flooding.

Downstream of Long Pond, as Rennies River flows out of Long Pond, flooding is observed adjacent to the watercourse within the park area and overtops Prince Phillip Drive. After Prince Phillip Drive, to Carpasian Road north of Pringle Place, the floodplain is mainly contained to the river channel and riparian areas of the river and the associated trail, except for a few properties along Vaughan Place. At the upstream end of Portugal Cove Road bridge, flooding is observed over the residential properties at Pringle Place and over several roads including Pringle Place, Portugal Cove Road, and Rennies Mill Road. Downstream of Portugal Cove Road, extensive flooding is anticipated over Feildian Grounds and the Riverdale Tennis Club properties, residential properties along the south side of Winter Place, and Winter Avenue towards Kings Bridge Road. Additionally, the flood boundary extends into the backyards of the residential properties along Empire Avenue and the electrical substation located at Kings Bridge Road. The floodplain also extends to portions of Winter Avenue, Judge Place, Kings Bridge Road, and onto the King George V soccer field and park.

3.2.2.7 Fish and Fish Habitat

The Rennies River watershed provides habitat for fish, and species that may be present include American eel (*Anguilla rostrata*), three-spined stickleback (*Gasterosteus aculeatus*), and salmonids. Salmonid species confirmed as present within the Rennies River watershed include brown trout (*Salmo trutta*) (D. Keefe. NLECCM, *pers comm*. September 20, 2017, NAACAP, 2015, R. Bishop. SAEM, *pers comm*. February 22, 2021), brook trout (*Salvelinus fontinalis*), and Atlantic salmon (*Salmo salar*; NAACAP, 2015). The Rennies River is not designated as a Scheduled Salmon or Brown Trout River (Fisheries and Oceans Canada (DFO), 2020a, b); however, the system was included in a Salmon Enhancement Program which consisted of the dispersion of incubated Atlantic salmon eggs in the Rennies River (Government of Newfoundland and Labrador, 2020a; SAEN, 2020).

Fishing has been noted to occur in within the watershed including Long Pond, spots along the Rennies River downstream of Long Pond (such as approximately 120 m upstream of Kings Bridge Road), and Quidi Vidi Lake.

3.2.2.8 Wildlife

The Project area is located within an urban setting (St. John's, NL). Therefore, the likelihood of the presence of common mammal wildlife typically present within the Ecoregion, where suitable conditions occur, is low. Species that may be present in the ecoregion include black bear (*Ursus americanus*), red fox (*Vulpes vulpes*), caribou (*Rangifer tarandus*), moose (*Alces alces*), lynx (*Lynx canadensis*), and other small fur bearing mammals (NLFFA, 2021c; Heritage Newfoundland and Labrador, 2002). Likely species within the Project area include small fur bearing mammals.

The Project area is located within and adjacent to the riparian zone and upland regions of the watershed, which could be used by bird species for breeding, feeding, and resting for at least part of the year. Over 373 bird species (including 204 native and 166 irregular visitors) have been found in NL (NLFFA, 2021d). The regional nesting period for the Project area is mid-April to mid-August (ECCC, 2021); however, it is possible for some species to breed outside of this period. The Project is in Bird Conservation Region 8 (BCR 8): the Boreal Softwood Shield. Priority bird species associated with BCR 8 are primarily located within wetlands, coniferous forests, inland waterbodies, and riparian habitats (Environment Canada, 2013). During Newfoundland Breeding Bird Surveys, which were conducted in proximity to the Project area, 65 breeding species were recorded (Newfoundland Breeding Bird Atlas, 2021, Appendix E). Using citizen reported occurrences, approximately 162 species have been observed within the Project area (eBird 2021, Appendix E).

3.2.2.9 Species at Risk and Species of Concern

Twenty-one species at risk (20 fauna and 1 flora) were identified as potentially occurring within the Project area from the Atlantic Canada Conservation Data Centre (AC CDC) database and the AC CDC's Expert Opinion Maps (Table 3.3). Of note was the single observation of a polar bear (*Ursus maritimus*) recorded in 1993, which has not been reported since that initial observation.

The AC CDC indicated that 1,196 rare fauna observations and 30 rare flora observations have been recorded within ± 5 km of the Project area (Appendix F). An assessment of the AC CDC Expert Opinion Maps of provincially and federally listed species suggest that boreal felt lichen (*Erioderma pedicellatum*) may be present, while banded killifish (*Fundulus diaphanous*) are possible, but unlikely. The Project is also identified within the Barrow's Goldeneye (*Bucephala islandica*) range (A. Durocher, AC CDC, *pers comm*. April 22, 2021).

Table 3.3 Results of AC CDC Search

Species	NL *Endangered Species Act* Status	Canadian *Species at Risk Act* (SARA)	Committee on the Status of Endangered Wildlife in Canada (COSEWIC)
Bird			
Bank Swallow *Riparia*	No Status	Schedule 1 – Threatened	Threatened
Barn Swallow *Hirundo rustica*	No Status	Schedule 1 – Threatened	Threatened
Barrow's Goldeneye *Bucephala islandica*	Vulnerable	Schedule 1 – Special Concern	Special Concern
Bobolink *Dolichonyx oryzivorus*	Vulnerable	Schedule 1 – Threatened	Threatened
Canada Warbler *Cardellina canadensis*	Endangered	Schedule 1 – Threatened	Special Concern
Chimney Swift *Chaetura pelagica*	Threatened	Schedule 1 – Threatened	Threatened
Common Nighthawk *Chordeiles minor*	Threatened	Schedule 1 – Threatened	Special Concern
Evening Grosbeak *Coccothraustes vespertinus*	No Status	Schedule 1 – Special Concern	Special Concern
Newfoundland Gray-cheeked Thrush *Catharus minimus*	Threatened	No Status	No Status
Harlequin Duck *Histrionicus histrionicus*	Vulnerable	Schedule 1 – Special Concern	Special Concern
Ivory Gull *Pagophila eburnea*	Endangered	Schedule 1 – Endangered	Endangered
Lesser Yellowlegs *Tringa flavipes*	No Status	No Status	Threatened
Olive-sided Flycatcher *Contopus cooperi*	Threatened	Schedule 1-- Threatened	Special Concern
Peregrine Falcon *Falco peregrinus* subsp. *anatum*	Vulnerable	Schedule 1 – Special Concern	Not at Risk
Red Crossbill *Loxia curvirostra*	Endangered	Schedule 1 – Threatened	Threatened
Rusty Blackbird *Euphagus carolinus*	Vulnerable	Schedule 1 – Special Concern	Special Concern
Short-eared Owl *Asio flammeus*	Vulnerable	Schedule 1 – Special Concern	Special Concern

Species	NL *Endangered Species Act* Status	Canadian *Species at Risk Act* (SARA)	Committee on the Status of Endangered Wildlife in Canada (COSEWIC)
Insects			
Monarch *Danaus plexippus*	No Status	Schedule 1 – Special Concern	Special Concern
Mammal			
Polar Bear *Ursus maritimus*	Vulnerable	Schedule 1 - Special Concern	Special Concern
Fish			
Banded Killifish *Fundulus diaphanous*	Vulnerable	Schedule 1 – Special Concern	Special Concern
Plant			
Boreal Felt Lichen *Erioderma pedicellatum*	Vulnerable	Schedule 1 – Special Concern	Special Concern

3.2.2.10 Protected Areas

The Project is located within Pippy Park land use zone. Any development within Pippy Park is subject to the *Pippy Park Commission Act* and approval of the C.A. Pippy Park Commission.

There are no provincial protected areas, such as provincial parks, wilderness reserves, wildlife reserves, wildlife parks, ecological reserves, provisional ecological reserves, public reserves, special management, or Canadian Heritage Rivers within the Project area. There are also no federal parks/reserves such as national parks, national historic sites, migratory bird sanctuaries, or marine protected areas within the Project area.

3.3 Construction

Construction is divided into two phases, site preparation and infrastructure construction including ground disturbance, earth works, watercourse alteration, and installation of concrete structures. Site preparation will include clearing of vegetation and grubbing of organic materials to prepare a base for construction. Following site preparation, the flow control structure/berms will be constructed. The staging of construction will be dependant on the contractor; however, the flood retention berms will be in place prior to the flow control structure and periods of typical flooding events. Anticipated activities associated with construction include the following:

Site preparation

- Vegetation clearing
- Grubbing

- Environmental protection, and sediment and erosion control measures, as required

Infrastructure Construction

Flow Control Structure Construction

- Isolation of working area within the watercourse, including:
  - Installation of a cofferdam
  - Dewatering of isolated area
  - Fish salvage, as required
  - Diversion (collection and discharge) of water from upstream to downstream of the construction site via pumps and hoses or pipes
- Excavation for placement of culvert and adjacent earth berms, as required
- Placement of new materials to establish new watercourse bed and construction of earth berms (i.e., rock fill, and granular material)
- Grading and shaping of berm
- Stabilization of berm slope with armour stone
- Installation of safety features and handrails

Earth Berm Construction

- Excavation for foundation of the berm, as required
- Placement of new materials (i.e., rock fill, granular material, and armour stone)
- Grading and shaping of berm
- Stabilization of berm slopes
- Placement of topsoil
- Vegetation of the constructed berm
- Environmental protection, and sediment and erosion control measures

Cast-in-place Wall Construction

- Excavation for the wall foundation
- Stabilization and compaction of fill material around concrete retaining wall
- Placement of footing for concrete retaining wall
- Installation of cast in place concrete wall
- Placement of new materials (i.e., rock fill and granular material)
- Placement of new handrails
- Environmental protection, and sediment and erosion control measures

Access to the construction site within the Project Area will depend on the location of the proposed structure. Traffic control measures will be undertaken as required for access to the required areas. When work is be completed along or adjacent to roadways, traffic control measures may include temporary lane closures or detours, if necessary. The Long Pond Flow Control Structure will be accessed from either the east side of Allandale Road or the west side of Prince Phillip Drive, with most work occurring between the roadways. Access from Allandale will include access points on both the north and south of the river. The other sites will be accessed directly from the adjacent roadways, Prince Phillip Drive, Kerwin Place, and Clinch Crescent.

The locations of proposed laydown areas for material and equipment have not been identified at this time and will be dependant on the selection of a contractor. Any laydown areas will occur greater than 30 metres away from a watercourse or wetland.

Construction is anticipated to occur between the hours of 07:00 and 18:00 from Monday to Friday, and from 08:00 to 17:00 on Saturdays, Sundays, and statutory holidays (if required). This aligns with the requirements of the St. John's Noise By-law, which states that construction equipment needs to cease between 23:00 and 07:00 (City of St. John's, 1998). Approval will be required from the City to work outside of regular hours/days for construction of the Project. Request for approval must be issued to the City at least 72 hours in advance if work is scheduled outside of the above noted times and must follow the City by-laws.

Potential impacts and sources of pollutants because of the Project and associated activities are provided in Section 3.3.1. Potential causes of resource conflicts are provided in Section 3.3.2. Mitigation measures to address potential impacts, pollutants and resources conflicts are described in the following sections and a summary of proposed mitigation measures is provided in Appendix G.

3.3.1 Environmental Impacts and Potential Sources of Pollutants

The Project will be constructed with mitigation measures to minimize risk, and potential environmental impacts, as well as potential sources of pollutants. Potential impacts and sources of pollutants because of construction are identified in Table 3.4.

Table 3.4 Potential Concerns caused by Flood Mitigation Infrastructure and Environmental Impact and/or Source of Pollutants that may Arise as a Result of Construction

Possible Concern	Infrastructure	Potential Environmental Impact	Potential Source of Pollutants
Removal of vegetation	All	✓	
Change in Floodplain conditions as a result of flood mitigation infrastructure	All	✓	
Silt and sediment runoff	All	✓	✓
Risk of release of fuel, lubricant, and hydraulic fluid from construction vehicles	All	✓	✓
Temporary barrier to fish passage, during installation of inverted, open-bottom, box-shaped culvert.	Flow Control Structure	✓	
Maintaining flow around the work site	Flow Control Structure	✓	

Possible Concern	Infrastructure	Potential Environmental Impact	Potential Source of Pollutants
Dewatering of work area within the cofferdams	Flow Control Structure	✓	✓
Release of materials into adjacent watercourses (i.e., concrete from cast in place)	Cast-in-place Wall	✓	✓
Interaction with fishing	Flow Control Structure	✓	
Disruption of wildlife, including birds and fish	All	✓	
Dust generation	All	✓	✓
Airborne emissions from construction equipment	All	✓	✓
Noise emissions from construction activities	All	✓	✓
Generation of construction debris	All	✓	✓
Temporary disruption of traffic or trail use	All	✓	

3.3.2 Potential Causes of Resource Conflict During Construction

Mitigation measures and best management procedures will be established and monitored to minimize potential resource conflicts. The following sections outline potential causes of resource conflict.

Land or Soil Disturbance: During site preparation and construction activities, such as excavation activities or removal of existing soil materials, there is a potential to affect soils, surrounding lands, and potential for accidental release of fuels and other contaminants from equipment.

Construction equipment will not be permitted to operate outside the construction zone to prevent damaging adjacent areas. Standard safety and environmental practices will be enforced to reduce and prevent potential conflicts caused by construction equipment and tasks. Adjacent properties will be avoided as much as possible, though roadside ditches will require alteration in the form of earthworks because of the Project.

Where possible, surface soil will be reused. Material that cannot be reused on site will be disposed of offsite following applicable regulations and guidelines. In the event an accidental spill occurs to land, spills will be cleaned up and reported to NLECCM. An Emergency Spill Response Plan, Spill Prevention Plan, and measures for proper handling, storage and disposal of hazardous and other waste materials are outlined in Appendix G. Following these requirements, minimal conflicts are expected.

Surface Water and Surface Water Management: The construction of the flow control structure intersects with the Rennies River at the downstream end of Long Pond. The following potential effects may occur because of construction:

- Modification of waterflows during construction within the watercourse.

- Dewatering and release of water from the dewatered area.
- Modification of localized changes to surface water drainage in the location of the flood migration structures.
- Release of deleterious substances associated with accidental spills/leaks, improper disposal of waste materials, or the use of chemical-based dust suppressants.

Excavation of riverbanks will be limited to the area of the flow control structure, and areas of modification will be minimized as much as possible to this area. Any in-water works will occur during the summer low flow period (May 1 to September 30) to reduced effects and to avoid sensitive life stages of aquatic life (from October 1 to May 31). Any alterations of the watercourse as part of construction will be restored.

An Erosion and Sediment Control Plan will be implemented prior to construction and will describe measures to:

- Prevent loss of soil during construction by stormwater runoff or wind erosion, including protecting topsoil by stockpiling for reuse
- Prevent sedimentation of storm sewers or receiving streams
- Prevent pollution of the air with dust and particulate matter

Standard practices, including the use of temporary erosion and sediment control devices such as silt fences will be used to mitigate the possible sources of pollutants and protect Rennies River from potential effects.

The cast-in-place wall, the NRC earth berm, and the Prince Philip Drive earth berm will mostly be constructed in the outer riparian zone/upland area. However, mitigation measures such as those identified for the flow control structure will be implemented to reduce potential effects of the release of soil or silt from the work areas. Where the cast-in-place structure is installed within 30 metres of a watercourse or buffer area, concrete formwork will be sealed to prevent the potential release of concrete during construction. Following these requirements, minimal conflicts are expected.

The flow control structure and berms upstream of the flow control structure are designed to accommodate a 1:100 AEP CC plus 30% flow event, and the Prince Phillip Drive Berm to accommodate a 1:100 AEP CC flow event (Section 3.2.1). Further assessment of the effects from the long-term operations of the flow control structure and associated flood protection infrastructure is found in Section 3.4.2. There is also the potential that construction of the flood mitigation infrastructure will result in localized changes to surface water drainage, particularly in areas behind the proposed structures. Areas where drainage may be altered will be assessed during detailed design. The design will consider alternatives to minimize stormwater build up behind the berms.

Wetlands: Wetland vegetation is not expected to be disturbed by construction activities, however, there are wetland areas just outside of the construction area along Clinch Crescent and the NRC building. Erosion and sediment control measures will be

implemented where necessary along the perimeter of the construction area to reduce the likelihood of soil or silt entering the wetland during construction. Following these requirements, minimal conflicts are expected during construction. However, indirect effects to adjacent wetlands may occur because of the operation of the flow control structure. Further assessment of the effects from the long-term operations of the flow control structure and associated flood protection infrastructure is found in Section 3.4.2.

Groundwater: During excavation activities or removal of existing soil materials, there is a potential for interactions with groundwater. Dewatering plans and associated measures will be implemented to control the inflow of groundwater. Discharge of water from the site will be conducted in accordance with applicable environmental guidelines.

Whenever possible, construction, particularly including work in wet areas, should be completed during dry or low-flow periods.

The Project is in an area serviced by municipal water and sewer. Review of available mapping did not identify the presence of potable groundwater wells (Government of Newfoundland and Labrador, 2021). Therefore, the interaction with groundwater for drinking is not anticipated.

Improper disposal and treatment of potentially contaminated soils during construction could also lead to contaminated groundwater. An Emergency Spill Response Plan, Spill Prevention Plan and measures for proper handling, storage and disposal of hazardous and other waste materials are outlined in Appendix G.

Following these requirements, minimal conflicts are expected.

Fish and Fish Habitat: Due to the installation of the flow control structure within Long Pond and the concrete wall and berms in proximity to Leary's Brook and Rennies River, the following potential effects may occur because of construction:

- Bank erosion and sediment loading
- Changes to channel morphology and water flow
- Alteration to riparian/upland habitat through vegetation removal
- Release of deleterious substances associated with accidental spills/leaks, improper disposal of waste materials, or the use of chemical-based dust suppressants

There are additional potential effects that may occur specific to the installation of the Long Pond flow control structure only which include:

- Obstruction of fish passage

In-water works required to construct the flow control structure will occur over a period of approximately two weeks under low flow and low rainfall conditions to minimize the risk to fish and fish habitat as much as possible. The identified timing window as specified by DFO

is roughly from May 1 to September 30 (DFO, 2019). After construction is complete, fish will be able to pass freely through the opening of the flow control structure.

Overall, the Project will be designed, and construction activities executed, to minimize impacts to the watercourses, thereby minimizing the effects on fish or fish habitat areas. Prior to construction near the watercourses, NLECCM and Fisheries and Oceans Canada (DFO) will be consulted, and applicable regulatory permits and authorizations will be obtained. Existing watercourses will not be disturbed other than the areas indicated, and only clean rock fill materials will be used directly adjacent to the watercourse. Earth berms will be seeded and covered with sod and/or hydroseed and/or native vegetation once topsoil cover is added to enhance stabilization.

As outlined in Appendix G, further mitigation measures to address the above-mentioned effects will be prepared, including the development of an Erosion and Sediment Control Plan and Emergency Spill Response Plan, both of which will be incorporated into an EPP. Following these requirements, minimal conflicts are expected.

Wildlife: Potential effects to wildlife, including migratory/breeding birds, are expected during the construction period. Effects include:

- Habitat loss or alteration
- Injury or mortality of wildlife
- Avoidance of Project area by wildlife

Loss or alteration of habitat may displace wildlife that use the riparian and upland areas of Long Pond, Leary's Brook, and Rennies River for cover, foraging, breeding, and nesting. Earth berms will be vegetated with similar pre-disturbance species after construction to minimize the loss or alteration of habitat.

To protect breeding birds and their nests, whenever possible, vegetation clearing will occur outside the breeding bird period (mid-April to mid-August). If vegetation clearing outside the breeding bird nesting period is unavoidable, breeding bird /nest surveys will be completed prior to removal of vegetation or disturbance of potential habitat to identify evidence of nesting activities. Nests and neighbouring vegetation will be left undisturbed until nesting is complete. If nests containing eggs, or young, of migratory birds are discovered during construction, disruptive activities in the nesting area should cease until nesting is completed. A buffer zone should be established at an appropriate set-back distance surrounding the nest. Appropriate set back distances should be based on setbacks identified in the literature or in consultation with a provincial or federal wildlife biologist.

Deposition of harmful substances into waterbodies or areas utilized by wildlife could potentially occur due to accidental spills or leaks. An EPP with an emergency response plan and spill prevention plan will be developed to mitigate the likelihood of accidental spills.

Operation of machinery, equipment, human presence, and noise may result in temporary avoidance behaviours by animals in the vicinity of the construction areas. Clearing activities are proposed to occur prior to sensitive timing windows such as the nesting period. Construction activities will be limited as to reduce the overall time of noise and disturbance.

Domestic refuse from construction crews may act as an attractant for wildlife. Improper storage and disposal of refuse can act an attractant for wildlife and increase the risk of injury or mortality from construction equipment or vehicles. Best management practices (BMPs) will be implemented for the handling of domestic refuse generated during construction.

Construction lighting also has the potential to attract wildlife, specifically migratory birds, to the area, increasing the likelihood of wildlife interactions with machinery and subsequent injury. Any lighting for construction will follow BMPs to reduce the potential effects to wildlife.

With implementation of mitigation measures, such as vegetation clearing, noise and waste management, the potential effects to wildlife and species at risk are expected to be minimal.

Vegetation and Forestry: Several native and non-native plant species are likely to exist within and adjacent to the Project area. No mature trees will be displaced during construction. Clearing and grubbing, as part of site preparation, will result in the direct loss or alteration of vegetation. The use of heavy machinery during construction may inadvertently introduce additional invasive or exotic species to the existing environment.

As stated, the two earth berms will be covered with topsoil, hydroseed and/or sod as well as revegetated with native vegetation wherever possible. Non-native species that are non-invasive may be planted in specific instances to enhance reinforcement or structural durability that would otherwise not be provided by native species. Additionally, if native species cannot be sourced, non-invasive non-native species may also be planted as a replacement. A mixture of hydroseed may be planted in areas that are the closest to the river, and sod may be used where there is reasonable distance between the berm and the watercourse. Following these requirements, minimal conflicts are expected.

Air Emissions and Quality: The use of heavy equipment such as excavators, bulldozers, chainsaws, and equipment to compact the soils, may result in disturbance to wildlife and adjacent properties. Disturbance could include noise and dust emissions. Prevention and mitigation measures will be incorporated into the EPP to avoid or reduce emissions of noise and dust from construction activities. Equipment and construction activities on site will occur during approved working hours and equipment used on site will be in good working order to reduce effects of noise. Following these requirements, minimal conflicts are expected.

Human Activities: The intent of the Project is to provide positive benefits to the community. Construction will mostly take place on open space municipal land.

Fishing has been noted to occur in Long Pond, Quidi Vidi Lake, and some spots along the Rennies River (such as approximately 120 m upstream of Kings Bridge Road). The Salmonid Association of Eastern Newfoundland (SAEN) confirmed that fishing was primarily for brown trout and that fish may be consumed; however, the quantity of fish caught and consumed is not known (R. Bishop, *pers comm.* 2021). Apart from the works required to construct the Long Pond flow control structure, watercourse work will be minimized and avoided as much as possible. Mitigation measures have been identified to avoid or reduce the potential of effects to fish and fish habitat, which will also mitigate potential effects on fishing.

Quidi Vidi Lake, which is used for recreational purposes, is located downstream of the Project Area. Mitigation measures have been identified within the EARD to mitigate the potential of effect from accidents or malfunctions including fueling and maintenance restrictions within 30 m of a waterbody.

The flood mitigation infrastructure will be designed in accordance with applicable engineering standards and will be constructed by a qualified contractor.

Impacts to human activities during construction may include temporary restriction of traffic along, Prince Phillip Drive, Clinch Crescent, and Kerwin Place during mobilization and demobilization of equipment, and construction. Traffic controls will be implemented following the City of St. John's requirements; however, effects are expected to be infrequent and short in duration. Following these requirements, minimal conflicts are expected. Temporary safety fences will be installed to isolate the construction area and to inhibit the entry of unauthorized persons in the Project areas. Disturbance to humans due to noise emissions can also occur. As previously described, equipment and construction activities on site will occur during approved working hours and equipment used on site will be in good working order to reduce effects of noise.

3.4 Operations

Once constructed, the flood mitigation infrastructure will aid in the protection from flooding events, such as a 1:100 AEP flood flow. The flow control structure will allow for the retention of storm waters within Long Pond. The retention time was classified as the amount of time that the water level in Long Pond is above the normal pond elevation of 53.2 m. Long Pond currently acts to attenuate flow; however, the flow control structure will temporarily increase the maximum water elevation in Long Pond during a flow event. The retention time will be dependant on the AEP event, lake level, and the other seasonal factors, and length of could range in the period of days. Table 3.5 illustrates the estimated

maximum water elevations in Long Pond for the 1:20 AEP CLC, 1:100 AEP CLC and the 1:100 AEP CLC plus 30% flows.

Table 3.5 Peak Water Levels in Long Pond

Flow Event	Water Elevation in Long Pond (m)		Difference in Peak Water Levels
	Existing Conditions	Post Flow Control Structure & Ancillary Flood Protection Construction	
Normal level	53.2	-	-
1:20 AEP CLC	54.7	54.8	+0.1
1:100 AEP CLC	55.2	55.4	+ 0.2
1:100 AEP CLC + 30%	55.4	56.0	+0.6

A care and maintenance program will be implemented to assess the flood mitigation infrastructure conditions annually, at a minimum. Following the yearly assessment, the infrastructure will be rehabilitated, as required, to maintain their aesthetics and function. Items will be repaired and cleaned as required to maintain the function of the infrastructure. The periodic maintenance activities following construction, including routine upkeep. Activities may include:

- Flow control structure repairs
- Annual inspection of berm conditions (planting and structural)
- Berm repairs including regrading and planting
- Wall repairs including concrete rehabilitation
- Geotechnical inspection every 5 years

Repairs to the flow control structure may require the installation of a cofferdam depending on the nature of the repair required. At the time of the repair, the same mitigation measures applied during the construction phase to reduce risk to fish and fish habitat will be adopted.

The flow control structure and berms are to remain in-situ indefinitely or until they require decommissioning or rehabilitation. When the need to decommission or rehabilitate the earth berms arises, the berms will either be revised or incorporated into additional flood water control structures along the river, removed and replanted with vegetation, or left in place and integrated into plans for more extensive water management of Rennies River watershed.

3.4.1 Environmental Impacts during Operation

The flow control structure and berms will be constructed to minimize risk and potential environmental impacts, as well as to minimize possible effects during the life of the

structure. Potential impacts and sources of pollutants because of construction are identified in Table 3.6.

Table 3.6 Potential Concerns caused by Flood Mitigation Infrastructure and Environmental Impact and/or Source of Pollutants that may Arise as a Result of Construction

Possible Concern	Infrastructure	Potential Environmental Impact	Potential Source of Pollutants
Change in Floodplain conditions because of flood mitigation infrastructure	All	✓	
Prolonged water retention and inundation to adjacent waterbodies and wetlands during flooding	All	✓	
Silt and sediment runoff	All	✓	✓
Changes to fish passage, during installation of inverted, open-bottom, box-shaped culvert.	Flow Control Structure	✓	

3.4.2 Potential Causes of Resource Conflict During Operation

Any resource conflicts that may arise as part of this Project are assessed as part of the construction phase given the intended purpose of the flood mitigation infrastructure is strictly for flood protection. The intent of the cast-in-place wall and two earth berms are to reduce resource conflict during operations. Repairs and inspections will be conducted on an as-needed basis and potential causes of resource conflict will be like the those described in Section 3.3.2 for construction during this time.

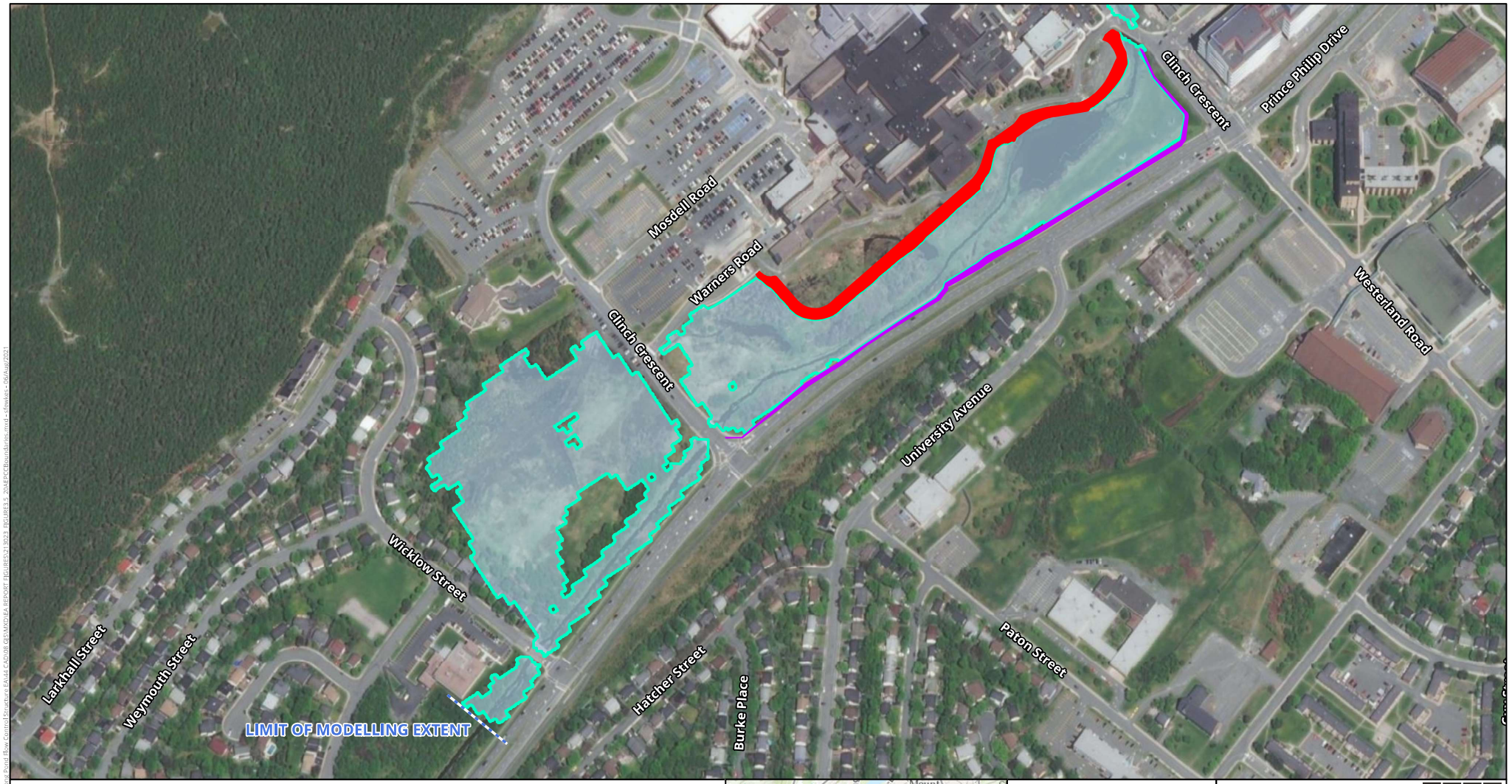
Surface Water and Surface Water Management: The flow control structure and berms upstream of the flow control structure (NRC Earth Berm and Clinch Crescent Cast-in-place) are designed to accommodate a 1:100 AEP CC plus 30% flow event, and the Prince Phillip Drive Earth Berm to accommodate a 1:100 AEP CC flow event (Section 3.2.1). The addition of the Long Pond flow control structure will result in water being temporarily stored in Long Pond during a flow event, which results in an expansion of the floodplain extent upstream of the flow control structure. Following the implementation of the three additional flood control berms and walls, the floodplain decreased for the 1:100 AEP CLC and the 1:100 AEP CLC plus 30% by approximately 16,235 m^2 and 2,055 m^2, respectively, in locations of residential properties, commercial uses, and roadways versus the floodplain with no mitigation measures. A summary of the changes for the is provided in Table 3.7.

Table 3.7 Summary of the Hydrologic and Hydraulic Conditions pre and post Construction 1:20 AEP CC and the 1:100 AEP CC, and 1:100 AEP CC + 30%

Scenario	Summary of Changes between Existing Conditions and Post-Construction		Summary of Changes
	Description	Change (+ - increase) (- = decrease)	
1:20 AEP CC	**Overall Change to Floodplain (m^2)**	**+2,055 m^2**	▸ Increased floodplain in spots surrounding Long Pond up to 10 m into vegetated areas ▸ Improved flooding downstream of the flow control structure, including Vaughan Place, Carpasian Road, Pringle Place, and Winter Avenue, and Empire Avenue ▸ Increased flooding along the Pippy Park Trails, affecting approximately 760 m of trail (26% of the trail network), which is 90 m more than the existing conditions (670 m or 23% of the trail network).
	Additional Area Flooded within Floodplain (m^2)	+6,255 m^2	
	Flood Area reduced within Floodplain (m^2)	-4,200 m^2	
	Approximate width of additional flooding (m)	5 – 10 m	
1:100 AEP CC	**Overall Change to Floodplain (m^2)**	**-16,235 m^2**	▸ Increased floodplain in spots surrounding Long Pond and upstream to Clinch Crescent, With up to 10 m into vegetated areas and 10 m toward the Fluvarium, the environmental museum on the northeast side of Long Pond (Figure 3.2). ▸ Downstream of the Flow Control Structure there is increased flooding in isolated areas of up to 5 m adjacent to the existing floodplain along the river, which encroaches on properties along Elizabeth Avenue, Vaughan Place, Larch Park, Pringle Place, and Winter Avenue, Feildian Grounds, the Riverdale Tennis Club. ▸ Decreased infrastructure flooding downstream of the flow control structure including Prince Phillip Drive and Kings Bridge Road. ▸ Decreased flooding downstream of the flow control structure for residential properties including along Smithville Crescent, Vaughan Place, Pringle Place, and Winter Avenue, Judge Place, Empire Avenue, the Boulevard. ▸ Decreased flooding downstream of the flow control structure for recreational and open spaces including along Rennie's River, Larch Park, Feildian Grounds, the Riverdale Tennis
	Additional Area Flooded within Floodplain (m^2)	+9,365 m^2	
	Flood Area reduced within Floodplain (m^2)	-25,600 m^2	
	Approximate width of additional flooding (m)	5 -10 m	

Scenario	Summary of Changes between Existing Conditions and Post-Construction		Summary of Changes
	Description	Change (+ - increase) (- = decrease)	
			Club and Wyatt Park on the east side of Kings Bridge Road. ▶ Increased flooding along the Pippy Park Trails, affecting approximately 1,030 m of trail (36% of the trail network), which is 95 m more than the existing conditions (935 m or 33% of the trail network).
1:100 AEP CC + 30%	**Overall Change to Floodplain (m^2)**	**-2,305 m^2**	▶ Increased floodplain in spots surrounding Long Pond and upstream to Clinch Crescent. With up to 15 m into vegetated areas and 15 m toward the Fluvarium. ▶ Decreased flooding of infrastructure downstream of the flow control structure including Prince Phillip Drive and Kings Bridge Road. ▶ Decreased flooding downstream of the flow control structure for residential properties including along Smithville Crescent, Vaughan Place, Carpasian Road, Roche Street Pringle Place, and Winter Avenue, Judge Place, Empire Avenue, the Boulevard. ▶ Decreased flooding downstream of the flow control structure for recreational and open spaces including along Rennies River, Larch Park, Feildian Grounds, the Riverdale Tennis Club and Wyatt Park on the east side of Kings Bridge Road. ▶ Increased flooding along the Pippy Park Trails, affecting approximately 1,395 m of trail (48% of the trail network), which is 285 m more than the existing conditions (1,110 m or 39% of the trail network).
	Additional Area Flooded within Floodplain (m^2)	+11,340 m^2	
	Flood Area reduced within Floodplain (m^2)	-13,645 m^2	
	Approximate width of additional flooding (m)	5 – 15 m	

There is also the potential that construction of the flood mitigation infrastructure will result in localized changes to surface water drainage, particularly in areas behind the proposed structures. Areas where drainage is altered will be assessed during detailed design. The design will consider alternatives to minimize stormwater build up behind the berms.

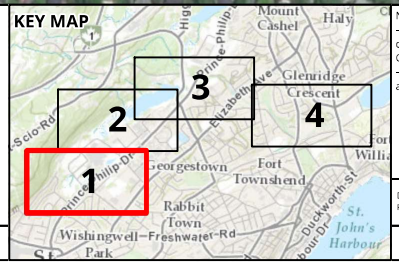


LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

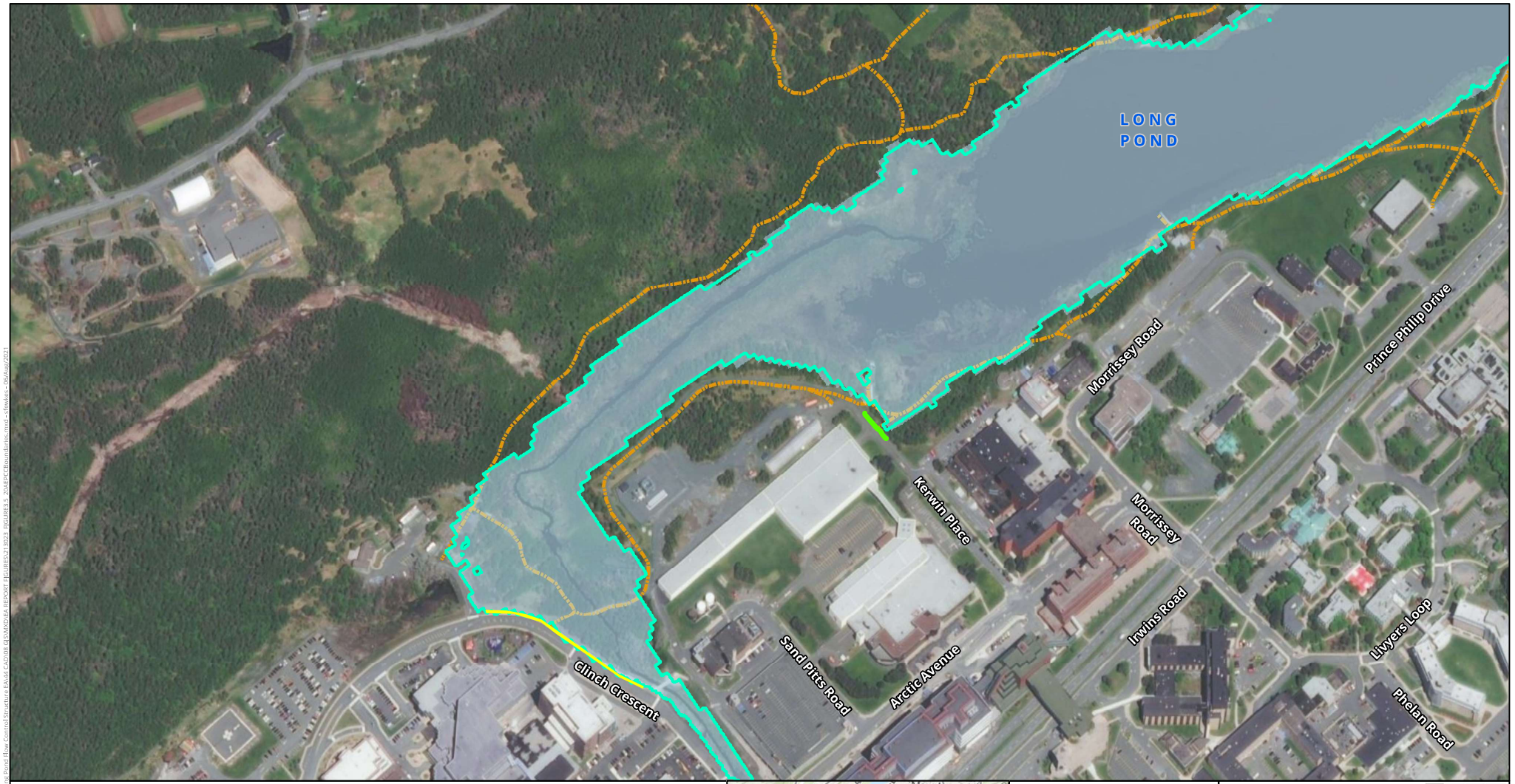
ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

PROJECT N°: 213023	FIGURE: 3.5 (1)
SCALE:1:3,500	DATE: Aug 2021

Document Path: N:\St_John's\Data\Jobs\2021\CA13023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_20AEPECBoundaries.mxd - Steven - 06/Aug/2021

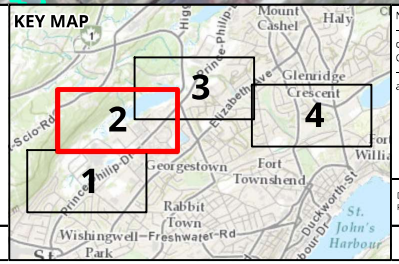


LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall
- Long Pond Walking Trail

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

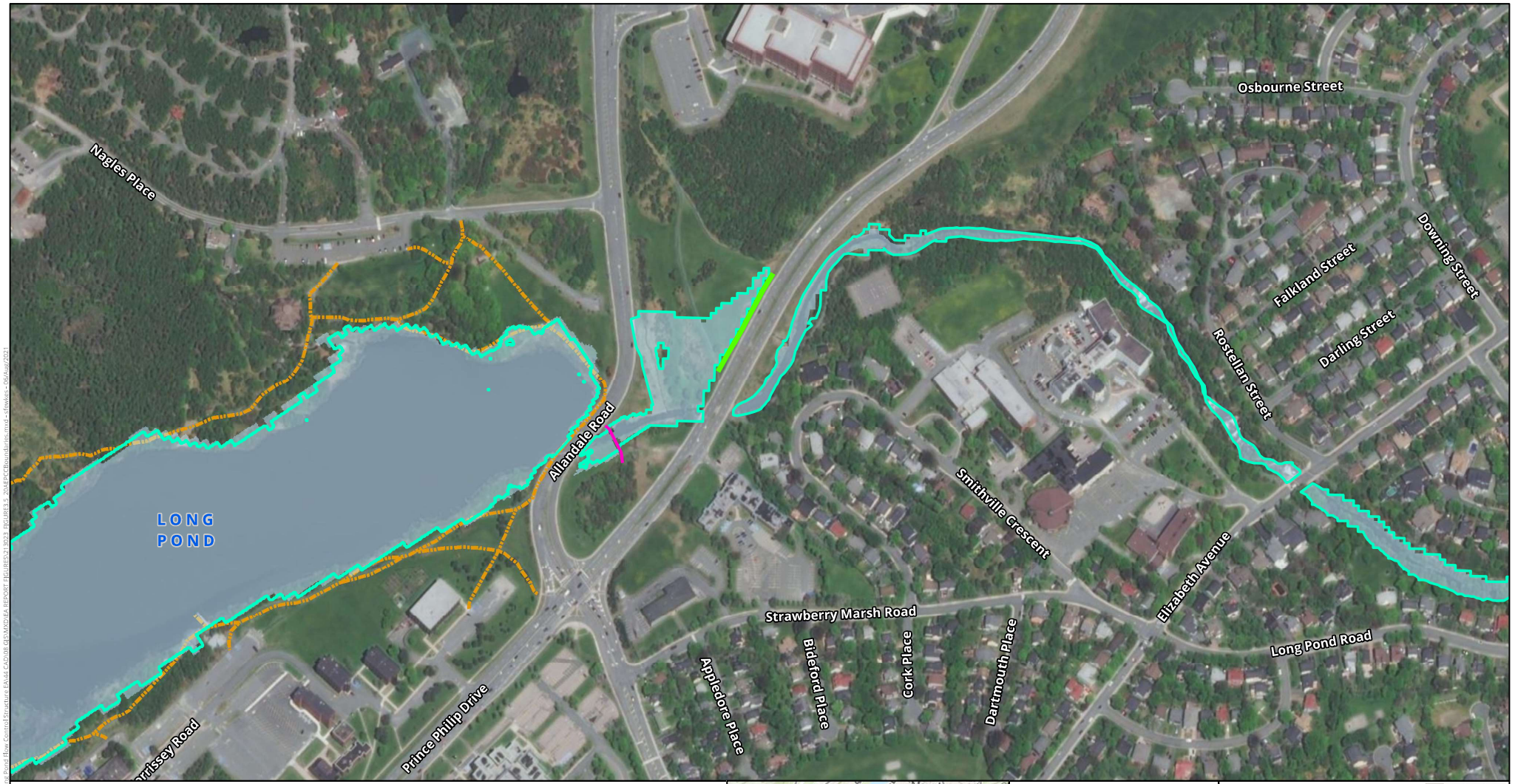
ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT N°: 213023	FIGURE: 3.5 (2)
SCALE:1:3,500	DATE: Aug 2021

Document Path: N:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3_20AEPCCBoundaries.mxd - Plotted on: 06/Aug/2021

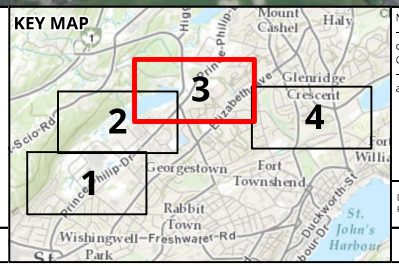


LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Earth Berm With Concrete Opening
- Long Pond Walking Trail

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

PROJECT N°: 213023	FIGURE: 3.5 (3)
SCALE:1:3,500	DATE: Aug 2021

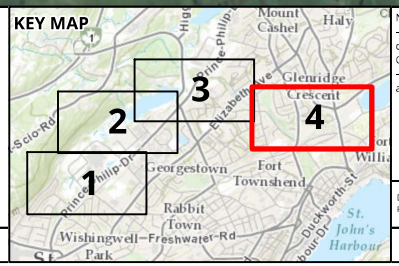
Document Path: N:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE 3_20AEPCCBoundaries.mxd - Steves - 06/Aug/2021

LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

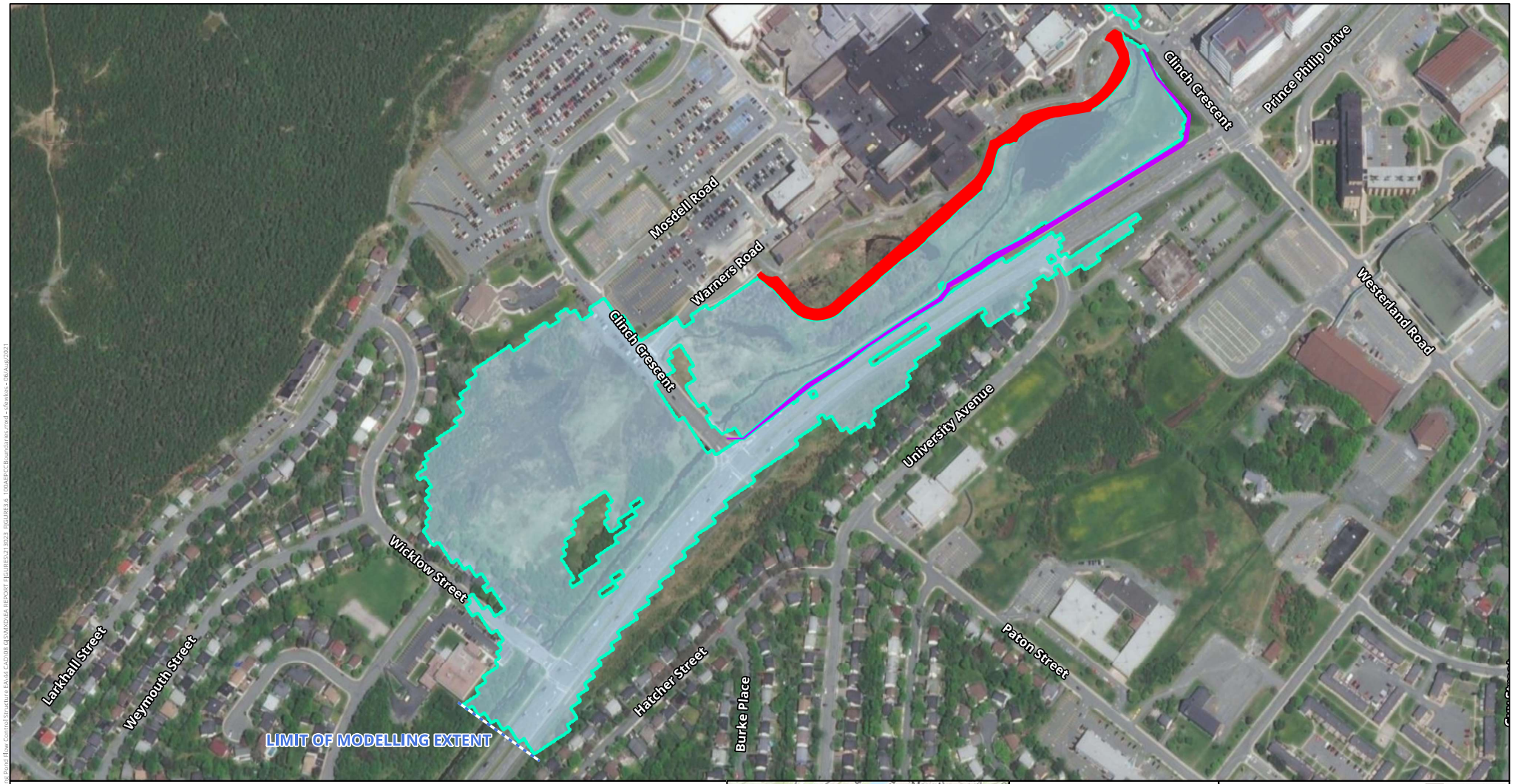
ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

PROJECT N°: 213023	FIGURE: 3.5 (4)
SCALE:1:3,500	DATE: Aug 2021

Document Path: P:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3_20AEPCBoundaries.mxd - Stefanie - 06/Aug/2021

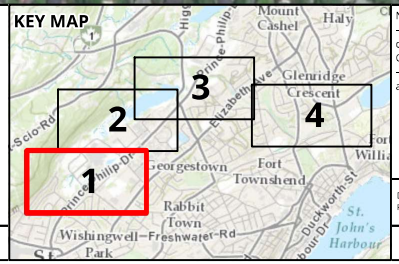


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

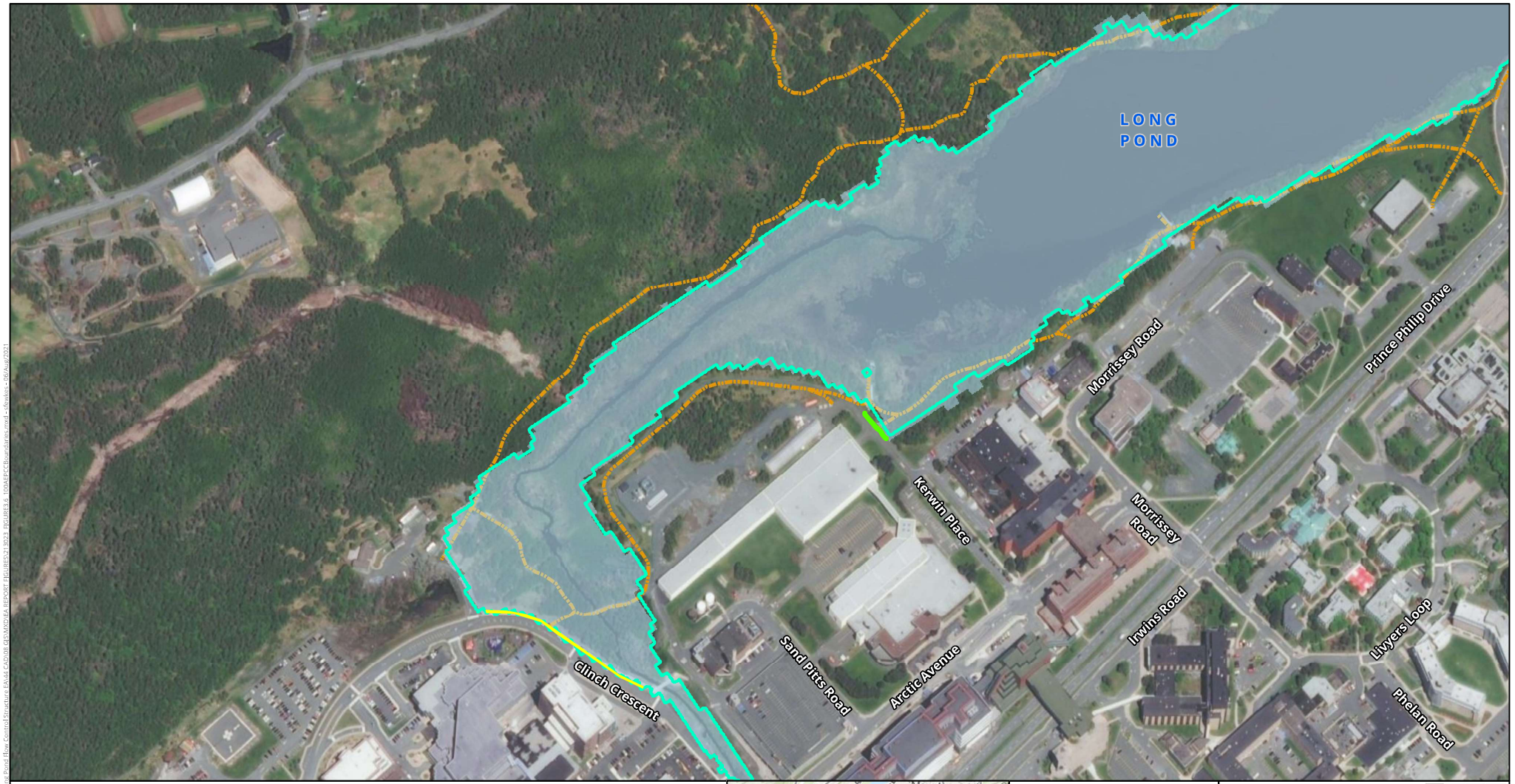
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

PROJECT N°: 213023	FIGURE: 3.6 (1)
SCALE:1:3,500	DATE: Aug 2021

Document Path: P:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3.6 (1)MXD\EPC\Boundaries.mxd - Nkwoka - 06/Aug/2021

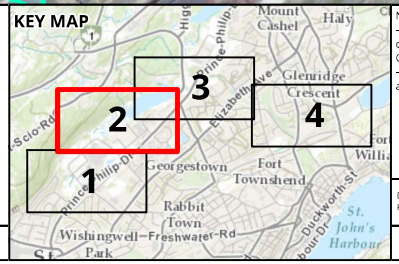


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall
- Long Pond Walking Trail

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

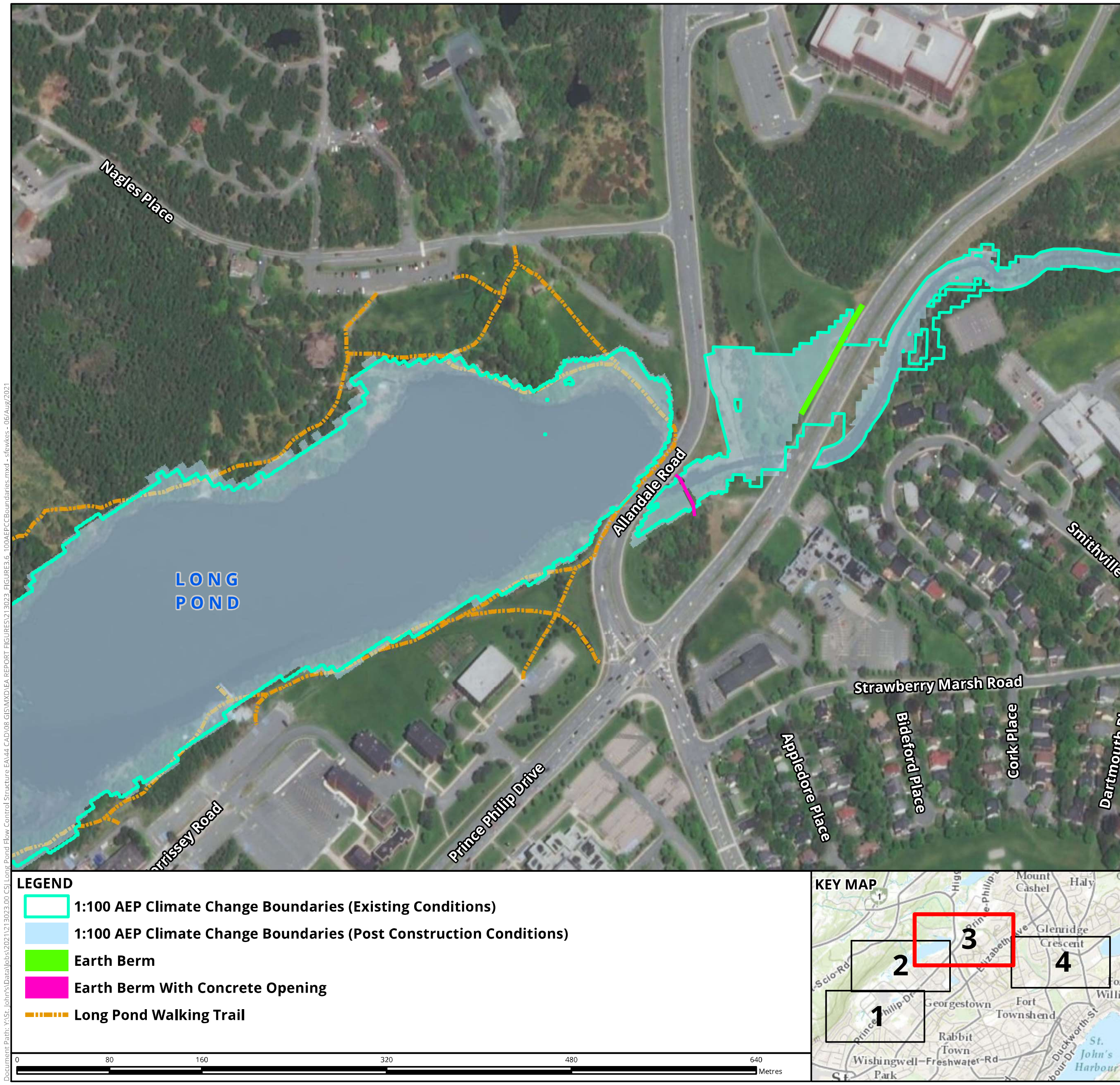
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT N^{O}: 213023	FIGURE: 3.6 (2)
SCALE:1:3,500	DATE: Aug 2021

Document Path: K:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3.6 (2) 100AEPCBBoundaries.mxd - kfowler - 06/Aug/2021



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

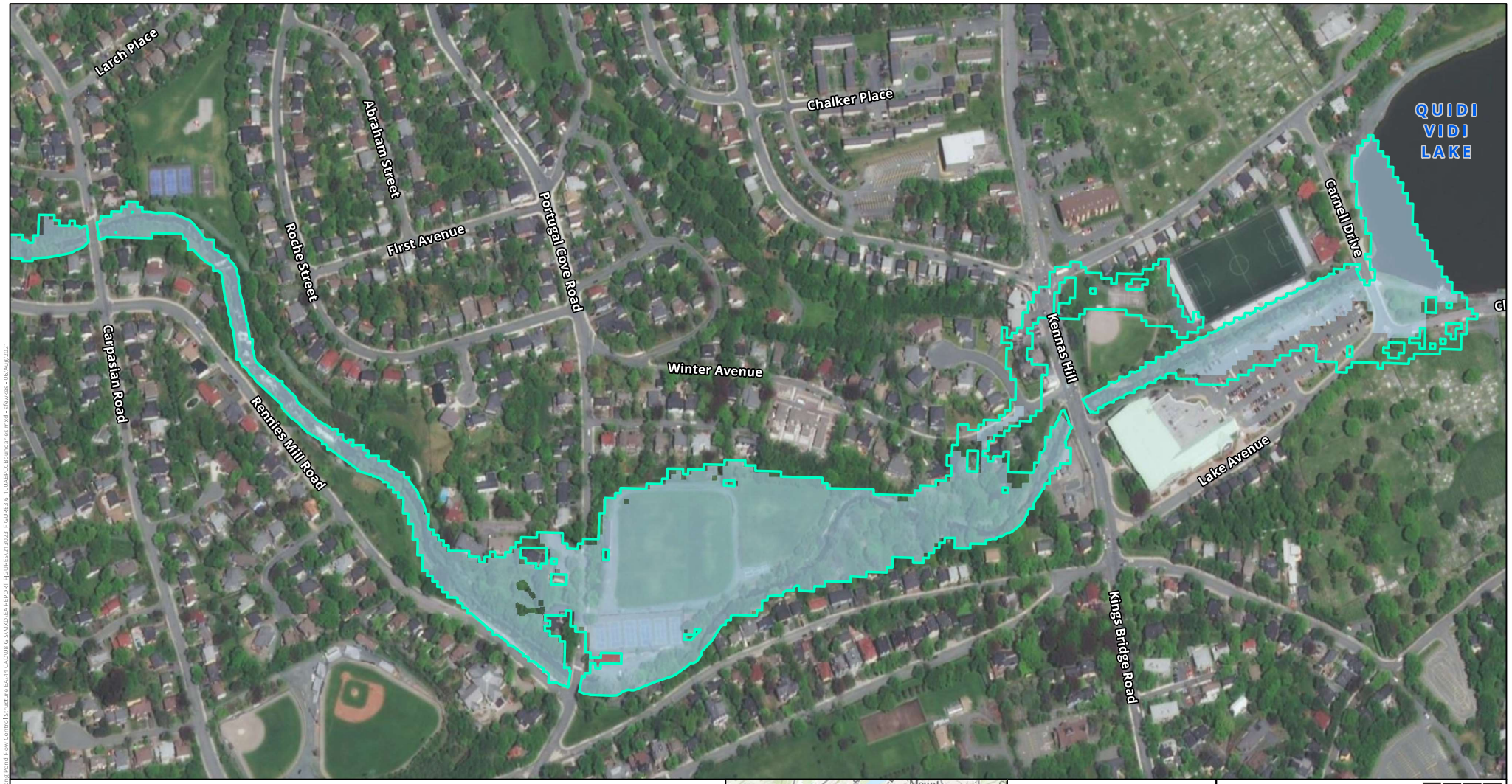
Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

PROJECT Nº: 213023	FIGURE: 3.6 (3)
SCALE: 1:3,500	DATE: Aug 2021

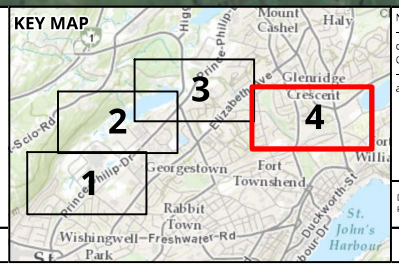


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

PROJECT N°: 213023	FIGURE: 3.6 (4)
SCALE:1:3,500	DATE: Aug 2021

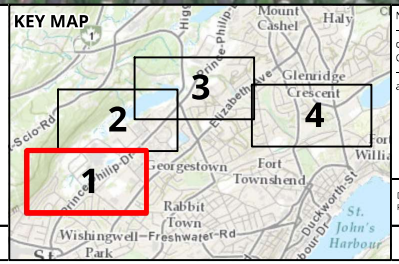
Document Path: X:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3.6 100AEPCCBoundaries.mxd - nkeeles - 06/Aug/2021

LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

PROJECT N°: 213023	FIGURE: 3.7 (1)
SCALE:1:3,500	DATE: Aug 2021

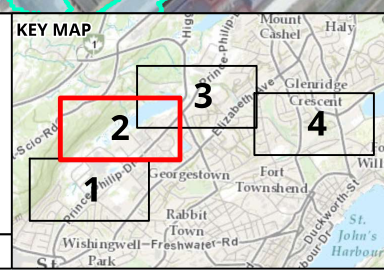
Document Path: P:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3_7_100330APCBCLboundaries.mxd - Steven - 06/Aug/2021

LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall
- Long Pond Walking Trail

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

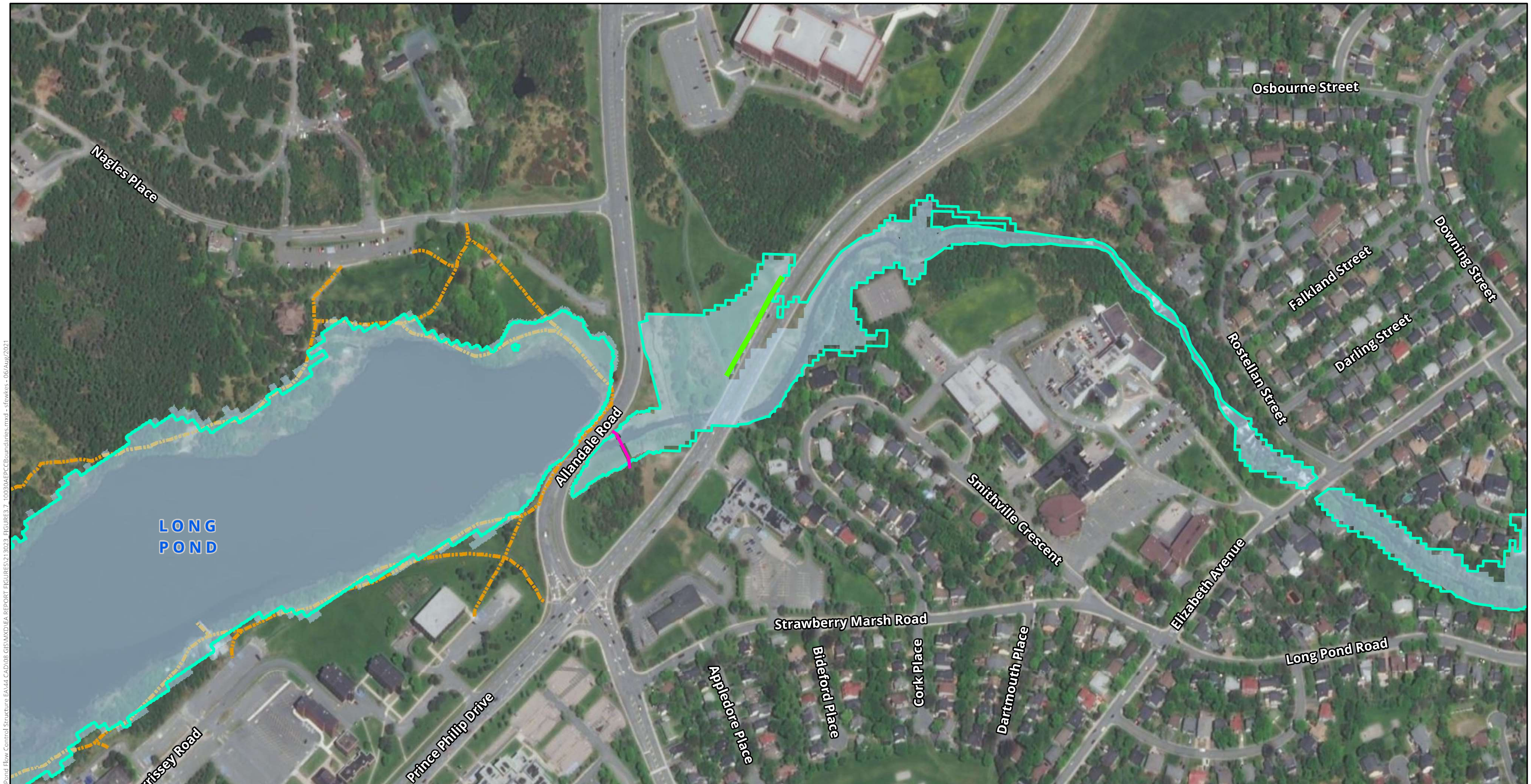
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT Nº: 213023	FIGURE: 3.7 (2)
SCALE:1:3,500	DATE: Aug 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\04 CAD\08 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3.7_100304EPCCBoundaries.mxd - sfewkes - 06/Aug/2021

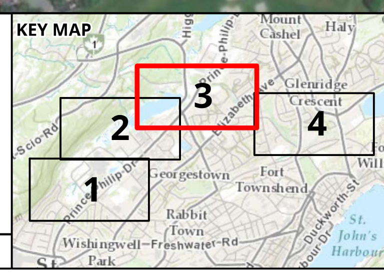


LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Earth Berm With Concrete Opening
- Long Pond Walking Trail

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

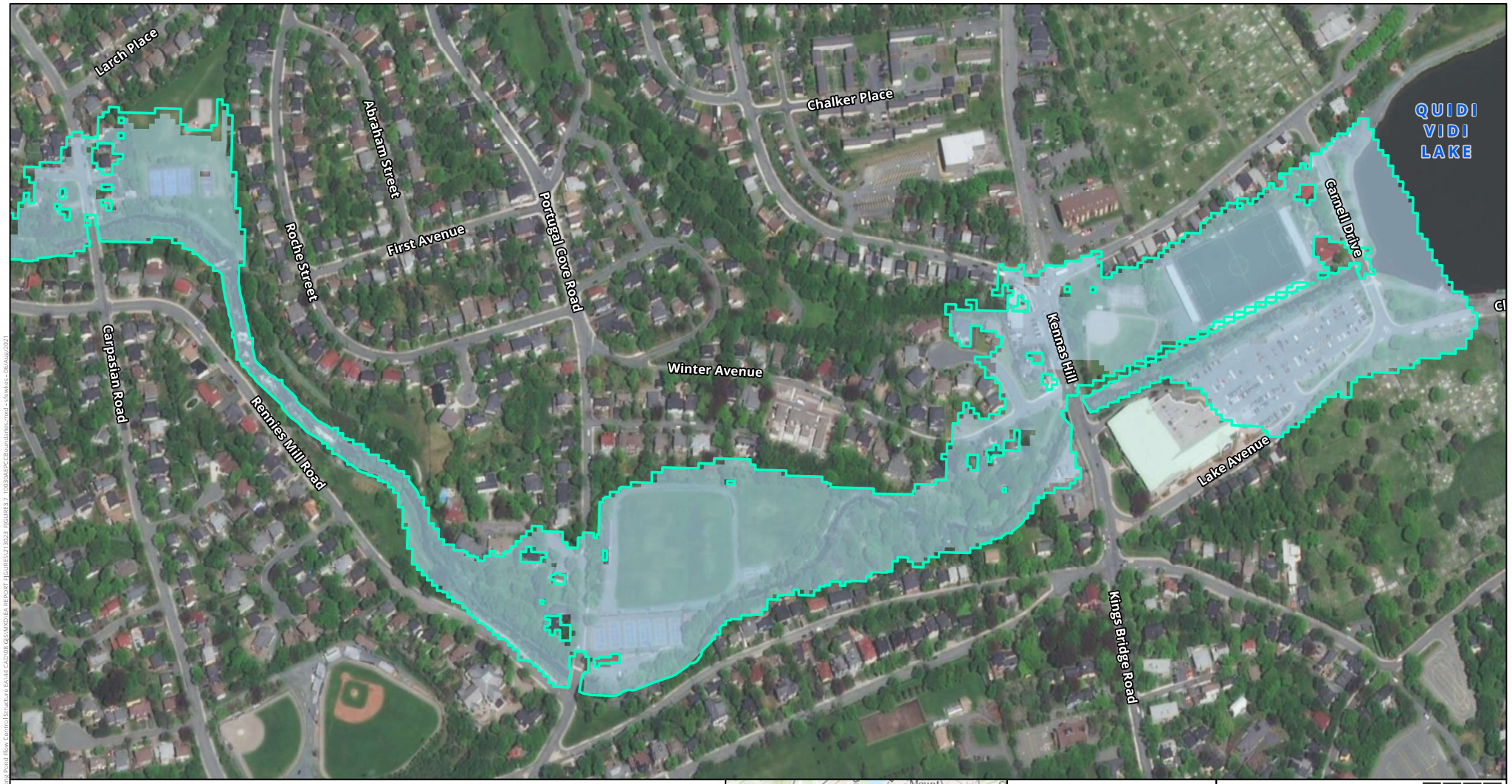
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

PROJECT N°: 213023	FIGURE: 3.7 (3)
SCALE: 1:3,500	DATE: Aug 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\04 CAD\08 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3.7_10030AEPCCBoundaries.mxd - sfewkes - 06/Aug/2021

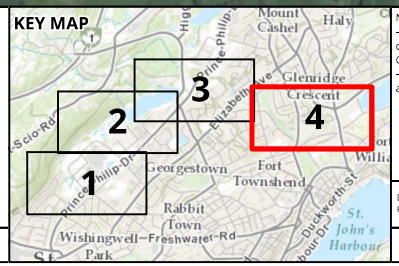


LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake
- Long Pond Walking Trail - trail extent is approximate, not surveyed

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

PROJECT N^{O}: 213023	FIGURE: 3.7 (4)
SCALE:1:3,500	DATE: Aug 2021

Document Path: X:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 3.7 (4) EA REPORT FIGURES.mxd - Status = 06/Aug/2021

Wetlands: While the adjacent wetlands will not be disrupted by the day-to-day operations of the flow control structure and accompanying flood mitigation infrastructure, storm events that result in flooding will cause the wetland areas surrounding Long Pond to be temporarily inundated with water for longer periods of time. This is due to the restricted flow conditions because of the flow control structure. Once regular flow conditions are restored, drainage of the flood waters will occur.

The effects would be dependant on the frequency and duration of water retention, and include potential changes to wetland hydrology, effects to vegetation and the wetlands functional abilities. The water retention may range to a period of days per event, if water were to be stored for a much longer duration (i.e., multiple weeks during the growing season in any given year), then potential changes could be anticipated such as dieback or change of vegetation; however, the modeling undertaken does not suggest that this storage scenario is required, or indeed likely to occur.

Given that stormwater storage in the wetland will only occur intermittently (i.e., following a rainfall event) and will quickly dissipate once precipitation has ceased. Monitoring should be considered to monitor potential changes or effects. Offsetting may be required if effects result in changes to the wetland area.

Fish and Fish Habitat: Fish passage may change once the flow control structure is operating as there will be velocity changes caused by flow regulation. The presence of rip rap will mimic natural channel conditions and will therefore support fish migration. Fish will still be able to migrate freely through the opening of the structure.

When Long Pond is backwatered and the flow control structure is in use, velocities through the structure may temporarily increase until the water levels reduce to normal lake levels. These occurrences are anticipated to overlap with periods of storm conditions which typically occur from June 1st to November 30th. In turn, these overlap with the migratory periods for brook trout (September), and brown trout (October). Assessment of fish passage through the flow control structure will be completed during further design and consultation with DFO.

Human Activities: The intent of the Project is to provide positive benefits to the community. The flood mitigation infrastructure will be designed in accordance with applicable engineering standards and will be constructed by a qualified contractor.

Access to the Health Sciences Centre and NRC building may be temporarily obstructed during regular inspections and maintenance. This may include disruption within the areas of infrastructure and temporary restriction of traffic along Clinch Crescent, Kerwin Place, Prince Philip Drive, Allandale Road. Traffic controls will be implemented following the City of St. John's requirements; however, effects are expected to be infrequent and short in duration. Following these requirements, minimal conflicts are expected.

3.5 Occupations

Design and construction will be the responsibility of the contractor with input from the City, the City's Project Manager, and the City's Consultant. The contractor will ultimately decide on the numbers and types of employees working on the project following final design. Anticipated project estimates have been provided below for evaluation.

Employment equity will be the responsibility of the successful contractor during construction. The City of St. John's has employment equity policies that will be followed in any employment opportunities.

3.5.1 Employees During Construction Phase

It is projected that the occupations outlined in Table 3.8 will be required for employment during the construction phase of the project. Table 3.8 also displays the approximate anticipated number of positions during construction and their associated National Occupational Classification (NOC) codes.

3.5.2 Employees During Operations Phase

The only staff that will be employed during the Operations Phase of the project are those who are required to conduct as-needed maintenance activities. The berms will otherwise not be staffed post-construction.

3.5.3 Employment Equity

The City is committed to the employment of a qualified workforce that reflects the community's diversity. The City has established employment equity policies within their Corporate and Operational Policy Manual. The policies outline their commitments to achieve fair and equal access to municipal employment opportunities for citizens; encourages the participation in City employment by all sectors; and foster an environment where employees and candidates for employment are treated with fairness, respect, and dignity, without discrimination based on gender, race, colour, religion, ethnic origin, ancestry, sexual orientation, age, disability, marital status, or the need for accommodations. Employment decisions will be based on job related knowledge, qualifications, skills, abilities, and fairness. The City encourages companies hired to complete the proposed works to have similar policies and will be an equal opportunity employer.

Additionally, the City has implemented the Workplace Human Rights Policy & Procedure Bylaw as a mechanism for the investigation of alleged violations of individual rights, ensuring that alleged violations of the Policy are investigated.

Table 3.8 Anticipated Positions / Occupations Required during Construction Phase

Position	National Occupational Classification Group Title Code	Type of Employment Full / Part-time	Duration of Employment (months)	Number Positions Anticipated	Hiring Method Contracted Out, Direct Hire, Existing Staff	Estimated Quarterly Occupational Requirements		
						2022		
						Q2/22	Q3/22	Q4/22
Construction Manager	0711	Full Time	4	1	Contracted Out	1	1	1
Heavy Equipment Operators	7521	Full Time	4	2	Contracted Out	2	2	2
Construction and Trades Contractors and Supervisors	7205	Full Time	4	1	Contracted Out	1	1	1
Construction Trades Labourers	7611	Full Time	4	4	Contracted Out	4	4	4
Land Surveyors	2154	Part Time	4	1	Contracted Out	1	1	1
Construction Inspectors	2264	Full Time	4	1	Contracted Out	1	1	1
Geological Engineer	2144	Part Time	6	1	Contracted Out	1	1	1
Civil Engineer	2131	Part Time	6	1	Contracted Out	1	1	1

3.6 Public Consultation

The City of St. John's provided opportunities for public engagement and involvement throughout the process, including a Project specific webpage and a virtual public engagement session. To summarize the initial engagement findings, the City of St. John's has prepared a "What We Heard" document outlining a summary of the engagement activities (Appendix H).

The City of St. John's prepared a Project-specific webpage on the 'Engage St. John's' website, on November 23, 2021, which provided a Project description, available information for the Project, and question submission form. The Project description on the Engage St. John's website included the identification of the location of the Long Pond flow control structure and associated flood mitigation infrastructure (cast-in-place wall and two earth berms). Question submitted were posted, and responses were provided from the City of St. John's (Appendix H).

The City of St. John's held a virtual public engagement session on December 7, 2021, to provide information on the proposed Project, and to respond to questions and seek feedback from the local community. Virtual public engagement session announcements were posted on the 'Engage St. John's' website (the website), postcards were mailed to households in the area, and newsletters were sent to registers users and followers of the website to increase exposure of the event to potential participants. Forty-one people attended the virtual public engagement session. The session provided Project details on the flow control structure and associate infrastructure and described the process for the registration of the Undertaking in accordance with the provincial *Environment Protection Act* and *Environmental Assessment Regulations*. Presented materials included the following and the presentation is provided in Appendix H:

- Background
- The Project
    - Location / Project Design
    - Water Levels
    - Project Schedule
- Permits and Authorizations
    - Environmental Assessment Process
    - Other Permit Requirements

Participants were able to express concerns and issues with the Project via the engagement pages and at the public session. Key concerns and issues with this Project included the following which are integrated into this EARD:

- Understanding technical details and intent
- Environmental Assessment process and approval levels for this Project
- Active transportation and pedestrian safety concerns
- Long-term and short-term potential environmental impacts and mitigation of potential damage caused by flooding

A summary of key questions and concern themes are presented in Table 3.9, a full list of questions and responses is included in the "What We Heard Document" in Appendix H. Questions about other undertakings within the vicinity of the Project area are not included within this assessment.

Table 3.9 Summary of Questions and Concerns from Public Information Meeting on December 7, 2021.

Theme	Topic	Response Summary
Project	How does the flow control structure and the weir differ in terms of flood mitigation?	Both provide the same level of flood mitigation.
	Is the structure able to withstand flow rates of 100 m^3/s?	The storm flow rates are less than 100 m^3/s though the structure can withstand this flow rate.
	Alternative engineering solutions to the Project	The stormwater management plan captures alternatives considered.
	How many residential homes downstream will be affected by the Project?	The number of homes that will be protected by the Project is ten to 12. Flooding protection is also provided for a main road, Prince Phillip Drive.
	Does this Project consider the new flood protection berms by the Health Sciences Centre	Yes, the project includes the berms presently under construction
Flooding Concerns	What is the current flood plan?	Flood mapping has been developed for 1:20-, and 1:100 annual exceedance probability (AEP) scenarios.
	Following a 1:100 AEP+30% storm, how long will it take for water to return to normal levels?	This could include a period of up to a few days and will be refined during further design.
	Will the flow control structure create depositional issues downstream during a storm event, due to high flow velocities at the discharge point of the structure?	Immediately downstream of the flow control structure will see an increase in velocity but will be handled in hydraulics of the design. Gravel may move during a storm but will only increase in a small area.

Theme	Topic	Response Summary
	Are there upstream impacts expected during a storm event?	No.
	Is the water table being considered for the proposed downstream berms? (i.e., berm at Prince Phillip Road)	Yes, this is currently being considered.
Environmental Impacts	How will sensitive fish and birds and their habitats be protected? Is river habitat a priority for the City?	As part of the EARD, potential species at risk within the Project area have been identified, and mitigation measures have been proposed to avoid or reduce environmental effects. The design and operation of the structure will be reviewed with Fisheries and Oceans Canada (DFO) to maintain fish passage and minimize effects to fish habitat.
	Has the possibility of the loss of fish habitat within the stream intersecting the upstream wetland during a flooding event been looked at?	The likelihood of effects would be dependant on the frequency and duration of water retention. The requirement for water retention would be intermittent (i.e., following a rainfall event) and will quickly dissipate once precipitation has ceased. Monitoring should be considered to monitor potential changes or effects. Offsetting may be required if effects result in changes fish habitat and wetlands.
	Have you studied potential increase in sedimentation this flood control may generate in Long Pond?	Effects from additional sedimentation is expected to minimal due to the short duration of water retention.
	The cattail marsh at the head of Long Pond is home to a rare Red Winged Blackbird nesting site (rare for eastern Newfoundland). This area may be vulnerable to floodwaters. Was there any investigation by the environmental scientist with regard to this?	The Red Winged Blackbird may nest within the wetlands surrounding Long Pond, however, occurrence of extreme rainfall is unlikely to occur during the general nesting period.

Theme	Topic	Response Summary
		Further assessment or monitoring may be required to estimate the magnitude of risk.
Transportation and Pedestrian Concerns	Plan to upgrade the sidewalk on the west side of Allandale Road? What are the impacts to the walking trails along Long Pond?	This is not included in the Project scope. Flooding would occur on the trails even without the structure
Environmental Assessment Process	How does this Project relate to the plan currently in review with NSECCM?	This submission is considered a new submission. A new submission was required due to the changes to the proposed project, and the timeline of the previous submission.
Other Approvals Permits	Have preliminary meetings occurred with Pippy Park, QVRRDF on the Project? Do municipal development bylaws apply to developments in Pippy Park?	Yes. A meeting with Pippy Park has occurred to discuss the Project. Yes, and Pippy Park may have additional development requirements.

3.7 Project Related Documents

The following section includes a summary of the documents used to generate this EARD.

3.7.1 Reference Documents

Bishop, Robert (Bob). President of Salmonid Association of Eastern Newfoundland (SAEN), St. John's, Newfoundland and Labrador. February 22, 2021.

CBCL. 2014. Rennies River Catchment Stormwater Management Plan (RRCSWMP): Final Report. File No. 123097.00. Report prepared for City of St. John's by CBCL, St. John's, NL. Dated April 15, 2014. Available: http://www.stjohns.ca/sites/default/files/files/publication/Rennies%20River%20Catchment%20Stormwater%20Management%20Plan_0.pdf. Accessed May 19, 2021.

CBCL. 2021. Long Pond Flow Control Structure Environmental Assessment- Hydraulic Analysis. Report prepared for City of St. John's by CBCL, St. John's NL. Dated July 16, 2021.

City of St. John's. 2021. St. John's Map Viewer. Available: https://map.stjohns.ca/mapcentre/#. Accessed: July 14, 2021.

City of St. John's. 1998. St. John's Noise By-Law. Available: http://www.stjohns.ca/bylaws.nsf/nwByLawNum/1405. Accessed: July 18, 2021.

Durocher, Adam. Data Manager, Atlantic Canada Conservation Data Centre, Corner Brook, Newfoundland and Labrador. April 22, 2021.

Environment and Climate Change Canada (ECCC). 2018. General Nesting Periods of Migratory Birds in Canada. Available: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html. Accessed: June 16, 2021.

Environment Canada. 2013. Bird Conservation Strategy for Bird Conservation Region 8 and Marine Biogeographic Units 10 and 12 in Newfoundland and Labrador: Boreal Softwood Shield, Newfoundland-Labrador Shelves, and Gulf of St. Lawrence. Canadian Wildlife Service, Environment Canada. Sackville, New Brunswick. vi + 158 pp. + Appendices. Available online: http://publications.gc.ca/collections/collection_2014/ec/CW66-320-6-2014-eng.pdf. Accessed: June 16, 2021.

eBird. 2021. eBird: An online database of bird distribution and abundance. eBird, Ithaca, New York. Available: http://www.ebird.org . (Accessed: May 27, 2021).

Fisheries and Oceans Canada (DFO). 2020a. Newfoundland and Labrador Angler's Guide 2020-2021:
Annex 7 - Newfoundland and Labrador scheduled Salmon Rivers. Available: http://www.nfl.dfo-mpo.gc.ca/NL/AG/ScheduledSalmonRivers. Accessed: March 26, 2021.

Fisheries and Oceans Canada (DFO). 2020b. Newfoundland and Labrador Angler's Guide 2020-2021: Brown Trout. Available: http://www.nfl.dfo-mpo.gc.ca/NL/AG/BrownTrout Accessed: March 26, 2021.

Fisheries and Oceans Canada (DFO). 2019. Timing windows to conduct projects in or around water. Available: https://www.dfo-mpo.gc.ca/pnw-ppe/timing-periodes/index-eng.html. Accessed June 16, 2021.

Golder Associates Ltd. November 2014. Report on Proposed Weir Structure – Long Pond St. John's, NL. Prepared for CBCL Limited.

Government of Canada. 2020. Canadian Climate Normals 1981 – 2010 Station Data – St. John's A – Climate ID: 8403506. Modified: July 20, 2018. Available: http://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?stnID=6720&autofwd=1. Accessed: March 26, 2021.

Government of Newfoundland and Labrador, Environment, Climate Change and Municipalities (NLECCM). 2020a. Water Quality Station Profile: Station #: NF02ZM0016,

Rennies River at Carnell Drive. Available: https://www.canal.gov.nl.ca/root/main/station_details_e.asp?envirodat=NF02ZM0016. Accessed March 31, 2021.

Government of Newfoundland and Labrador. 2021. Newfoundland and Labrador Water Resources Portal. Available: https://maps.gov.nl.ca/water/mapbrowser/Default.aspx. Accessed: March 26, 2021.

Government of Newfoundland and Labrador, Department of Fisheries, Forestry and Agriculture (NLFFA).2021b. District Planning Information. Available: https://www.gov.nl.ca/ffa/programs-and-funding/forestry-programs-and-funding/managing/district/ Accessed: July 18, 2021.

Government of Newfoundland and Labrador, Department of Fisheries, Forestry and Agriculture (NLFFA). 2021a. Maritime Barrens Ecoregion. Available: https://www.gov.nl.ca/ecc/files/natural-areas-pdf-island-6b-southeast-barrens.pdf /. Accessed: July 18, 2021.

Government of Newfoundland and Labrador, Department of Fisheries, Forestry and Agriculture (NLFFA). 2021c. All Species. Available: http://www.flr.gov.nl.ca/wildlife/all_species/index.html. Accessed July 18, 2021.

Government of Newfoundland and Labrador, Department of Fisheries, Forestry and Agriculture (NLFFA). 2021d. Birds. Available: https://www.gov.nl.ca/ffa/wildlife/all-species/birds/. Accessed: July 18, 2021.

Government of Newfoundland and Labrador, Environment, Climate Change and Municipalities NSECCM (2014). Available: https://www.gov.nl.ca/eccm/waterres/flooding/flooding/#forecast. Accessed: July 18, 2021.

Government of Newfoundland and Labrador, Industry, Energy and Technology. 1994. Surficial Geology Map. Available: https://www.gov.nl.ca/iet/mines/geoscience/reports-maps/indexes/. Accessed September 29, 2020.

Heritage Newfoundland and Labrador. 2002. Maritime Barrens. Available Online: https://www.heritage.nf.ca/articles/environment/maritime-barrens.php. Accessed: March 26, 2021.

Keefe, Donald. Ecosystem Management Ecologist, Aquatic, Wildlife Division, Newfoundland and Labrador, Department of Municipal Affairs and Environment, Corner Brook, Newfoundland and Labrador. September 20, 2017.

Newfoundland Breeding Bird Atlas. 2021. Newfoundland Breeding Bird Atlas (2020-2024). Available: https://www.birdscanada.org/birdmon/nfatlas/main.jsp. Accessed: July 18, 2021.

Northeast Avalon Atlantic Coastal Action Program (NAACAP). 2015. Rennies River Watershed Riparian Assessment. Available Online: http://s860504074.online-home.ca/wp-content/uploads/2015/07/Rennies-River-Watershed-Riparian-Assessment.pdf. Accessed: July 18, 2021.

Rydin, H. and Jeglum, J. K.2006.The biology of peatlands. Oxford University Press, Oxford, 360 pp.

Salmonid Association of Eastern Newfoundland (SAEN). 2020. SAEN Projects. Available Online: https://www.saen.org/projects.html. Accessed: July 27, 2021.

Stantec Consulting Ltd. (Stantec). 2016. Geotechnical Investigation – Flood Protection Berm (Rev.1), Health Sciences Centre, St. John's, NL. Technical Letter Report. Report prepared for Eastern Health by Stantec, St. John's, NL. Dated July 7, 2016.

Thaumas Environmental Consultants Ltd. 2014. Report on fish passage at the proposed Long Pond weir, Rennies River, St. John's, NL. Dated December 6, 2014.

Wood Environment & Infrastructure Solutions (Wood). 2020. Hurricane Season Outlook 2020. Report prepared for Water Resources Management Division, Department of Municipal Affairs and Environment by Wood, St. John's, NL. Dated 1 June 2020. Available Online: https://www.gov.nl.ca/eccm/files/WRMD_Hurricane_Season_Outlook_2020.pdf. Accessed: March 26, 2021.

3.7.2 Project Specfic Studies

The City has undertaken Project specific studies since 2013. The following Project related documents have been completed and are provided for further information to this EARD. The locations of the studies are provided below:

Available Online: CBCL. 2014. Rennies River Catchment Stormwater Management Plan (RRCSWMP): Final Report. File No. 123097.00. Report prepared for City of St. John's by CBCL, St. John's, NL. Dated April 15, 2014. Available Online: http://www.stjohns.ca/sites/default/files/files/publication/Rennies%20River%20Catchment%20Stormwater%20Management%20Plan_0.pdf

Appendix A – Flood Mitigation Studies

CBCL. 2021. Long Pond Flow Control Structure Environmental Assessment-Hydraulic Analysis. Report prepared for City of St. John's by CBCL, St. John's NL. Dated July 16, 2021.

Appendix H – Public Consultation Documents

Chapter 4 Approval of Undertaking

After completion of the environmental assessment process, the Project is anticipated to require federal and provincial environmental permits, approvals, and authorizations. Table 4.1 provides a list of the anticipated permits, approvals, authorizations, or reviews that may be required, the enabling legislation, and the regulatory agency responsible for administration. Respective approvals, permits, and authorizations will be in place prior to the commencement of construction activities.

Table 4.1 List of Permits, Approvals, Authorization or Reviews for the Project

Permit, Approval, Authorization or Review	Applicable Legislation	Issuing Body
Approval for the Undertaking	*Environmental Protection Act* / *Environmental Assessment Regulation*	Newfoundland and Labrador Minister of Environment and Climate Change
Permit to Alter a Body of Water Schedule J - Miscellaneous Works in a Freshwater Body i.e. Other works not specific to above schedules	*Water Resources Act,* SNL 2002 and NLECCM Policy for Development in Wetlands	NLECCM Water Resources Management Division
Request for Review	*Fisheries Act*	Fisheries and Oceans Canada (DFO)
Development, Building, and Occupancy Permits	*City of St. John's Act*, RSNL 1990	St. John's City Council
Pippy Park Approval	*Pippy Park Commission Act*	C.A. Pippy Park Commission

Chapter 5 Schedule

The preliminary design activities such as topographic surveys are scheduled to take place in the fall of 2021 and detailed design will continue through the fall of 2021 / winter of 2022. Upon receipt of required approvals and authorizations, site preparation activities, such as vegetation clearing may occur in the spring of 2022. Construction will follow in spring / summer of 2022. The construction is expected to occur over a four-month period including site preparation and construction.

The schedule reflects vegetation clearing occurring outside the breeding bird period (mid-April to mid-August, ECCC, 2018). If vegetation clearing outside the breeding bird nesting period is unavoidable, breeding bird/nest surveys will be completed by a competent biologist with appropriate relevant experience prior to removal of vegetation or disturbance of potential habitat. Appropriate setback distances should be based on setbacks identified in the literature or in consultation with a provincial or federal wildlife biologist.

Any in-water works will occur during the summer low flow period (May 1 to September 30) to avoid sensitive life stages of aquatic life (from October 1 to May 31). Mitigation measures will be employed as to minimize effects to brown trout, such as avoiding construction from October 1 to November 30 (DFO, 2019).

Chapter 6 Funding

Funding for the Project is to be determined and may include municipal, provincial, and federal funding opportunities. The estimated capital cost for the design and construction is in the range of $2.0 to 4.0 million.

APPENDIX A

Flood Mitigation Study

Memo

Date	07/16/2021
Memo to	Department of Environment, Climate Change and Municipalities
Project name	Long Pond Flow Control Structure Environmental Assessment
Subject	Hydraulic Analysis
From	Jennifer Bursey
Copies to	Greg Sheppard

Topography

LiDAR collected between Wicklow Street and Quidi Vidi in 2017 was provided by the City of St. John's. Since the hydraulic model was developed using LiDAR collected in 2015 the two sets of elevation data were compared. The comparison focused on land areas near, and within, the delineated floodplains. The average elevation difference was 0.005m, with a standard deviation of approximately 0.21m. The majority (approximately 80%) of elevations differ in the range of -0.1 to 0.1m.

The *Federal Flood Mapping Guidelines Series - Federal Airborne LiDAR Data Acquisition Guideline Version 3.0*, issued by Natural Resources Canada in 2020 is intended to provide guidance to entities that require/collect LiDAR data. The guideline focuses on data quality and accuracy requirements. Minimum requirements for airborne LiDAR acquisition, with respect to the surface, include the following:

- Surfaces must be free from extensive flooding or inundation, snow cover and ice buildup on shoreline or land areas;
- Dry land surface condition is required; and
- Frost is acceptable.

It is noteworthy that the comparison of 2015 and 2017 LiDAR data includes wet areas, such as the following:

- Area bounded by Wicklow Street, Prince Philip Drive and Clinch Crescent west;
- Area bounded by Clinch Crescent west, Clinch Crescent east, Prince Philip Drive and the Health Sciences Centre;
- Along Learys Brook between Clinch Crescent east and Long Pond; and
- Learys Brook and Rennies River.

There has been limited development within the floodplain since 2015. Most notably is the construction of Memorial University of Newfoundland's Animal Resource Centre and Core Science Buildings. As well as the Health Sciences Centre (HSC) flood protection berm at the north side of Leary's Brook between Clinch Crescent west and Clinch Crescent east which was constructed in 2020. Construction of the HSC south berm commenced in June 2021 and will be completed during the 2021 construction season. These buildings and structures are not reflected in the 2017 LiDAR. However, they have been included in the hydraulic model as elevation features.

Hydrology

In 2014 CBCL completed the Rennies River Catchment Stormwater Management Plan (RRCSMP) Study for the City of St. John's. The study included hydrologic modelling of the catchment to determine flood flows for existing and future land uses, considering up-to-date rainfall data as well as rainfall representative of climate change conditions.

The hydrologic model was built using XPSWMM, a modelling software developed by XP Solutions that uses standard hydrological methods to estimate runoff flows in a watershed, and solves dynamic flow equations to calculate 1D flows through pipes, culverts, narrow channels, etc. The software also calculates 2D flows through floodplains, large bodies of water, wide bridges, etc.

For a detailed description of the RRCSMP model, the reader is referred to the RRCSMP report, available at:
http://www.stjohns.ca/sites/default/files/files/publication/Rennies%20River%20Catchment%20Stormwater%20Management%20Plan_0.pdf

Hydrographs corresponding to the 1:20 annual exceedance probability (AEP) climate change (CLC), 1:100 AEP CLC and 1:100 AEP CLC + 30% events were extracted from the hydrologic model at various locations along Rennies River. These hydrographs were simulated in the hydraulic model to estimate the floodplain corresponding to each event.

Hydraulics

Hydraulic modelling of Rennies River was performed using the stormwater modelling software, XPSWMM. The hydraulic model was used to estimate water levels in the river channel, through structures (i.e., culverts and bridges) along the river reach, and in the overbanks. The 1:20 and 1:100 AEP climate change floodplains for the existing condition of the river (i.e., without mitigative measures in place) were prepared during the RRCSMP and updated during 2020-2021 to include berms at the Health Sciences Centre, by CBCL. The floodplains demonstrate anticipated flooding impacts to adjacent lands.

Inputs consisted of river channel invert elevations, channel and floodplain roughness coefficients, LiDAR information, hydraulic structure dimensions and inflow hydrographs. The model structure is a 1D network representing the hydraulic structures and the channel (for the 2020-2021 update) nested within a 2D domain (grid) representing the floodplain. Hurricane Igor (September 2010) was used as the calibration event for the hydraulic model.

Existing Conditions

Floodplains for the 1:20 AEP CLC, 1:100 AEP CLC and 1:100 AEP CLC + 30% flow conditions for existing conditions were prepared and are presented in Figures 1 to 3 (Appendix A), respectively. The existing conditions include the flood protection berms at the Health Sciences Centre.

Long Pond Flow Control Structure

The Long Pond Flow Control Structure is proposed to be constructed at the outlet of Long Pond, downstream of Allandale Road Bridge, as illustrated in Drawing B-1 and B-2 (Appendix B).

The proposed flow control structure will consist of a 6m wide pre-cast concrete channel, with earthen berms in the left and right banks. The bottom of the concrete opening will be countersunk in Rennies River. Riprap will be placed along the bottom of the concrete opening to the existing river bottom elevation.

In June 2020 the City of St. John's received revised guidelines for an environmental preview report for the Long Pond flow control structure. The revised guidelines limited the maximum water elevation in Long Pond to 56.0m during a 1:100 AEP CLC + 30% flow. An opening of 6m was selected to achieve this design criteria. Floodplains for the 1:20 AEP CLC, 1:100 AEP CLC and 1:100 AEP CLC + 30% flow conditions with the flow control structure in place are presented in Figures 1 to 3 (Appendix A), respectively.

Ancillary Flood Protection

A hydraulic analysis for potential downstream improvements, conducted for the City of St. John's in 2020, revealed that an earth berm is required at Prince Philip Drive to prevent the road from overtopping during the 1:100 AEP CLC flow event. The location of this berm is illustrated on Drawing B-6 (Appendix B).

The hydraulic model prepared for this current analysis revealed the need for a berm near the National Research Council (NRC) building to prevent flooding during the 1:100 AEP CLC + 30% event with the flow control structure in place. This berm is illustrated on Drawing B-3 (Appendix B).

Further, the hydraulic model indicates that the 1:100 CLC + 30% flow event will result in road overtopping at Clinch Crescent east under existing conditions. With the construction of the flow control structure the water level in this area will increase slightly, as shown in Drawing B-4 (Appendix B). Given the importance of the Health Sciences Centre it is prudent to provide flood protection to its access. Therefore, a cast-in-place concrete wall is being proposed in this area to accommodate the 1:100 AEP CLC + 30% flow event. The location of this concrete wall is illustrated in Drawing B-5 (Appendix B).

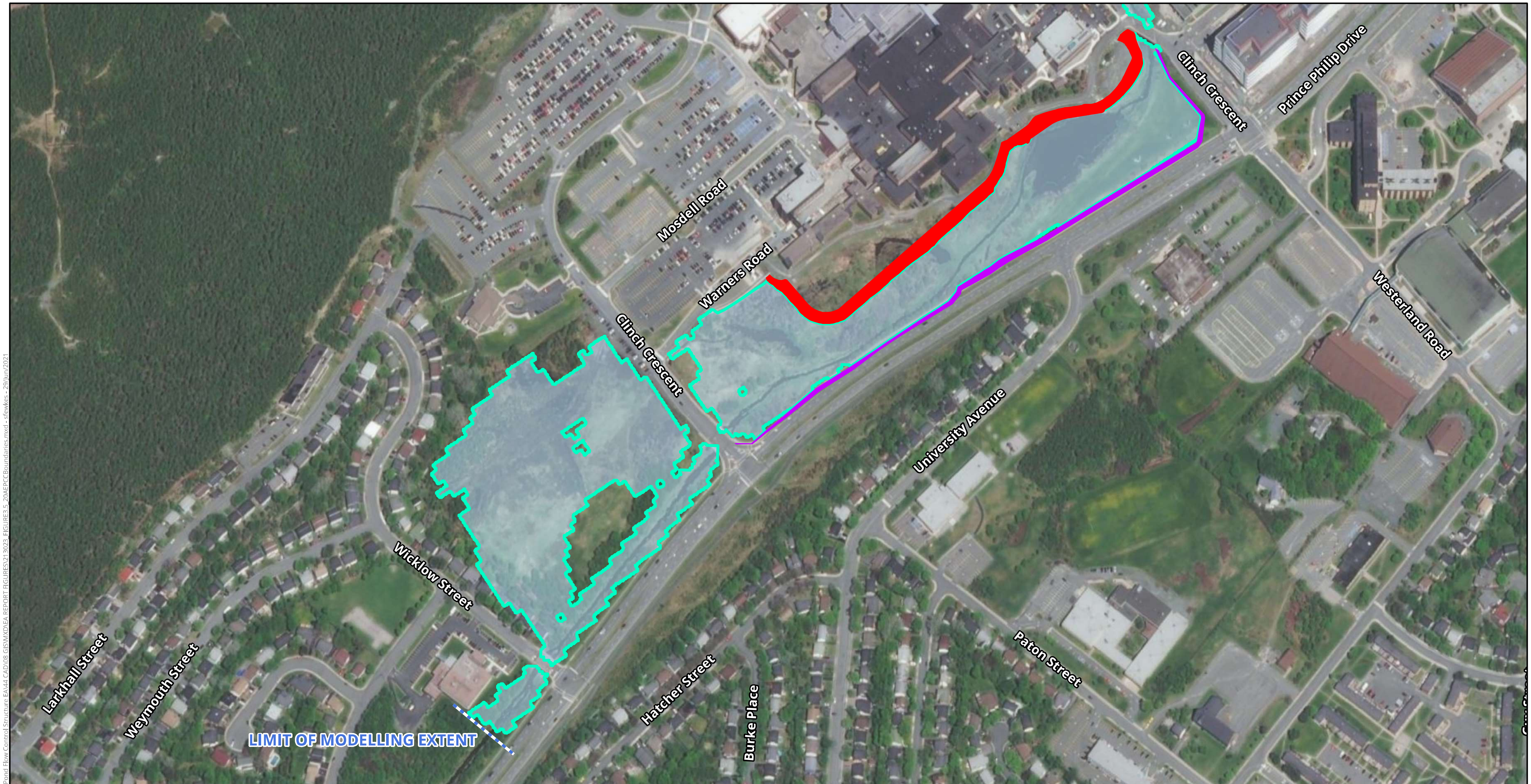
The addition of the Long Pond flow control structure will result in water being temporarily stored in Long Pond during a flow event. Long Pond currently acts to attenuate flow, however, by restricting the outlet with the flow control structure the maximum water elevation in Long Pond during a flow event will be higher than existing. Table 1 illustrates the estimated maximum water elevations in Long Pond for the 1:20 AEP CLC, 1:100 AEP CLC and the 1:100 AEP CLC + 30% flows.

Table 1: Peak Water Levels in Long Pond

Flow Event	Water Elevation in Long Pond (m)	
	Existing Conditions	Post Flow Control Structure & Ancillary Flood Protection Construction
1:20 AEP CLC	54.7	54.8
1:100 AEP CLC	55.2	55.4
1:100 AEP CLC + 30%	55.4	56.0

Appendix A:

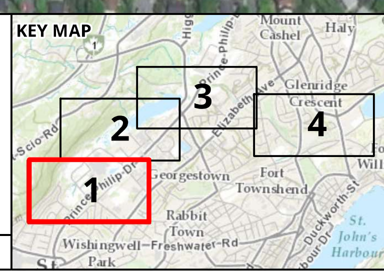
Floodplains



LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

PROJECT Nº: 213023	FIGURE: 1 (1)
SCALE:1:3,500	DATE: Jun 2021

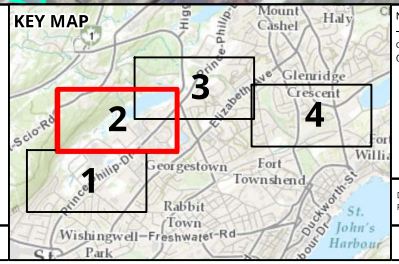
Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\08 GIS\MXD\EA REPORT FIGURES\213023_FIGURES 5_20AEPCCBoundaries.mxd - sfewkes - 29/Jun/2021

LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

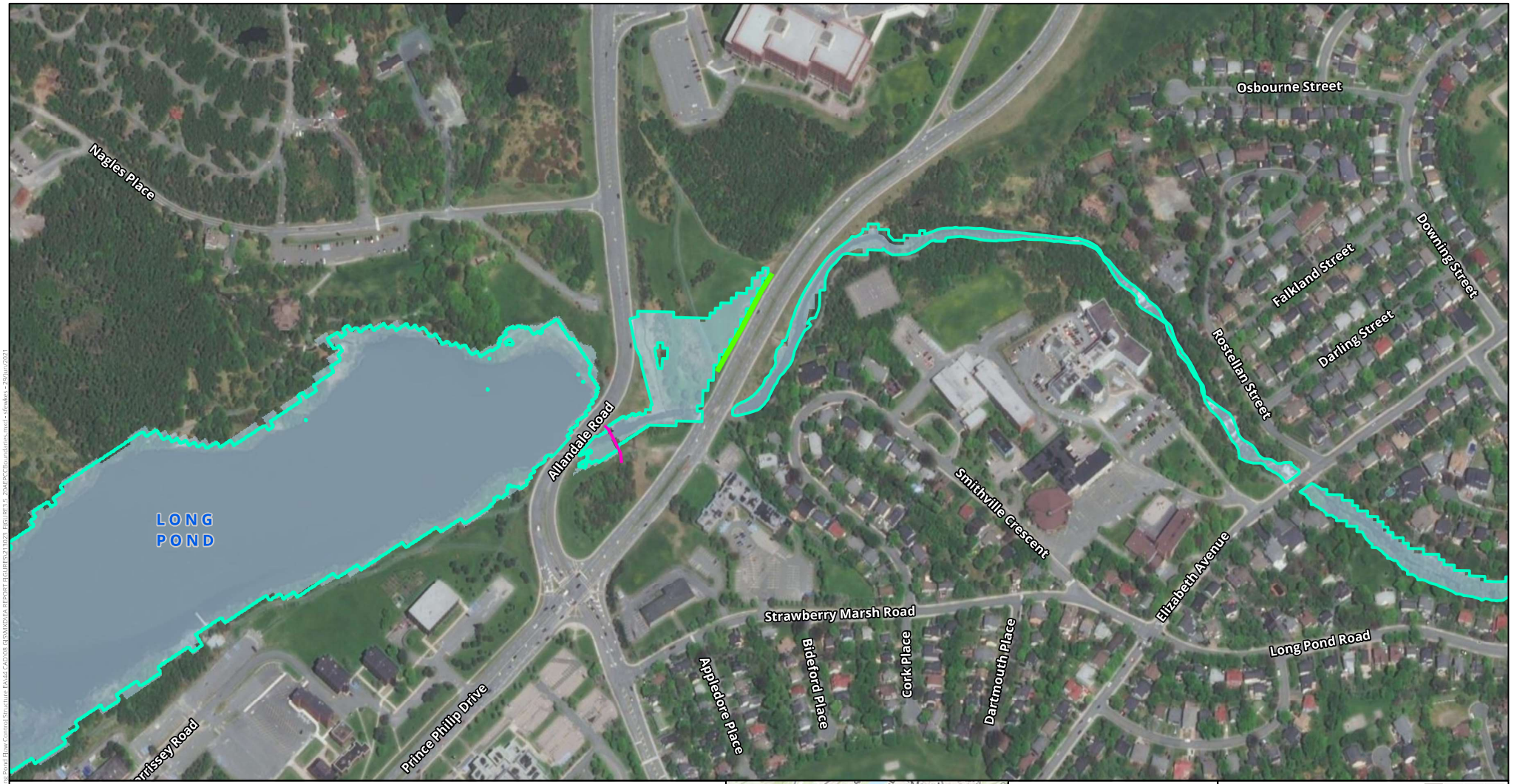
ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT N°: 213023	FIGURE: 1 (2)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023 FIGURE 5- 20AEPCBoundaries.mxd - dlewis - 29/Jun/2021

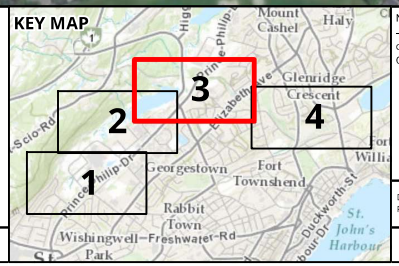


LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Earth Berm With Concrete Opening

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

PROJECT N°: 213023	FIGURE: 1 (3)
SCALE:1:3,500	DATE: Jun 2021

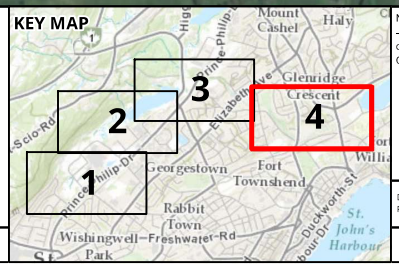
Document Path: Y:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE 1- 20AEPCBBoundaries.mxd - dlewis - 29/Jun/2021

LEGEND

- 1:20 AEP Climate Change Boundaries (Existing Conditions)
- 1:20 AEP Climate Change Boundaries (Post Construction Conditions)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:20 AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

PROJECT N°: 213023	FIGURE: 1 (4)
SCALE:1:3,500	DATE: Jun 2021

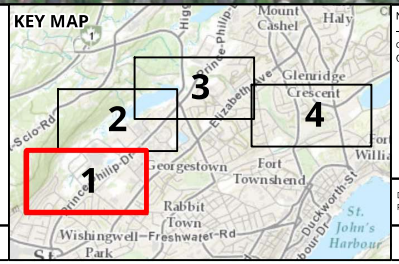
Document Path: X:\SJ_Jobs\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE1-5_20APCBCBoundaries.mxd - Gwales - 29/Jun/2021

LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

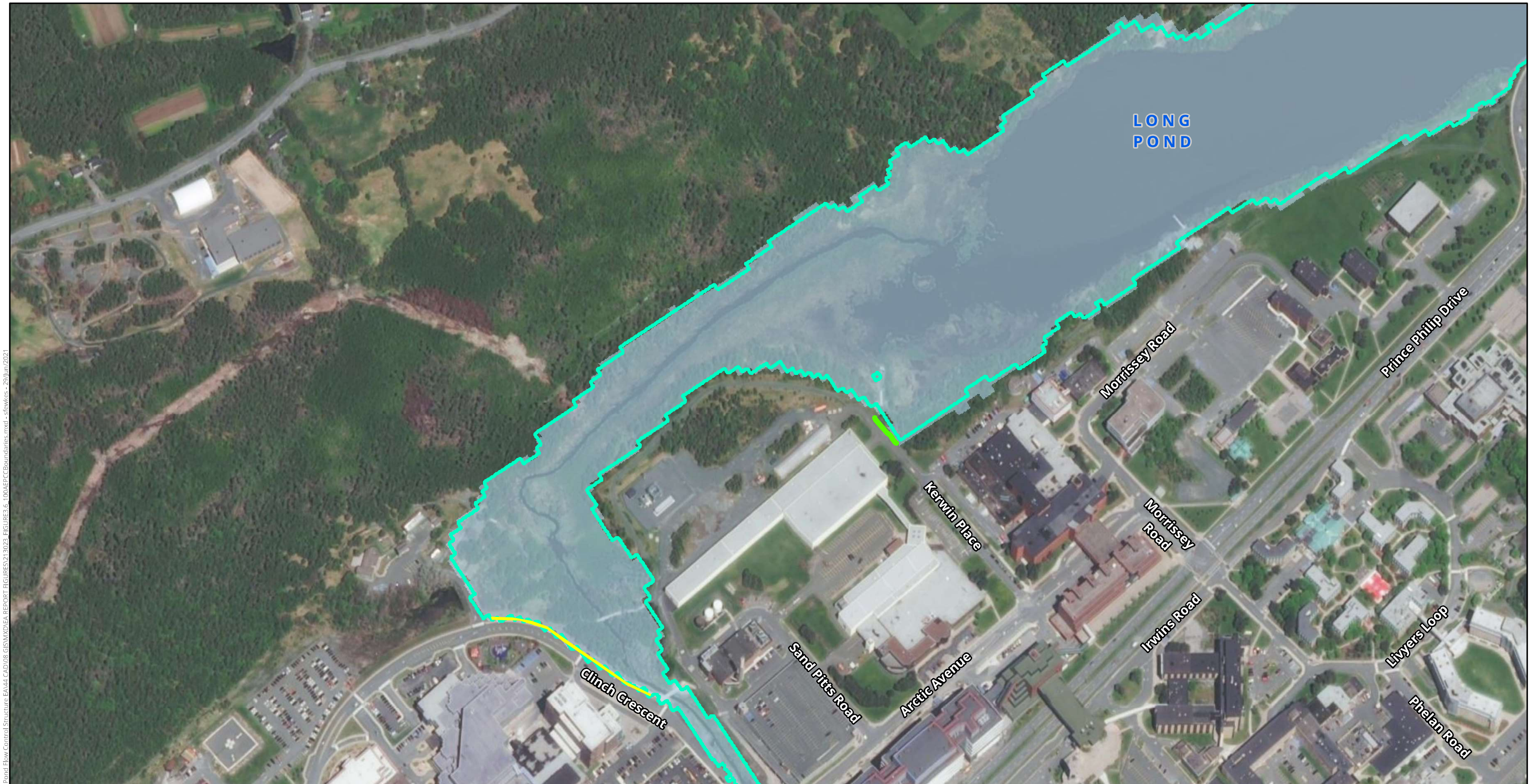
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

PROJECT N°: 213023	FIGURE: 2 (1)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE 6 - 100AEPCCBoundaries.mxd - sfewkes - 29/Jun/2021

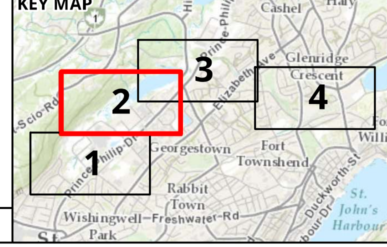


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

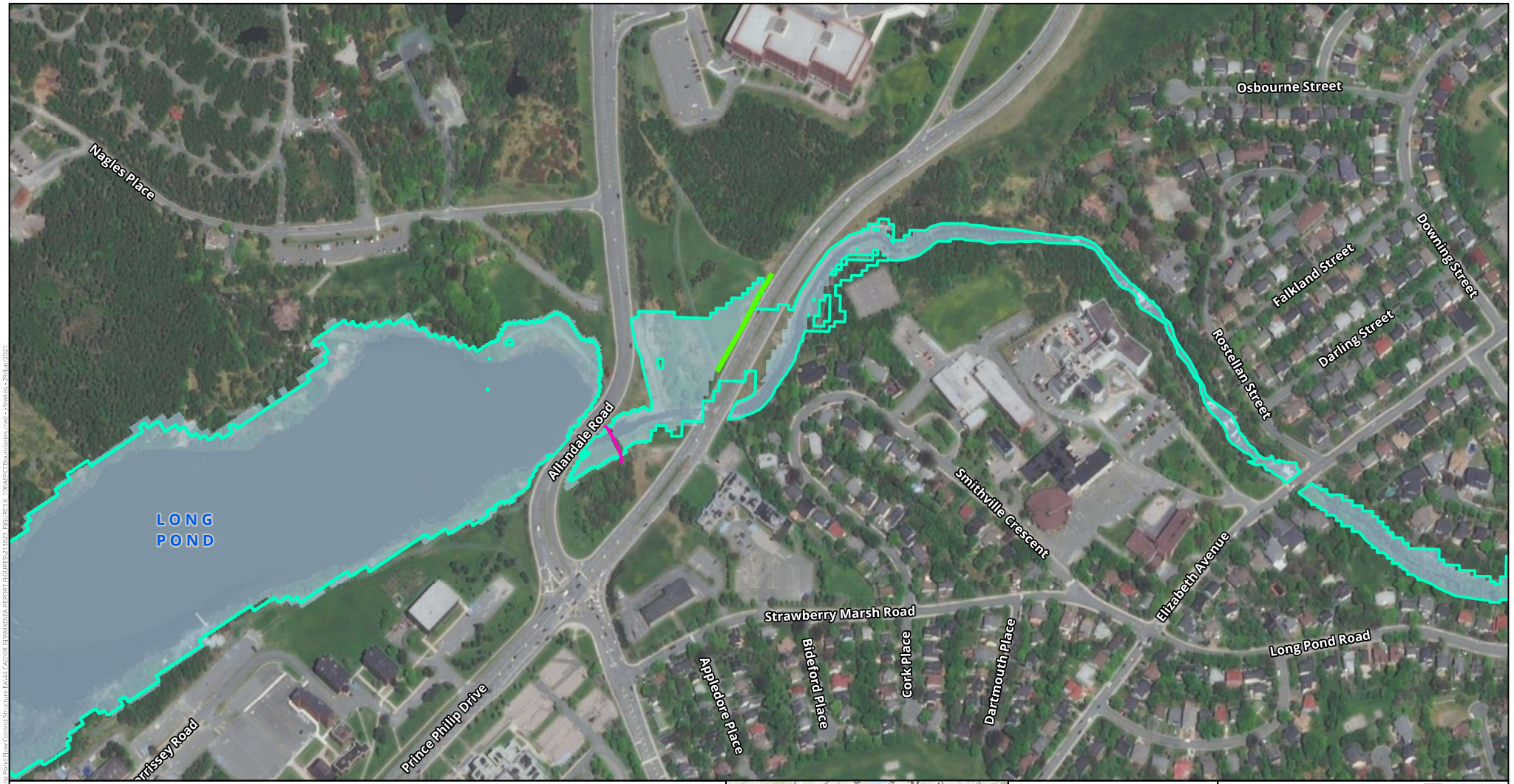
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT N°: 213023	FIGURE: 2 (2)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\04 CAD\08 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3.6_100AEPCCBoundaries.mxd - sfowkes - 29/Jun/2021

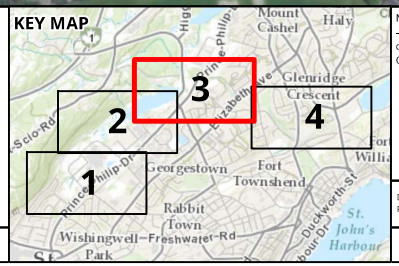


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Earth Berm With Concrete Opening

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

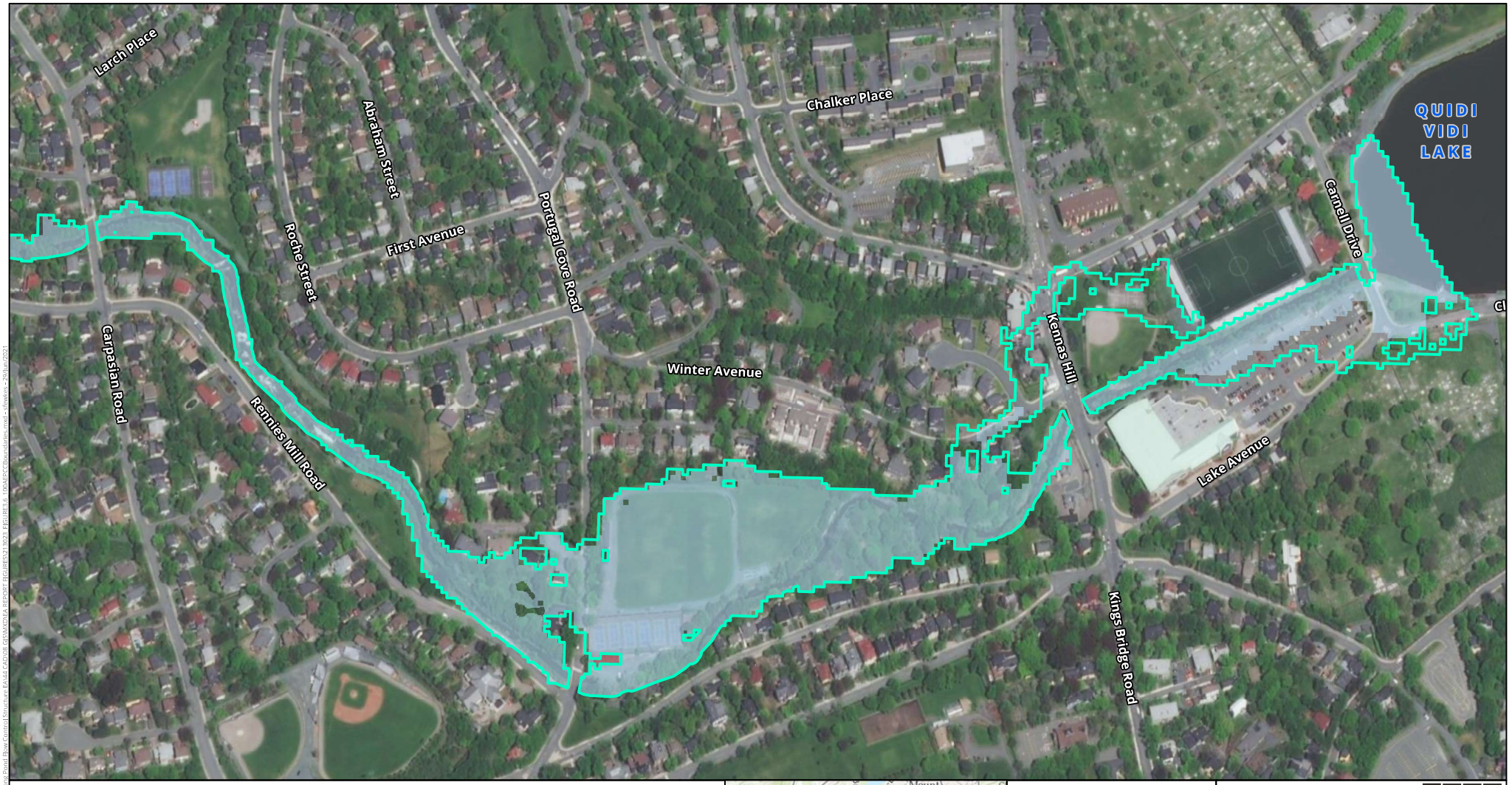
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

PROJECT N°: 213023	FIGURE: 2 (3)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE 6 - 100 AEPCBBoundaries.mxd - sfewkes - 29/Jun/2021

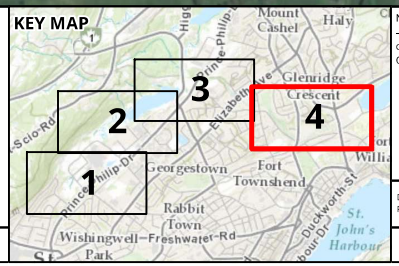


LEGEND

- 1:100 AEP Climate Change Boundaries (Existing Conditions)
- 1:100 AEP Climate Change Boundaries (Post Construction Conditions)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

PROJECT N°: 213023	FIGURE: 2 (4)
SCALE:1:3,500	DATE: Jun 2021

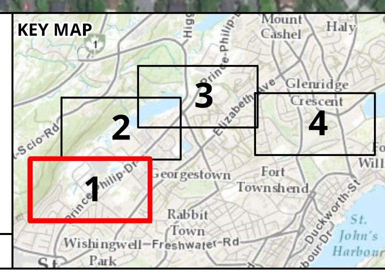
Document Path: Y:\SJ_Work\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE 6 - 100AEPCCBoundaries.mxd - sfewkes - 29/jun/2021

LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Health Science Centre - North Berm (Constructed)
- Health Science Centre - South Berm (Under Construction)

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 1 of 4)

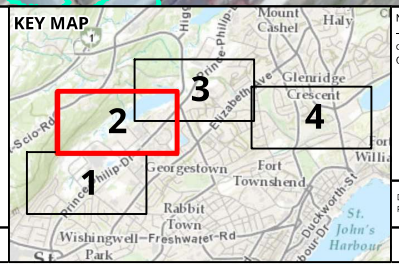
PROJECT Nº: 213023	FIGURE: 3 (1)
SCALE:1:3,500	DATE: Jun 2021

LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Cast-In-Place Concrete Wall

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

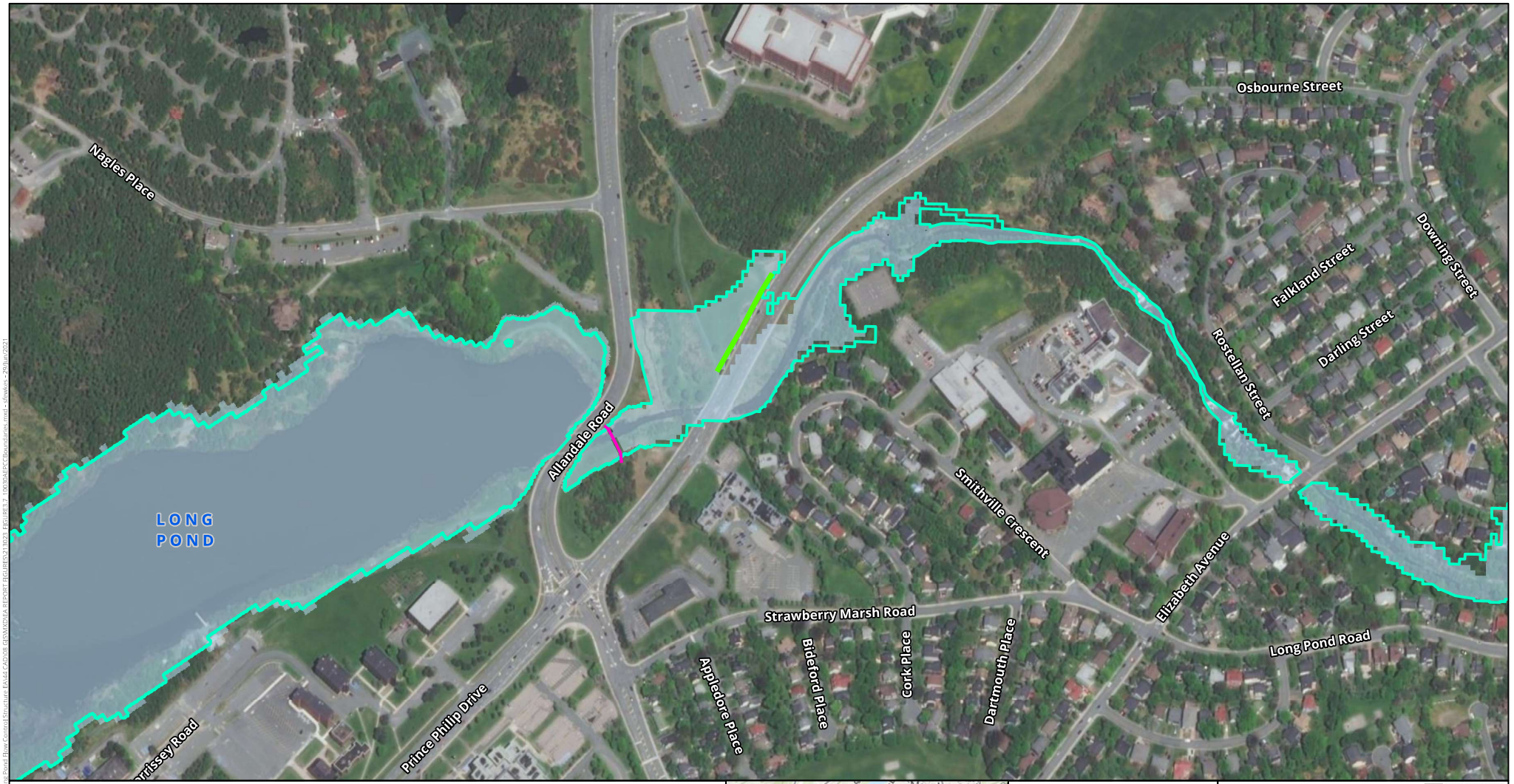
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 2 of 4)

PROJECT N°: 213023	FIGURE: 3 (2)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St_John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3_7_10OSAEPCBoundaries_mxd - Olivia.xx - 29/Jun/2021

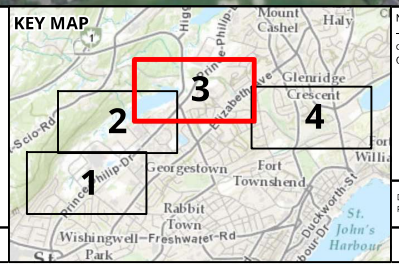


LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)
- Earth Berm
- Earth Berm With Concrete Opening

0 80 160 320 480 640 Metres

KEY MAP



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

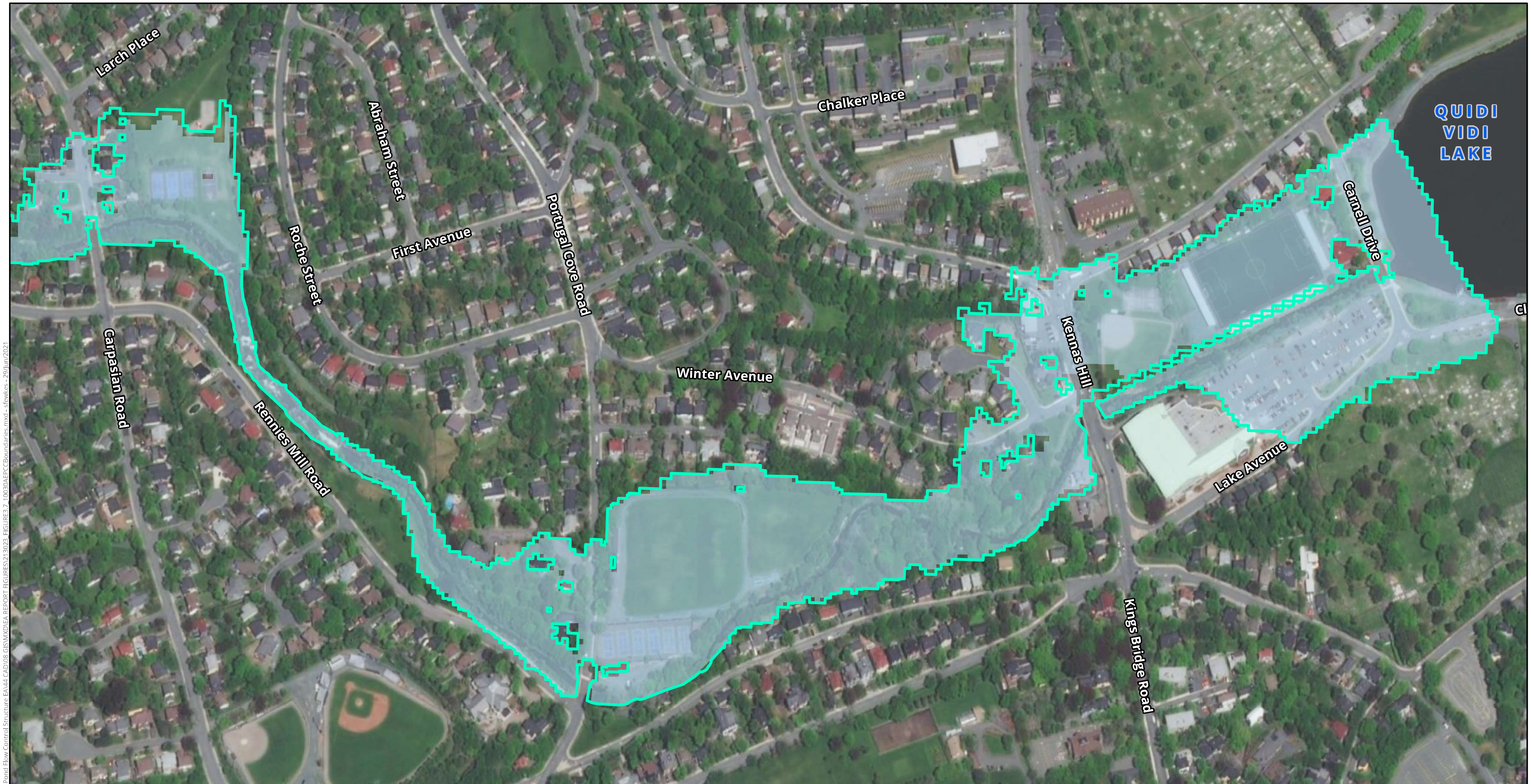
CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 3 of 4)

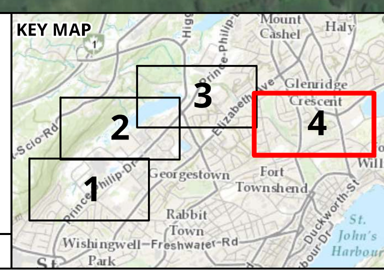
PROJECT N°: 213023	FIGURE: 3 (3)
SCALE:1:3,500	DATE: Jun 2021

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\06 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3_7_10OSSAEPCBoundaries.mxd - dlawless - 29/Jun/2021



LEGEND

- 1:100 Plus 30% AEP Climate Change Boundaries (Existing Conditions)
- 1:100 Plus 30% AEP Climate Change Boundaries (Post Construction Conditions)



NOTES:
- Flooding extents are based on the floodplain delineation between Wicklow Street and Quid Vidi Lake

Datum: NAD83
Projection: UTM Zone 22N

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

1:100 Plus 30% AEP Climate Change Boundaries and Post Construction Conditions (Page 4 of 4)

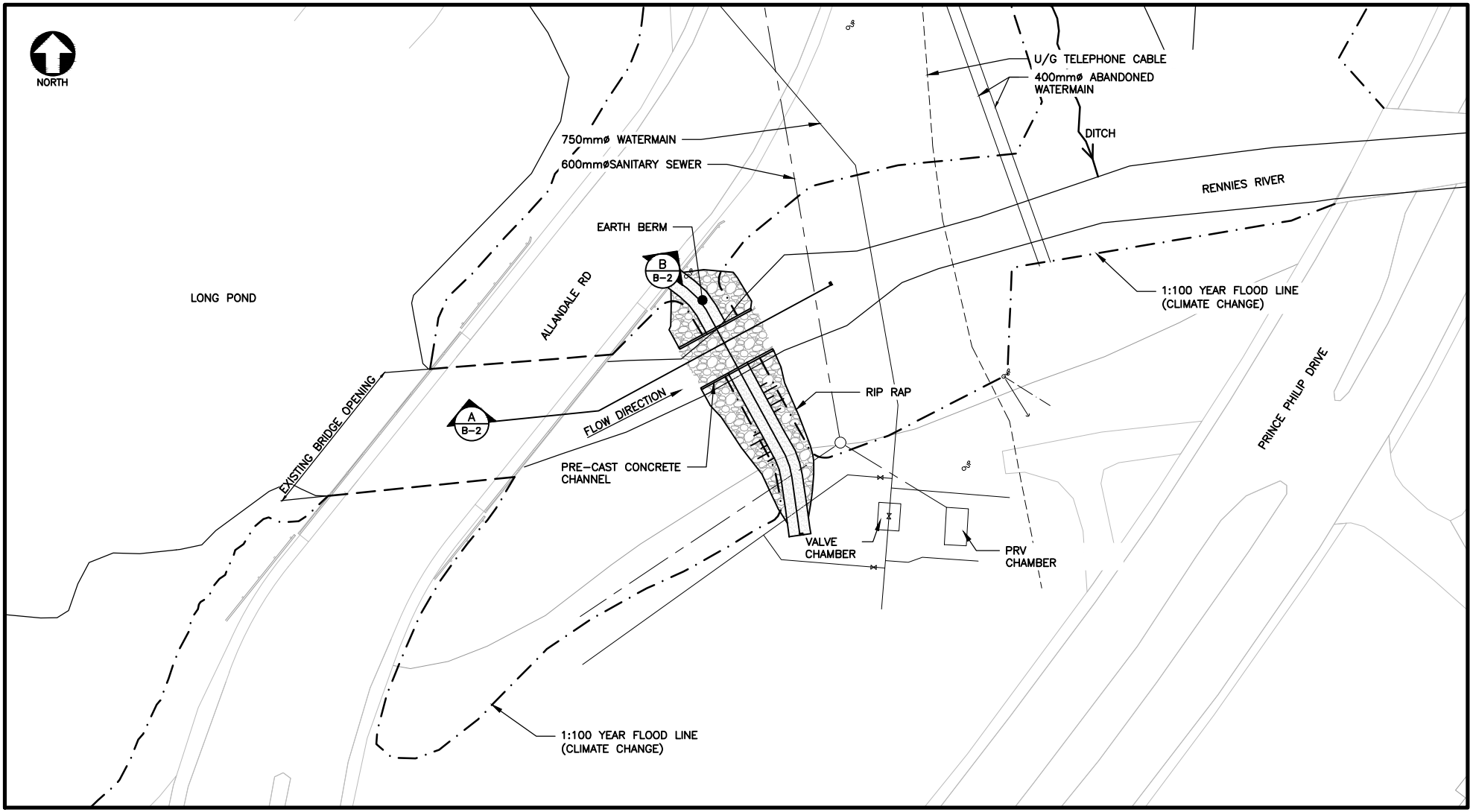
PROJECT N°: 213023	FIGURE: 3 (4)
SCALE:1:3,500	DATE: Jun 2021

0 80 160 320 480 640 Metres

Document Path: Y:\St. John's\Data\Jobs\2021\213023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\08 GIS\MXD\EA REPORT FIGURES\213023_FIGURE3.7_100|30AEPCCBoundaries.mxd - sfewkes - 29/Jun/2021

Appendix B:

Drawings



CONTROL STRUCTURE PLAN

1:500

0 10.0 20.0 30.0 40.0 50.0m

1:500

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

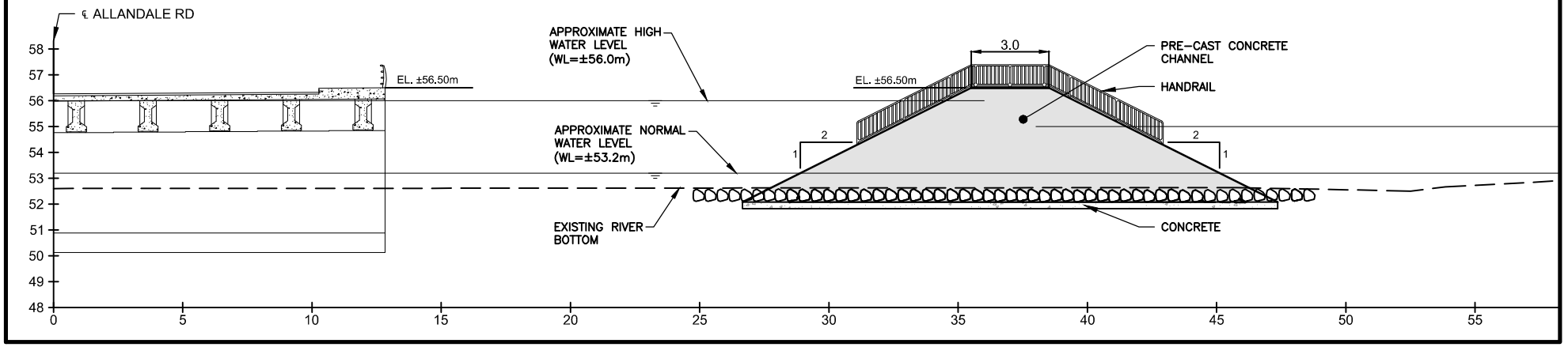
CSJ LONG POND FLOW CONTROL STRUCTURE EA

LONG POND FLOW CONTROL STRUCTURE PLAN

Drawing

B-1

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B1-B2-JUNE 9 2021.DWG LAYOUT NAME: B-1 PLOT DATE:Friday, July 16, 2021 1:58:27 PM

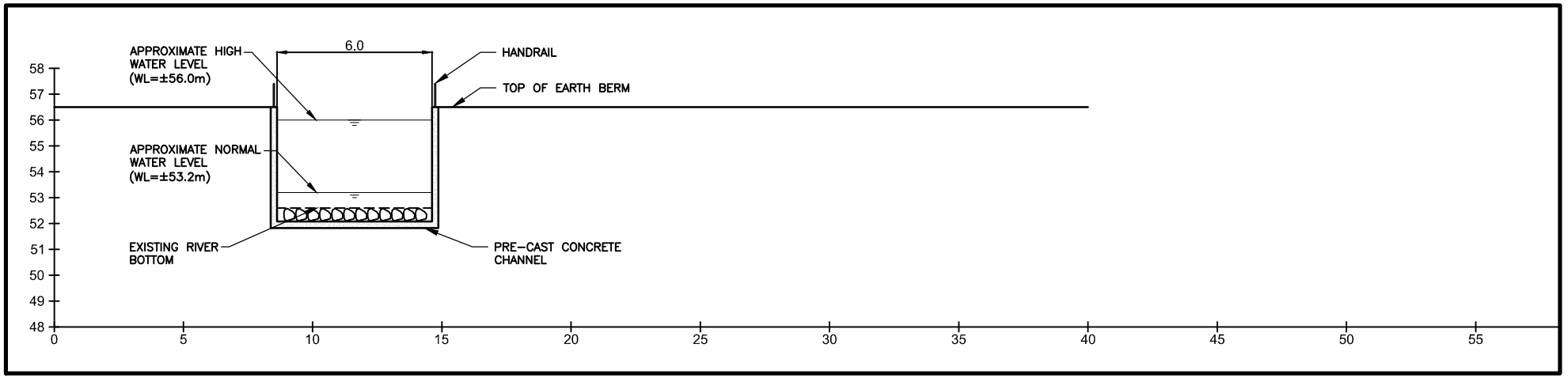


SECTION – A

1:150

0 3.0 6.0 9.0 12.0 15.0m

1:150



SECTION – B

1:150

0 3.0 6.0 9.0 12.0 15.0m

1:150

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

LONG POND FLOW CONTROL STRUCTURE SECTIONS

Drawing

B-2

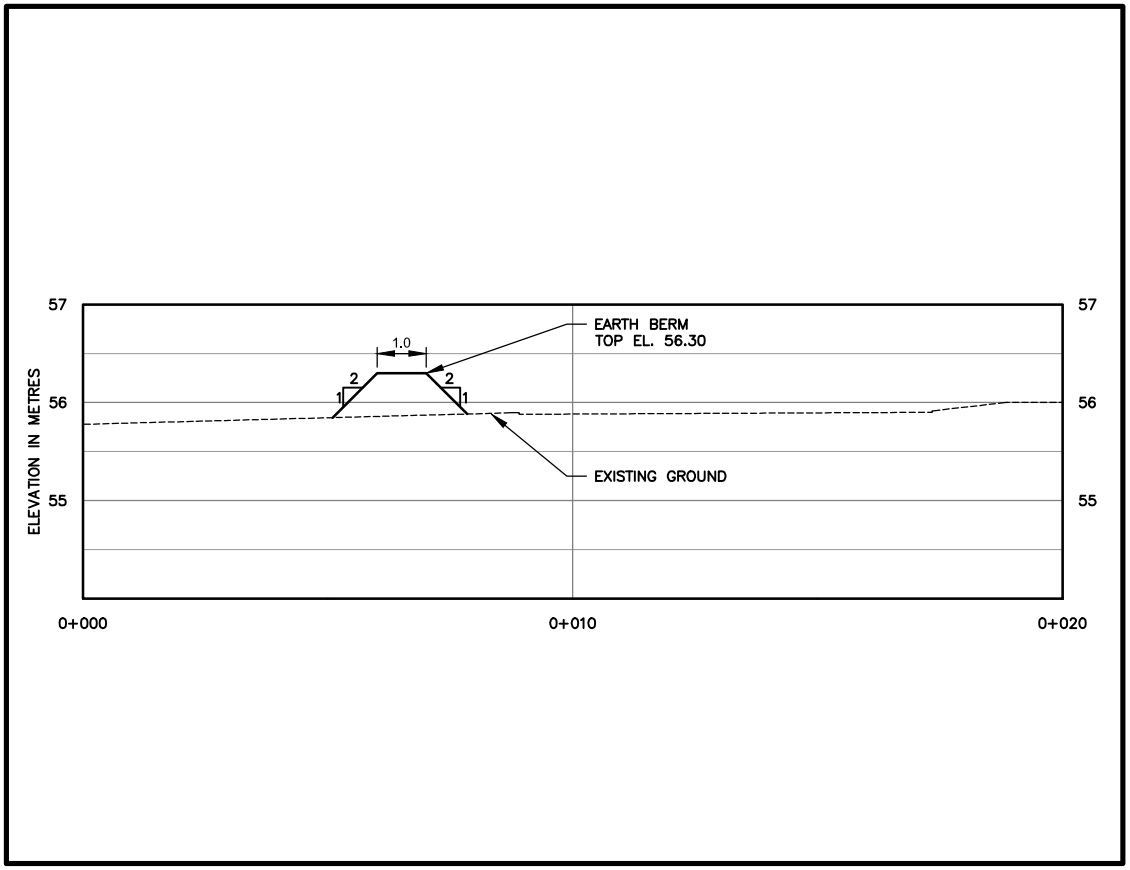
DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B1-B2-JUNE 9 2021.DWG LAYOUT NAME: B-2 PLOT DATE:Friday, July 16, 2021 1:59:02 PM

EARTH BERM PLAN

1:500

0 10.0 20.0 30.0 40.0 50.0m

1:500



SECTION – A

1:100 [H] 1:50 [V]

0 2.0 4.0 6.0 8.0 10.0m

1:100

0 1000 2000 3000 4000 5000mm

1:50

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

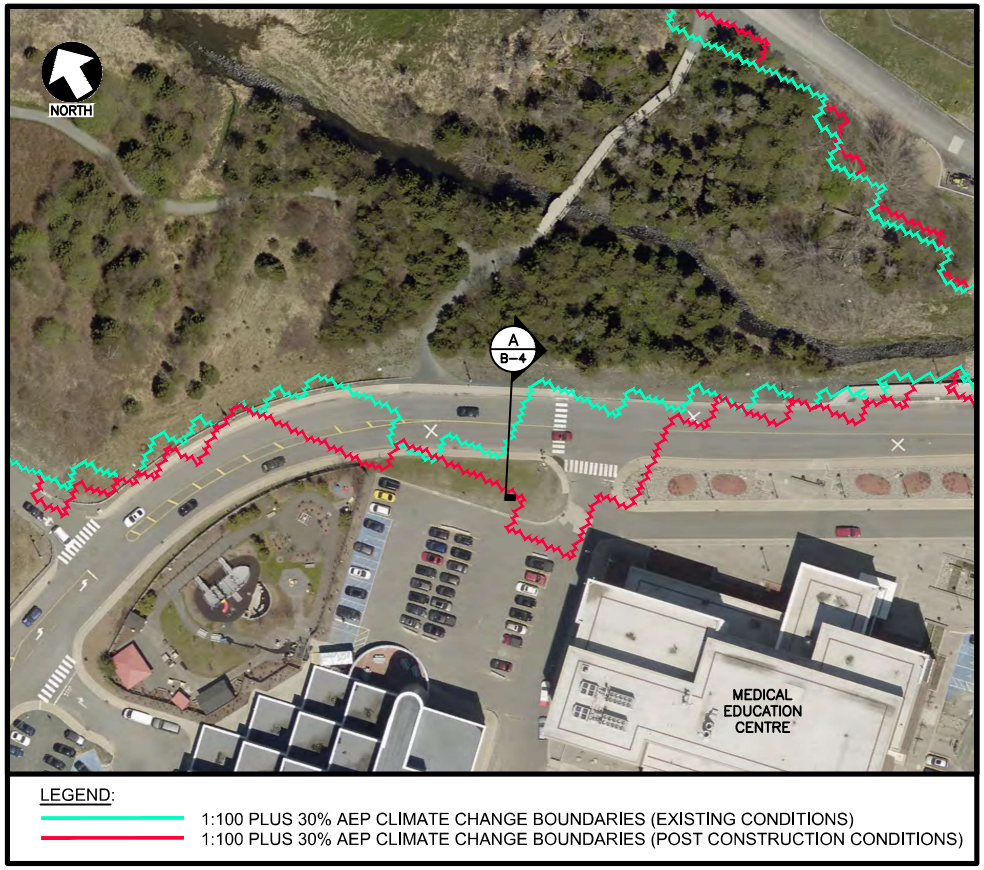
CSJ LONG POND FLOW CONTROL STRUCTURE EA

NATIONAL RESEARCH COUNCIL OF CANADA EARTH BERM PLAN & SECTION

Drawing

B-3

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-3 PLOT DATE:Friday, July 16, 2021 2:00:52 PM GB

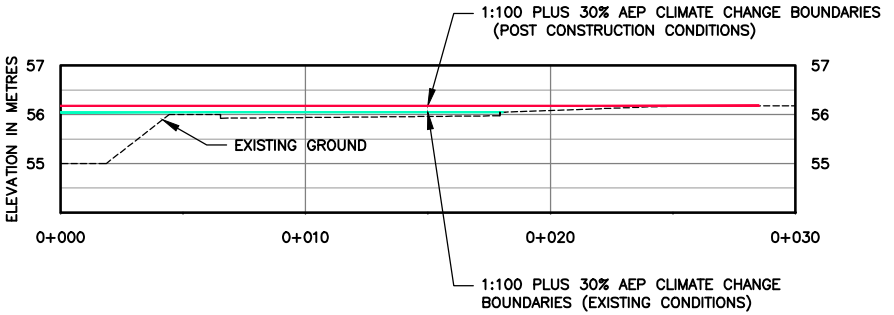


CLINCH CRESCENT PLAN

1:1000

0 20 40 60 80 100m

1:1000



SECTION – A

1:200 [H] 1:100 [V]

0 4.0 8.0 12.0 16.0 20.0m

1:200

0 2.0 4.0 6.0 8.0 10.0m

1:100

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

CLINCH CRESCENT PLAN & SECTION

Drawing

B-4

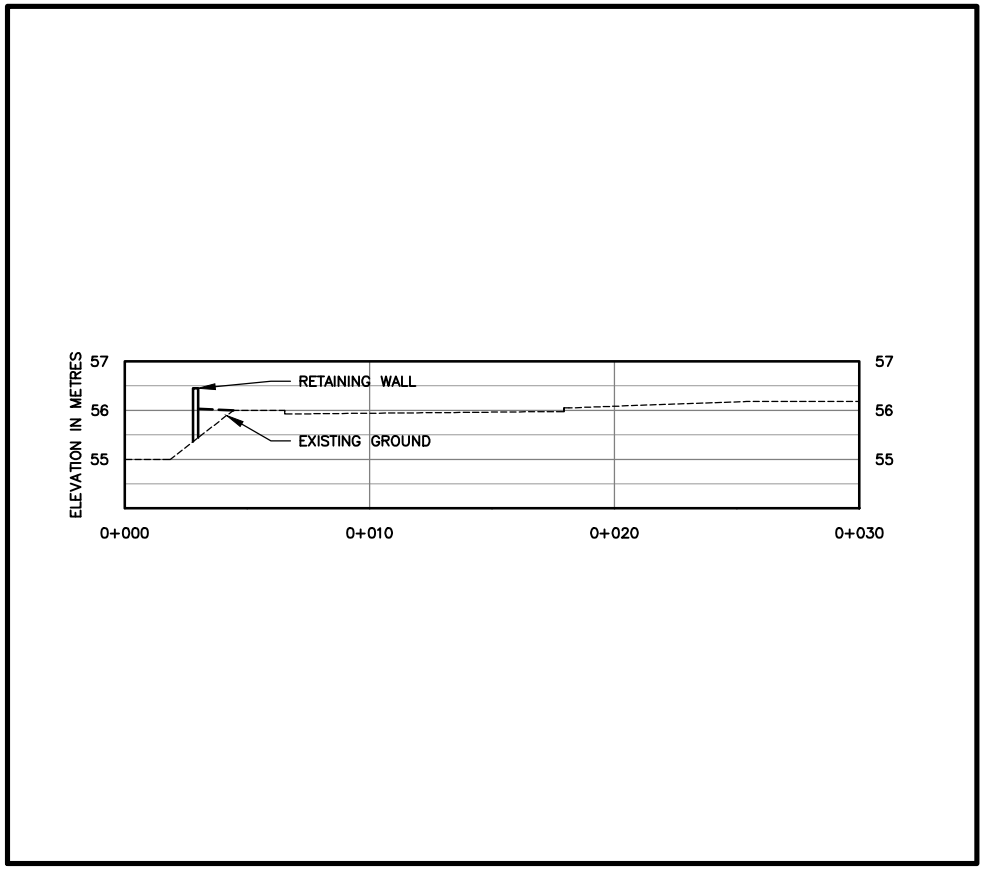
DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-4 PLOT DATE:Friday, July 16, 2021 2:25:56 PM GB

RETAINING WALL PLAN

1:1000

0 20 40 60 80 100m

1:1000



SECTION – A

1:200 [H] 1:100 [V]

0 4.0 8.0 12.0 16.0 20.0m

1:200

0 2.0 4.0 6.0 8.0 10.0m

1:100

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

No.	Description

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

CLINCH CRESCENT RETAINING WALL PLAN & SECTION

Drawing

B-5

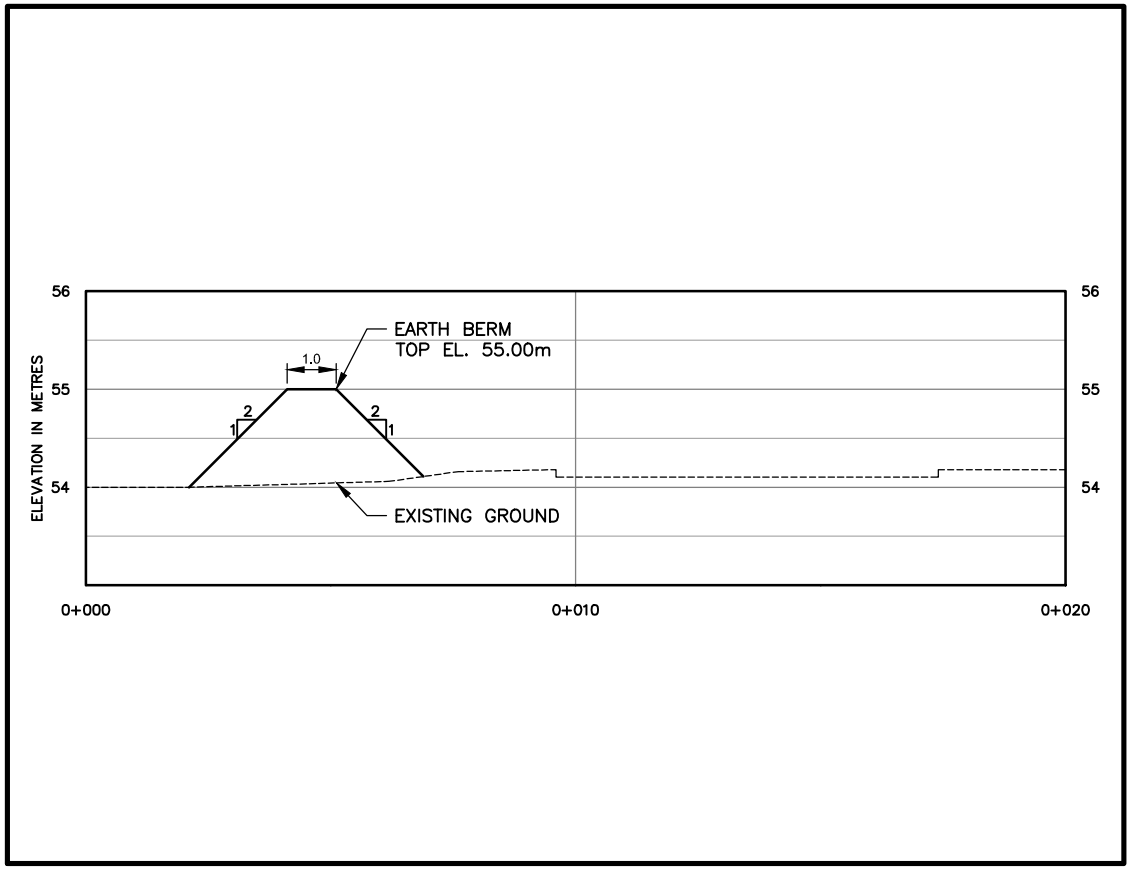
DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-5 PLOT DATE:Friday, July 16, 2021 2:50:09 PM GB

EARTH BERM PLAN

1:1000

0 20 40 60 80 100m

1:1000



SECTION – A

1:100 [H] 1:50 [V]

0 2.0 4.0 6.0 8.0 10.0m

1:100

0 1000 2000 3000 4000 5000mm

1:50

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

No.	Description

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

PRINCE PHILIP DRIVE EARTH BERM PLAN & SECTION

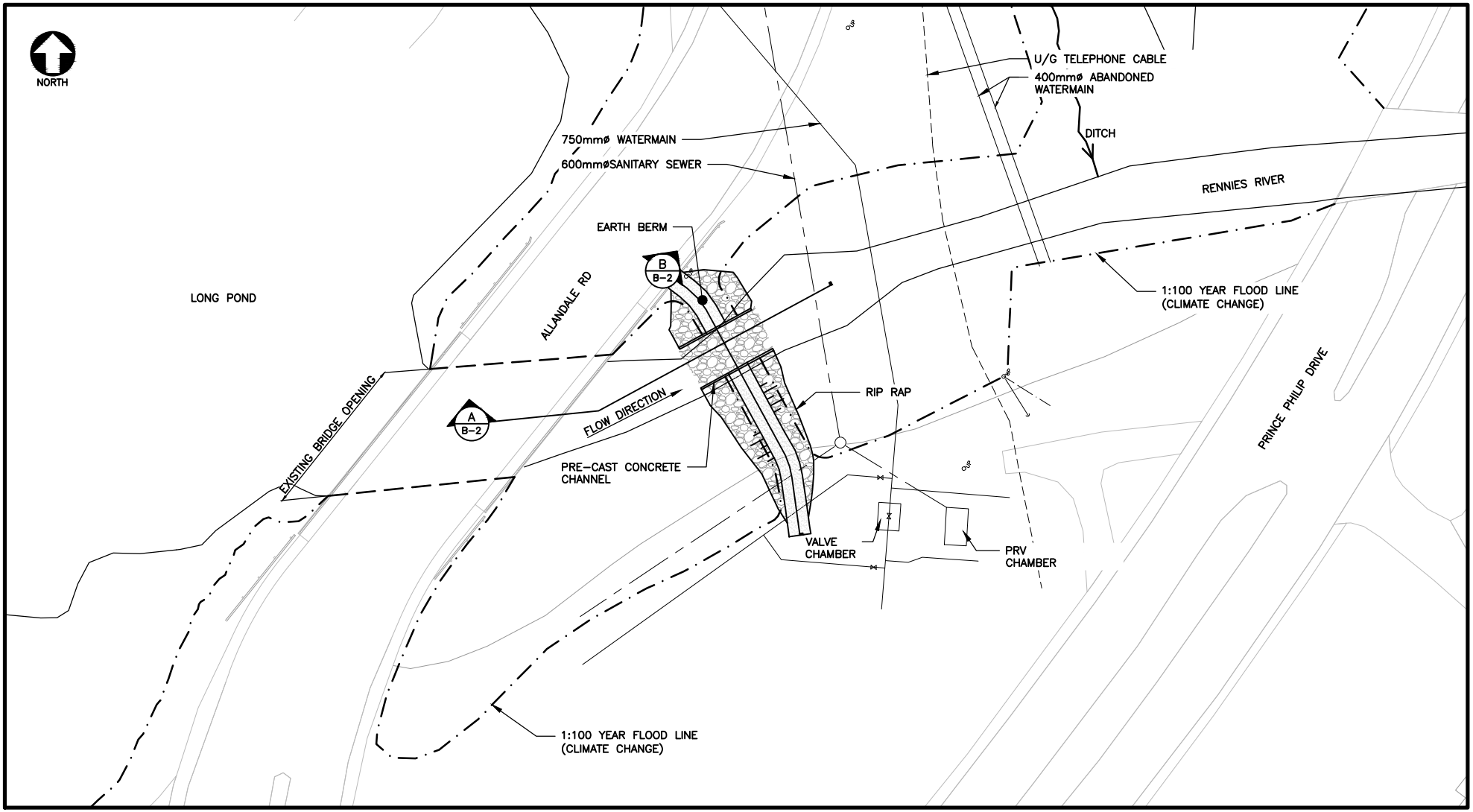
Drawing

B-6

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-6 PLOT DATE:Friday, July 16, 2021 2:30:29 PM GB

APPENDIX B

Engineering Sketches



CONTROL STRUCTURE PLAN

1:500

0 10.0 20.0 30.0 40.0 50.0m

1:500

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

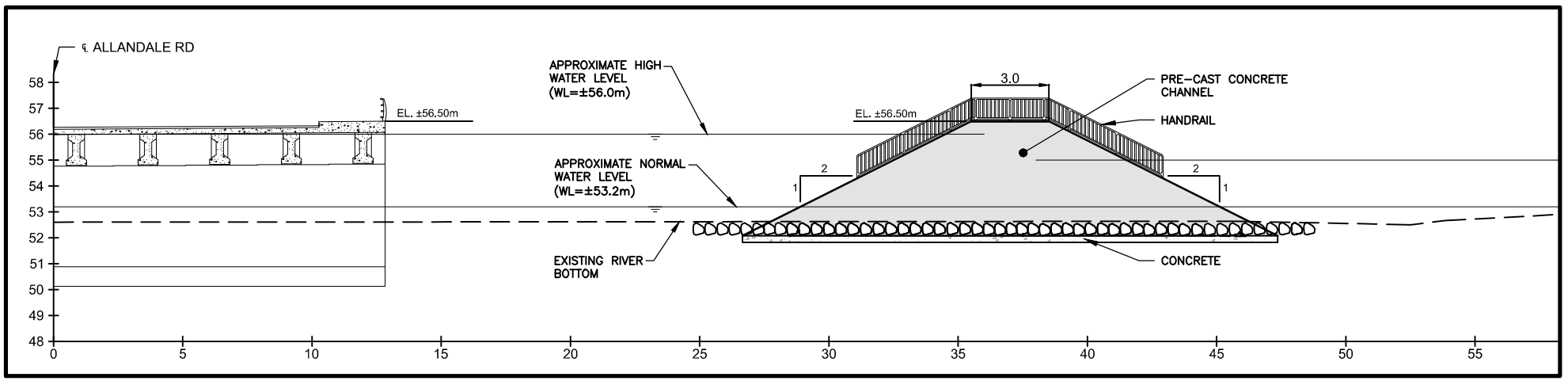
CSJ LONG POND FLOW CONTROL STRUCTURE EA

LONG POND FLOW CONTROL STRUCTURE PLAN

Drawing

B-1

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B1-B2-JUNE 9 2021.DWG LAYOUT NAME: B-1 PLOT DATE:Friday, July 16, 2021 1:58:27 PM

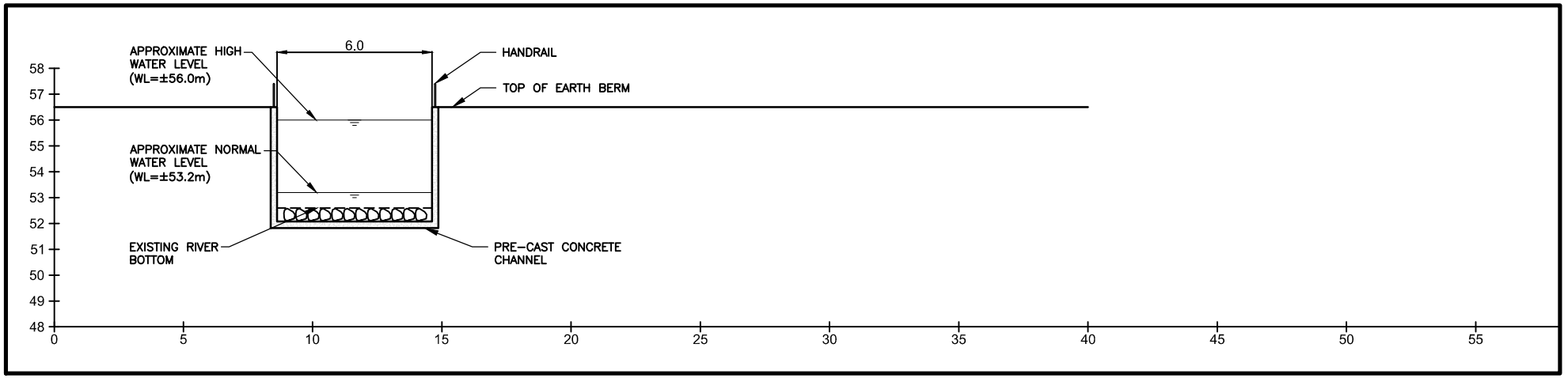


SECTION – A

1:150

0 3.0 6.0 9.0 12.0 15.0m

1:150



SECTION – B

1:150

0 3.0 6.0 9.0 12.0 15.0m

1:150

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

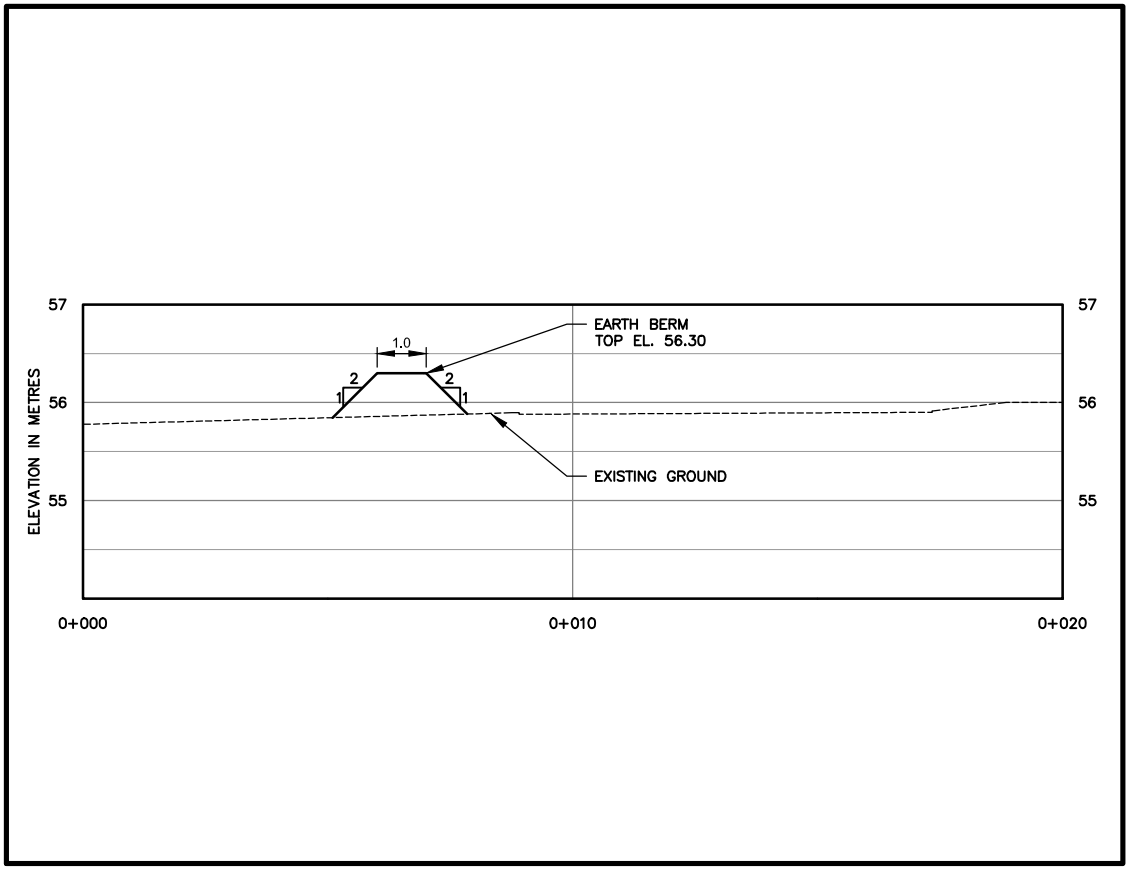
CSJ LONG POND FLOW CONTROL STRUCTURE EA

LONG POND FLOW CONTROL STRUCTURE SECTIONS

Drawing

B-2

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B1-B2-JUNE 9 2021.DWG LAYOUT NAME: B-2 PLOT DATE:Friday, July 16, 2021 1:59:02 PM



EARTH BERM PLAN

1:500

0 10.0 20.0 30.0 40.0 50.0m

1:500

SECTION – A

1:100 [H] 1:50 [V]

0 2.0 4.0 6.0 8.0 10.0m

1:100

0 1000 2000 3000 4000 5000mm

1:50

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

No.	Description

CBCL

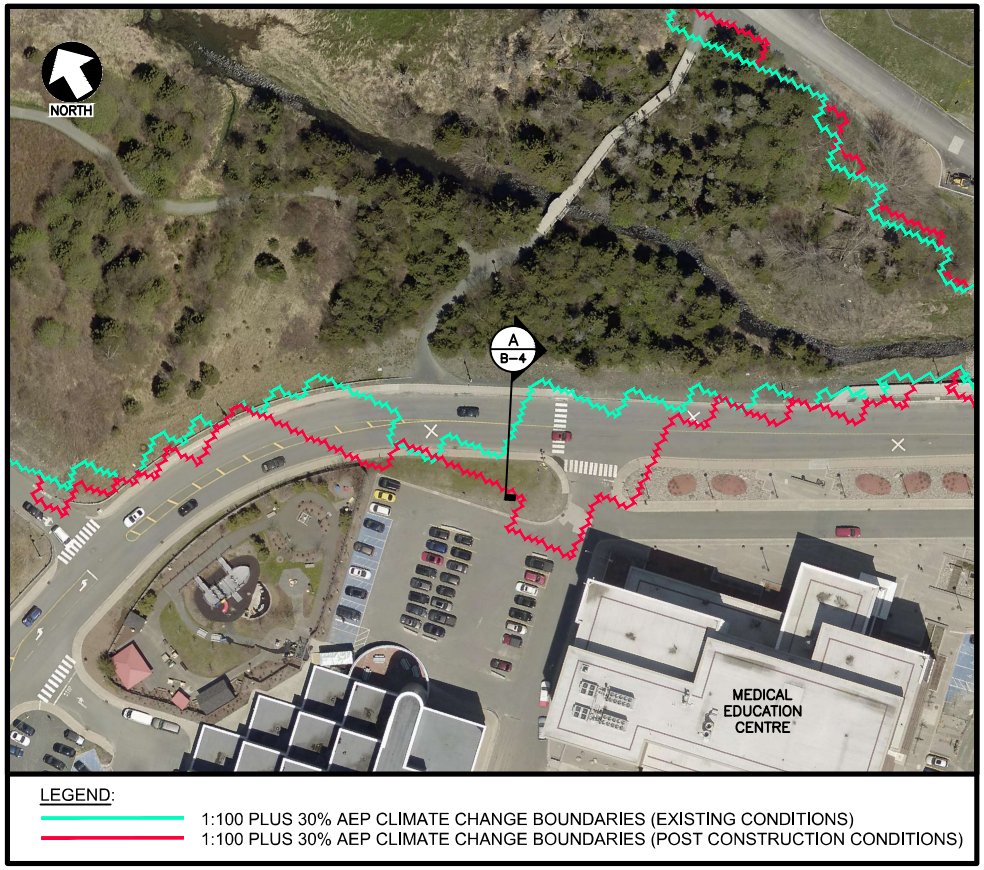
CSJ LONG POND FLOW CONTROL STRUCTURE EA

NATIONAL RESEARCH COUNCIL OF CANADA EARTH BERM PLAN & SECTION

Drawing

B-3

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-3 PLOT DATE:Friday, July 16, 2021 2:00:52 PM GB

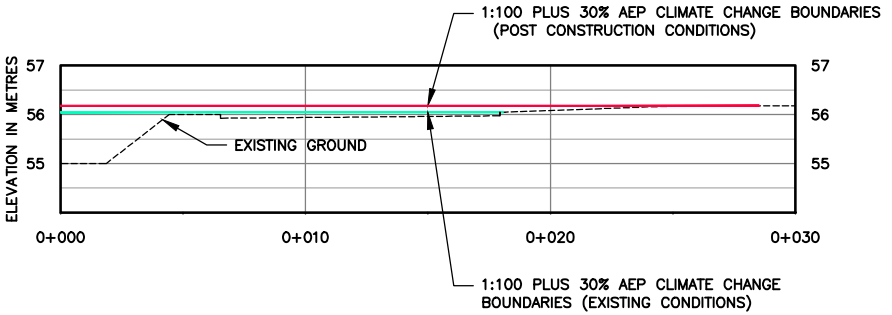


CLINCH CRESCENT PLAN

1:1000

0 20 40 60 80 100m

1:1000



SECTION – A

1:200 [H] 1:100 [V]

0 4.0 8.0 12.0 16.0 20.0m

1:200

0 2.0 4.0 6.0 8.0 10.0m

1:100

No.	Description

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

CLINCH CRESCENT PLAN & SECTION

Drawing

B-4

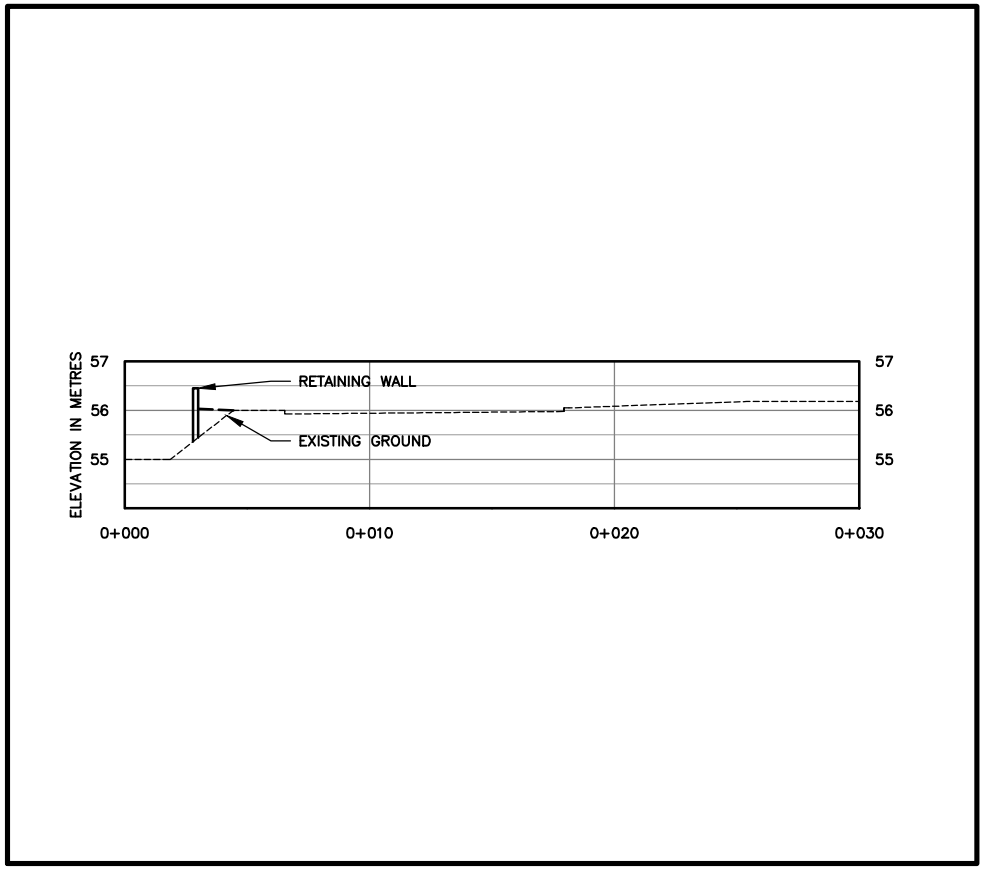
DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-4 PLOT DATE:Friday, July 16, 2021 2:25:56 PM GB

RETAINING WALL PLAN

1:1000

0 20 40 60 80 100m

1:1000



SECTION – A

1:200 [H] 1:100 [V]

0 4.0 8.0 12.0 16.0 20.0m

1:200

0 2.0 4.0 6.0 8.0 10.0m

1:100

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

No.	Description

CBCL

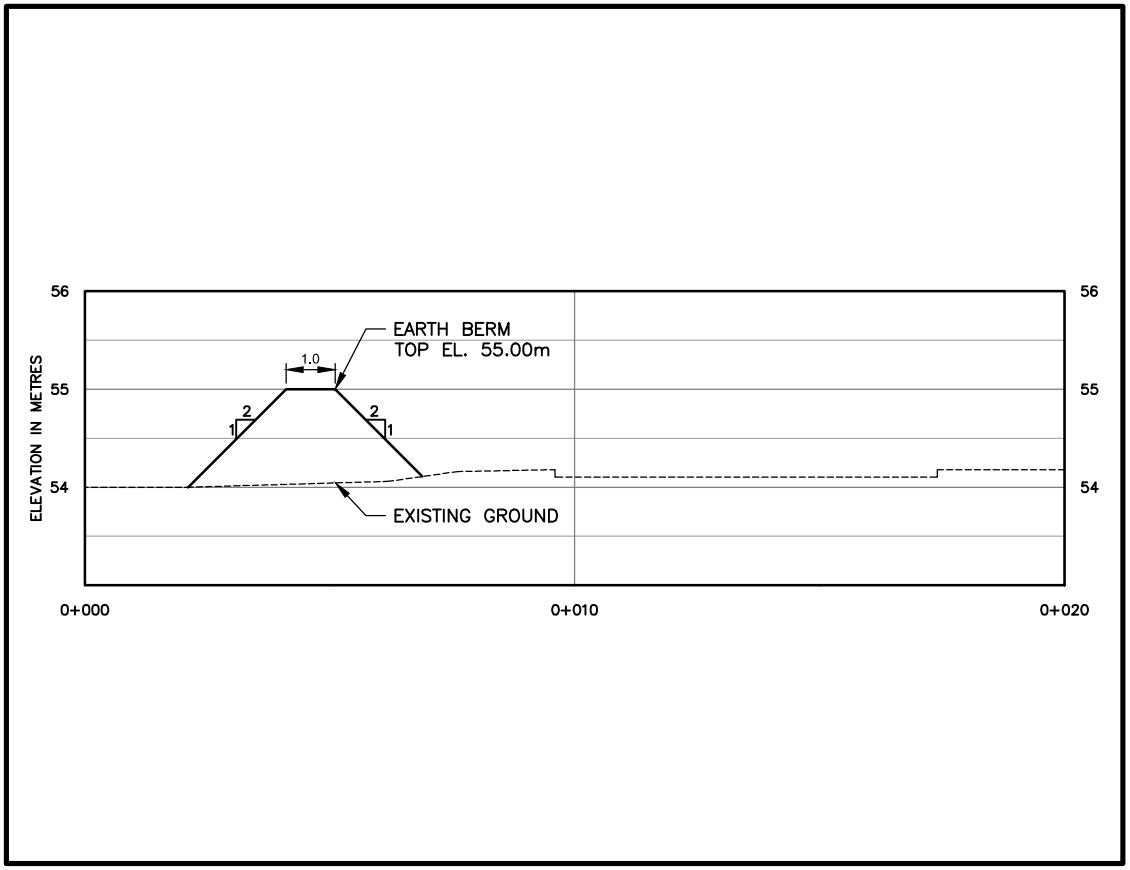
CSJ LONG POND FLOW CONTROL STRUCTURE EA

CLINCH CRESCENT RETAINING WALL PLAN & SECTION

Drawing

B-5

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-5 PLOT DATE:Friday, July 16, 2021 2:50:09 PM GB



EARTH BERM PLAN

1:1000

0 20 40 60 80 100m

1:1000

SECTION – A

1:100 [H] 1:50 [V]

0 2.0 4.0 6.0 8.0 10.0m

1:100

0 1000 2000 3000 4000 5000mm

1:50

Date	Scale	Designed	Drawn	Checked	Approved	CBCL No.	Contract
JULY 2021	AS SHOWN	GES	DDG	JRB	-	213023.00	-

No.	Description

CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

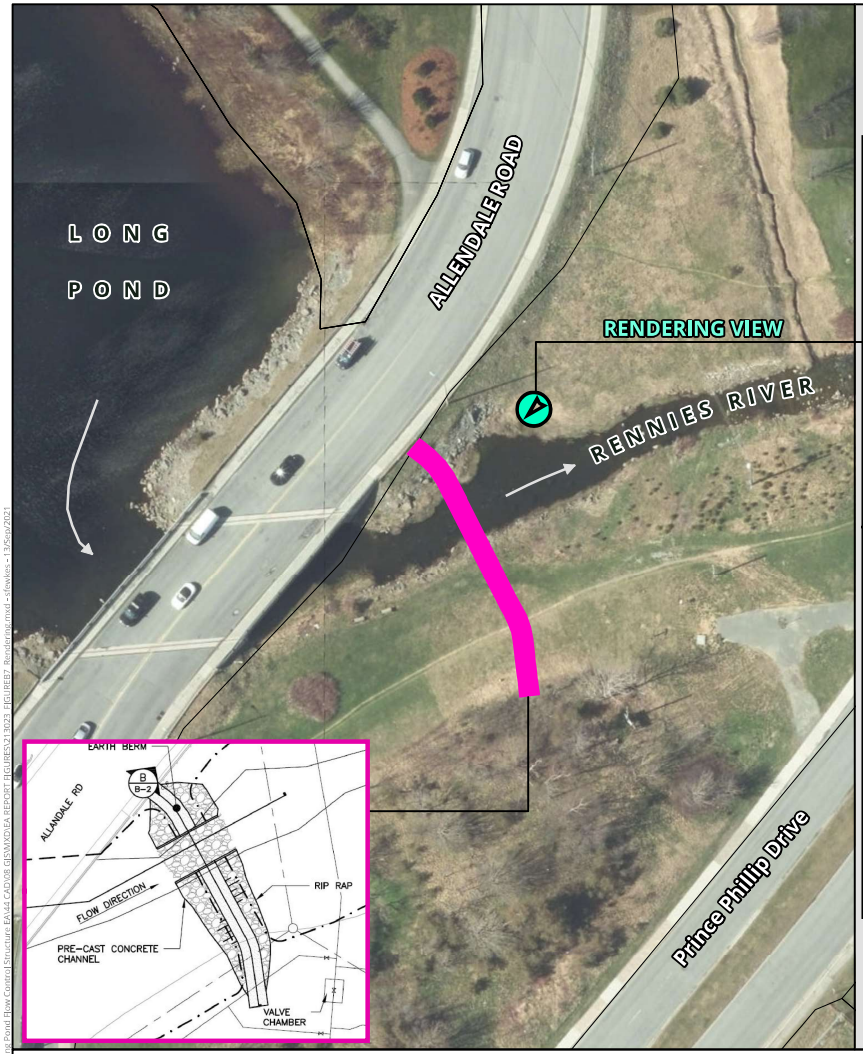
PRINCE PHILIP DRIVE EARTH BERM PLAN & SECTION

Drawing

B-6

DRAWING NAME: L:\JOBS\2021\213023.00 CSJ LONG POND FLOW CONTROL STRUCTURE EA\44 CAD\01 CIVIL\03 DRAWING SHEETS\213023.00-FIGURES B3-B4-B5-B6-JUNE 17 2021.DWG LAYOUT NAME: B-6 PLOT DATE:Friday, July 16, 2021 2:30:29 PM GB

Flow Control Structure Rendering

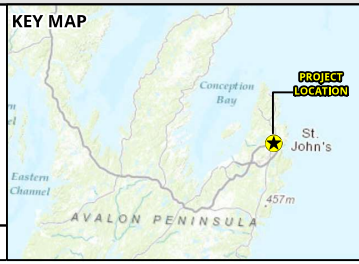


LEGEND

- Earth Berm With Concrete Opening
- Property Boundaries

0 12.5 25 50 75 100 Metres

KEY MAP



Datum: NAD83
Projection: UTM Zone 22N

B-7

ST. JOHN'S CBCL

CSJ LONG POND FLOW CONTROL STRUCTURE EA

Long Pond Flow Control Structure Rendering

PROJECT N°: 213023	FIGURE: B7
SCALE:1:700	DATE: Sep 2021

Document Path: N:\St. John's\Data\Jobs\2021\21-3023.00 CSJ Long Pond Flow Control Structure EA\44 CAD\08 GIS\MXD\EA REPORT FIGURES\21-3023 FIGURE B7 - Rendering.mxd - Stephen - 13/Sep/2021

APPENDIX C

Site Photographs

Appendix C: Photo Log

Photo 1: Location of Long Pond Flow Control Structure (looking south)

Photo 2: Location of Long Pond Flow Control Structure (looking north)

Photo 3: Rennies River Downstream of Allandale Road Bridge

Photo 4: Location of Earth Berm Located near the National Research Council (looking north)

Photo 5: Location of Retaining Wall along Clinch Crescent (looking west)

Photo 6: Location of Retaining Wall along Clinch Crescent (looking east)

Photo 7: Location of Earth Berm along Prince Phillip Drive (looking north)

Photo 8: Location of Earth Berm along Prince Phillip Drive (looking south)

APPENDIX D

Plant List

Species Name	Common Name	S-Rank at Time of Reconnaissance
Abies balsamea	Balsam Fir	S5
Acer pseudoplatanus	Sycamore Maple	SNA
Achillea millefolium	Common Yarrow	SNA
Aegopodium podagraria	Bishops Goutweed	SNA
Alnus incana	Speckled Alder	S5
Alnus viridis	Green Alder	S5
Anaphalis margaritacea	Pearly Everlasting	S5
Angelica atropurpurea	Great Angelica	S4
Artemisia vulgaris	Common Wormwood	SNA
Barbarea verna	Early Winter-Cress	SNA
Betula papyrifera	Paper Birch	S5
Calamagrostis canadensis	Blue-Joint Reedgrass	S5
Calamagrostis stricta	Slim-Stem Small-Reedgrass	S5
Carex stipata	Stalk-Grain Sedge	S4S5
Centaurea nigra	Black Starthistle	SNA
Chamerion angustifolium	Fireweed	S5
Chelone glabra	White Turtlehead	S4
Cicuta bulbifera	Bulb-Bearing Water-Hemlock	S3
Cornus stolonifera		S5
Epilobium ciliatum	Hairy Willow-Herb	S5
Euthamia graminifolia	Flat-Top Fragrant-Golden-Rod	S5
Eutrochium maculatum var. *maculatum*	Spotted Joe-Pye Weed	S4S5
Fragaria virginiana	Virginia Strawberry	S5
Galium palustre	Marsh Bedstraw	S4S5
Glyceria canadensis	Canada Manna-Grass	S5
Glyceria maxima	Reed Meadowgrass	SNA
Glyceria striata	Fowl Manna-Grass	S5
Gnaphalium uliginosum	Low Cudweed	SNA
Hieracium praealtum var. *decipiens*	King Devil	SNA
Hieracium umbellatum	Umbellate Hawkweed	S4
Hypericum perforatum	A St. John's-Wort	SNA
Impatiens glandulifera	Policeman's Helmet	SNA
Jacobaea vulgaris		SNA
Juncus articulatus	Jointed Rush	S5
Juncus bufonius	Toad Rush	S5
Juncus canadensis	Canada Rush	S4S5
Juncus effusus	Soft Rush	S5
Leucanthemum vulgare	Oxeye Daisy	SNA
Linaria vulgaris	Butter-And-Eggs	SNA
Lupinus polyphyllus	Lupine	SNA
Lythrum salicaria	Purple Loosestrife	SNA
Mentha canadensis	Canada Mint	S5
Myosotis scorpioides	True Forget-Me-Not	SNA
Myrica gale	Sweet Bayberry	S5

Species Name	Common Name	S-Rank at Time of Reconnaissance
Onoclea sensibilis	Sensitive Fern	S4S5
Osmundastrum cinnamomeum		S5
Persicaria maculosa	lady's-thumb, redshank	SNA
Persicaria sagittata	arrowleaf tearthumb, arrow-vine	SNA
Phalaris arundinacea	Reed Canary Grass	SNA
Phleum pratense	Meadow Timothy	SNA
Picea glauca	White Spruce	S5
Polygonum cuspidatum	Japanese Knotweed	SNA
Potentilla recta	Sulphur Cinquefoil	SNA
Prunus pensylvanica	Fire Cherry	S4S5
Ranunculus acris	Tall Butter-Cup	SNA
Ranunculus repens	Creeping Butter-Cup	SNA
Rosa virginiana	Virginia Rose	S4S5
Rubus idaeus ssp. *strigosus*	wild red raspberry	S5
Rumex acetosella	Sheep Sorrel	SNA
Rumex crispus	Curly Dock	SNA
Salix discolor	Pussy Willow	S5
Sambucus racemosa	Red Elderberry	S4
Scirpus atrocinctus	Black-Girdle Bulrush	S5
Scirpus microcarpus	Small-Fruit Bulrush	S4S5
Senecio viscosus	Sticky Groundsel	SNA
Solanum dulcamara	Climbing Nightshade	SNA
Solidago rugosa	Rough-Leaf Goldenrod	S5
Sonchus arvensis	Field Sowthistle	SNA
Sorbus americana	American Mountain-Ash	S4S5
Sorbus decora	Northern Mountain-Ash	S5
Spiraea latifolia		S4S5
Stachys palustris	Marsh Hedge-Nettle	SNA
Symphyotrichum novi-belgii	New Belgium American-Aster	S5
Taraxacum officinale	Common Dandelion	SNA
Thalictrum pubescens	Tall Meadow-Rue	S5
Trifolium arvense	Rabbit-Foot Clover	SNA
Trifolium campestre	Low Hop Clover	SNA
Trifolium pratense	Red Clover	SNA
Tussilago farfara	Colt's-foot	SNA
Typha latifolia	Broad-Leaf Cattail	SNA
Vicia cracca	Tufted Vetch	SNA
Urtica dioica ssp. *gracilis*	Stinging nettle	S3S5
Acer spicatum	Mountain Maple	S5
Agrostis capillaris	Colonial Bentgrass	SNA
Alisma triviale	Northern Water-Plantain	S2
Barbarea vulgaris	Yellow Rocket	SNA
Betula cordifolia	Heartleaf Birch, mountain white birc	S4S5
Calystegia sepium	Hedge Bindweed	SNA

Species Name	Common Name	S-Rank at Time of Reconnaissance
Cardamine pensylvanica	Pennsylvania Bitter-Cress	S4
Carex echinata	Little Prickly Sedge	S5
Carex utriculata	Bear Sedge	S4S5
Carex viridula	Little Green Sedge	S5
Clintonia borealis	Clinton Lily	S5
Cornus canadensis	Dwarf Dogwood	S5
Dryopteris carthusiana	Spinulose Shield Fern	S4
Eleocharis palustris	Creeping Spike-Rush	S4S5
Epipactis helleborine	Helleborine	SNA
Eurybia radula	Rough-Leaved Aster	S5
Hypochaeris radicata	Spotted Cat's-Ear	SNA
Ilex verticillata	Black Holly	S3
Iris versicolor	Blueflag	S5
Juncus filiformis	Thread Rush	S5
Juncus militaris	Bayonet Rush	S3
Kalmia angustifolia	Sheep-Laurel	S5
Leontodon autumnalis	Autumn Hawkbit	SNA
Luzula multiflora	Common Woodrush	S5
Lycopus uniflorus	Northern Bugleweed	S5
Maianthemum canadense	Wild Lily-of-The-Valley	S5
Malus pumila	Common Apple	SNA
Monotropa uniflora	Indian-Pipe	S5
Nasturtium microphyllum		SNA
Nuphar variegata	Yellow Cowlily	S5
Picea mariana	Black Spruce	S5
Pilosella aurantiaca		SNA
Populus tremuloides	Quaking Aspen	S4S5
Prunus virginiana	Choke Cherry	S4
Pteridium aquilinum	Bracken	S4S5
Ranunculus flammula	Lesser Spearwort	S5
Rhododendron groenlandicum		S5
Rubus flagellaris	Northern Dewberry	SU
Scrophularia nodosa	Wood Figwort	SNA
Symphoricarpos albus	Snowberry	SNA
Symphyotrichum puniceum	Swamp Aster	S5
Triadenum fraseri	Marsh St. John's-Wort	S5
Trientalis borealis	Northern Starflower	S5
Vaccinium angustifolium	Late Lowbush Blueberry	S5
Veronica officinalis	Gypsy-Weed	SNA
Viburnum cassinoides		S5
Viburnum edule	Squashberry	S5

APPENDIX E

Birds Detected in Vicinity to the Project Area in Newfoundland and Labrador

E.1 Breeding Birds Detected on Newfoundland and Labrador's BBS Square Summary 22TCT77
E.2 Species observed within the Project area and submitted to eBird

Appendix E.1: Breeding Birds Detected on Newfoundland and Labrador's BBS Square Summary 22TCT67 and 22TCT77 (Newfoundland Breeding Bird Atlas, 2021)

Species Reported in the Newfoundland Breeding Bird Survey	
American Black Duck	Pine Siskin
American Bittern	Purple Finch
American Crow	Ring-billed Gul
American Goldfinch	Ring-necked Duck
American Pipit	Red Crossbill
American Robin	Red-eyed Vireo
American Wigeon	Red-breasted Nuthatch
Bald Eagle	Rock Pigeon (Feral Pigeon)
Belted Kingfisher	Ruby-crowned Kinglet
Black-and-white Warbler	Sharp-sinned Hawk
Black-capped Chickadee	Song Sparrow
Black Guillemot	Sora
Blue-headed Vireo	Spotted Sandpiper
Black-legged Kittiwake	Swamp Sparrow
Blackpoll Warbler	Tree Swallow
Black-throated Green Warbler	White-throated Sparrow
Blue Jay	Wilson's Snipe
Boreal Chickadee	Wilson's Warbler
Cedar Waxwing	Yellow Warbler
Common Loon	Yellow-bellied Flycatcher
Common Raven	Yellow-rumped Warbler
Common Tern	
Dark-eyed Junco	
European Starling	
Fox Sparrow	
Gadwall	
Gray Catbird	
Greater Scaup	
Greater Yellowlegs	
Green-winged Teal	
Golden-crowned Kinglet	
Herring Gull	
House Sparrow	
Mallard	
Merlin	
Northern Flicker	
Northern Goshawk	
Northern Pintail	
Northern Saw-whet Owl	
Northern Shoveler	
Northern Waterthrush	
Olive-sided Flycatcher	
Osprey	
Pine Grosbeak	

Appendix E.2: Species observed within the Project area and submitted to eBird (eBird, 2021)

Species Observed in the Project Area	
Accipiter sp.	Lincoln's Sparrow
Alder Flycatcher	Little Blue Heron
American Bittern	Magnolia Warbler
American Black Duck	Mallard
American Coot	Mallard (Domestic type)
American Crow	Mallard x American Black Duck (hybrid)
American Goldfinch	Mallard/American Black Duck
American Redstart	Marsh Wren
American Robin	Merlin
American Wigeon	Mew Gull
Aythya sp.	Mourning Dove
Bald Eagle	Newfoundland & Labrador Bird Records
Baltimore Oriole	Northern Flicker
Bank Swallow	Northern Goshawk
Barn Swallow	Northern Harrier
Belted Kingfisher	Northern Parula
Black-and-white Warbler	Northern Pintail
Black-backed Woodpecker	Northern Saw-whet Owl
Black-bellied Plover	Northern Shoveler
Black-capped Chickadee	Northern Shrike
Black-headed Gull	Northern Waterthrush
Black-tailed Godwit	Northern Wheatear
Black-throated Green Warbler	Olive-sided Flycatcher
Blue Jay	Orange-crowned Warbler
Blue-headed Vireo	Osprey
Blue-winged Teal	Ovenbird
Bobolink	Palm Warbler
Bohemian Waxwing	passerine sp.
Boreal Chickadee	Pectoral Sandpiper
Boreal Owl	Peregrine Falcon
Brown Creeper	Pied-billed Grebe
Brown Thrasher	Pine Grosbeak
Bufflehead	Pine Siskin
Canada Goose	Pink-footed Goose
Canada Jay	Prairie Warbler
Cedar Waxwing	Purple Finch
Clay-colored Sparrow	Red Crossbill
Cliff Swallow	Red-breasted Nuthatch
Common Gallinule	Red-eyed Vireo
Common Goldeneye	Redhead
Common Grackle	Redwing
Common Loon	Red-winged Blackbird
Common Merganser	Ring-billed Gull
Common Raven	Ring-necked Duck
Common Redpoll	Ring-necked Duck x Lesser Scaup (hybrid)
Common Tern	Rock Pigeon
Common Yellowthroat	Rose-breasted Grosbeak
Common/Arctic Tern	Rough-legged Hawk
dabbling duck sp.	Ruby-crowned Kinglet
Dark-eyed Junco	Ruffed Grouse

Species Observed in the Project Area	
Double-crested Cormorant	Ruffed/Spruce Grouse
Downy Woodpecker	Rusty Blackbird
Eastern Kingbird	Savannah Sparrow
Eurasian Wigeon	Scarlet Tanager
Eurasian/American Wigeon	Semipalmated Plover
European Starling	Semipalmated Sandpiper
Evening Grosbeak	Sharp-shinned Hawk
Fieldfare	Slaty-backed Gull
finch sp.	Snow Bunting
Fox Sparrow	Snowy Egret
Gadwall	Snowy Owl
Glaucous Gull	Solitary Sandpiper
Golden-crowned Kinglet	Song Sparrow
Gray-cheeked Thrush	Sora
Great Black-backed Gull	Spotted Sandpiper
Great Blue Heron	Swamp Sparrow
Great Cormorant	Tree Swallow
Great Crested Flycatcher	Tufted Duck
Great Egret	Turkey Vulture
Great Horned Owl	warbler sp. (Parulidae sp.)
Greater Scaup	White-rumped Sandpiper
Greater Yellowlegs	White-tailed Tropicbird
Greater/Lesser Yellowlegs	White-throated Sparrow
Green Heron	White-winged Crossbill
Green-winged Teal	white-winged gull sp.
Hairy Woodpecker	Wilson's Phalarope
Hermit Thrush	Wilson's Snipe
Herring Gull	Wilson's Warbler
Herring x Lesser Black-backed Gull (hybrid)	Winter Wren
Hooded Merganser	Wood Duck
Horned Grebe	woodpecker sp.
House Sparrow	Yellow Warbler
Iceland Gull	Yellow-bellied Flycatcher
Indigo Bunting	Yellow-breasted Chat
Kentucky Warbler	Yellow-crowned Night-Heron
Killdeer	Yellow-legged Gull
large rail sp.	Yellow-rumped Warbler
Leach's Storm-Petrel	gull sp.
Least Flycatcher	Yellow-throated Warbler
Least Sandpiper	Blackpoll Warbler
Lesser Black-backed Gull	Northern Mockingbird
Lesser Scaup	Eastern Wood-Pewee
Lesser Yellowlegs	House Wren

BIRDS CANADA
OISEAUX CANADA

Square Summary (22TCT67) [change]

#species				#hours		#pc done	
poss	prob	conf	total	total	peak	road	offrd
8	23	17	48	51.1	21	0	1

Region summary (#7: Avalon, NL)

#squares	#sq with data	#species	#squares (pc)	
			target	compl.
168	77	118	0	5

Target number of point counts in this square: 15 in total: 15 road side, 0 off road.

SPECIES	Code	%
Canada Goose		12
Blue-winged Teal †		1
Northern Shoveler †		1
Gadwall †	H	0
American Wigeon		1
Mallard	FY	15
American Black Duck	FY	25
Northern Pintail	T	10
Green-winged Teal		6
Ring-necked Duck		12
Greater Scaup		2
Common Goldeneye		3
Hooded Merganser †		0
Common Merganser		0
Red-breasted Merganser		7
Ruffed Grouse		10
Willow Ptarmigan		6
Rock Pigeon (Feral Pigeon)	T	9

Mourning Dove		1
Sora †		2
Semipalmated Plover †		1
Killdeer †		1
Least Sandpiper †		0
Wilson's Snipe	T	35
Spotted Sandpiper	D	31
Greater Yellowlegs		19
Willet †		0
Common Murre §		5
Thick-billed Murre §		1
Razorbill §		7
Black Guillemot §		16
Atlantic Puffin §		2
Black-legged Kittiwake §		14

SPECIES	Code	%
Black-headed Gull †		0
Ring-billed Gull §		15
Herring Gull §		22
Great Black-backed Gull §		12
Caspian Tern †		0
Common Tern §	D	27
Arctic Tern §		3
Common Loon	P	31
Leach's Storm-Petrel §		1
Northern Fulmar ‡		1
Northern Gannet §		1
Great Cormorant §		0
Double-crested Cormorant §		5
American Bittern		6
Osprey	AE	15
Northern Harrier		9
Sharp-shinned Hawk	H	3
Northern Goshawk	AE	3
Bald Eagle		16
Rough-legged Hawk †		2
Great Horned Owl		6
Short-eared Owl †		0
Boreal Owl †		0

Northern Saw-whet Owl †	FY	2
Belted Kingfisher	H	23
American Three-toed Woodpecker †		0
Black-backed Woodpecker		6
Downy Woodpecker		3
Hairy Woodpecker		0
Northern Flicker	T	22
Merlin		7
Yellow-bellied Flycatcher	T	42
Alder Flycatcher		9

SPECIES	Code	%
Blue-headed Vireo	S	10
Philadelphia Vireo †		0
Red-eyed Vireo †	S	5
Canada Jay		24
Blue Jay	FY	29
American Crow	NB	48
Common Raven	AE	44
Black-capped Chickadee	CF	46
Boreal Chickadee	FY	38
Horned Lark		6
Tree Swallow	AE	23
Bank Swallow † §		0
Barn Swallow †		3
Golden-crowned Kinglet	T	42
Ruby-crowned Kinglet	T	36
Red-breasted Nuthatch	T	15
Brown Creeper †		1
Winter Wren †		5
European Starling	CF	35
Gray-cheeked Thrush †		5
Swainson's Thrush ‡		1
Hermit Thrush		32
American Robin	CF	71
Cedar Waxwing	T	24
House Sparrow	S	15
American Pipit		16
Evening Grosbeak †		0

Pine Grosbeak	P	23
Purple Finch	NB	31
Red Crossbill †	T	16
White-winged Crossbill		2
Pine Siskin	T	16
American Goldfinch	T	48

Breeding Bird Atlas - Summary Sheet for Square 22TCT67 (page 2 of 2)

SPECIES	Code	%
Chipping Sparrow †		0
Fox Sparrow	T	53
Dark-eyed Junco	NE	57
White-throated Sparrow	CF	58
Savannah Sparrow		58
Song Sparrow	T	36
Lincoln's Sparrow		2
Swamp Sparrow	T	49
Red-winged Blackbird †		1
Brown-headed Cowbird †		0
Rusty Blackbird †		3
Common Grackle		12
Ovenbird		3
Northern Waterthrush	T	49
Black-and-white Warbler	T	44
Tennessee Warbler		3
Mourning Warbler		9
Common Yellowthroat		25
American Redstart		20
Cape May Warbler †		0
Magnolia Warbler		19
Bay-breasted Warbler †		0
Yellow Warbler	CF	51
Blackpoll Warbler	T	57
Palm Warbler ‡		0
Yellow-rumped Warbler	T	54
Black-throated Green Warbler	S	24
Wilson's Warbler	S	41
Red Squirrel		0

This list includes all breeding species expected in the region #7 (Avalon). Underlined species are those that you should try to add to this square (22TCT67). They have not yet been reported in this square, but have been reported in more than 50% of the squares in this region so far. "Code" is the code for the highest breeding evidence for that species in square 22TCT67 over the last 5 years. The % columns give the percentage of squares in that region where that species was reported (this gives an idea of the expected chance of finding that species in region #7). Rare/Colonial Species Report Forms should be completed for species marked: § (Species of interest), ‡ (regionally rare), † (provincially rare). An up-to-date version of this sheet is available from https://www.birdscanada.org/birdmon/atlas/summaryform.jsp?squareID=22TCT67&lang=EN Data current as of **13/07/2021 05:20**.

BIRDS CANADA
OISEAUX CANADA

Square Summary (22TCT77) [change]

#species				#hours		#pc done	
poss	prob	conf	total	total	peak	road	offrd
8	32	25	65	178.7	91.1	10	14

Region summary (#7: Avalon, NL)

#squares	#sq with data	#species	#squares (pc)	
			target	compl.
168	77	118	0	5

Target number of point counts in this square: 15 in total: 15 road side, 0 off road.**Predef. completed:** [01, 02, 03, 04, 05, 07, 10, 12, 13, 14]

SPECIES	Code	%
Canada Goose		12
Blue-winged Teal †		1
Northern Shoveler †	V	1
Gadwall †	D	0
American Wigeon	P	1
Mallard	NY	15
American Black Duck	NY	25
Northern Pintail	FY	10
Green-winged Teal	D	6
Ring-necked Duck	D	12
Greater Scaup	P	2
Common Goldeneye		3
Hooded Merganser †		0
Common Merganser		0
Red-breasted Merganser		7
Ruffed Grouse		10
Willow Ptarmigan		6
Rock Pigeon (Feral Pigeon)	D	9

Mourning Dove		1
Sora †	T	2
Semipalmated Plover †		1
Killdeer †		1
Least Sandpiper †		0
Wilson's Snipe	D	35
Spotted Sandpiper	D	31
Greater Yellowlegs	S	19
Willet †		0
Common Murre §		5
Thick-billed Murre §		1
Razorbill §		7
Black Guillemot §	P	16
Atlantic Puffin §		2
Black-legged Kittiwake §	NE	14

SPECIES	**Code**	**%**
Black-headed Gull †		0
Ring-billed Gull §	D	15
Herring Gull §	NE	22
Great Black-backed Gull §		12
Caspian Tern †		0
Common Tern §	FY	27
Arctic Tern §		3
Common Loon	P	31
Leach's Storm-Petrel §		1
Northern Fulmar ‡		1
Northern Gannet §		1
Great Cormorant §		0
Double-crested Cormorant §		5
American Bittern	D	6
Osprey	CF	15
Northern Harrier		9
Sharp-shinned Hawk		3
Northern Goshawk		3
Bald Eagle	NY	16
Rough-legged Hawk †		2
Great Horned Owl		6
Short-eared Owl †		0
Boreal Owl †		0

Northern Saw-whet Owl †		2
Belted Kingfisher	D	23
American Three-toed Woodpecker †		0
Black-backed Woodpecker		6
Downy Woodpecker		3
Hairy Woodpecker		0
Northern Flicker	T	22
Merlin	D	7
Olive-sided Flycatcher †	S	0
Yellow-bellied Flycatcher	S	42

SPECIES	**Code**	**%**
Alder Flycatcher		9
Blue-headed Vireo		10
Philadelphia Vireo †		0
Red-eyed Vireo †		5
Canada Jay		24
Blue Jay	FY	29
American Crow	CF	48
Common Raven	T	44
Black-capped Chickadee	CF	46
Boreal Chickadee	T	38
Horned Lark		6
Tree Swallow	AE	23
Bank Swallow † §		0
Barn Swallow †		3
Golden-crowned Kinglet	T	42
Ruby-crowned Kinglet	T	36
Red-breasted Nuthatch	S	15
Brown Creeper †		1
Winter Wren †		5
European Starling	NY	35
Gray Catbird †	S	0
Gray-cheeked Thrush †		5
Swainson's Thrush ‡		1
Hermit Thrush		32
American Robin	CF	71
Cedar Waxwing	NB	24
House Sparrow	AE	15

American Pipit	A	16
Evening Grosbeak †		0
Pine Grosbeak	P	23
Purple Finch	FY	31
Red Crossbill †	T	16
White-winged Crossbill		2

Breeding Bird Atlas - Summary Sheet for Square 22TCT77 (page 2 of 2)

SPECIES	Code	%
Pine Siskin	T	16
American Goldfinch	T	48
Chipping Sparrow †		0
Fox Sparrow	T	53
Dark-eyed Junco	CF	57
White-throated Sparrow	T	58
Savannah Sparrow	T	58
Song Sparrow	FY	36
Lincoln's Sparrow		2
Swamp Sparrow	T	49
Red-winged Blackbird †	H	1
Brown-headed Cowbird †		0
Rusty Blackbird †		3
Common Grackle	CF	12
Ovenbird		3
Northern Waterthrush	T	49
Black-and-white Warbler	CF	44
Tennessee Warbler		3
Mourning Warbler		9
Common Yellowthroat		25
American Redstart	FY	20
Cape May Warbler †		0
Magnolia Warbler		19
Bay-breasted Warbler †		0
Yellow Warbler	CF	51
Blackpoll Warbler	CF	57
Palm Warbler ‡		0
Yellow-rumped Warbler	CF	54
Black-throated Green Warbler	S	24
Wilson's Warbler	S	41
Rose-breasted Grosbeak †	P	0
Red Squirrel		0

This list includes all breeding species expected in the region #7 (Avalon). Underlined species are those that you should try to add to this square (22TCT77). They have not yet been reported in this square, but have been reported in more than 50% of the squares in this region so far. "Code" is the code for the highest breeding evidence for that species in square 22TCT77 over the last 5 years. The % columns give the percentage of squares in that region where that species was reported (this gives an idea of the expected chance of finding that species in region #7). Rare/Colonial Species Report Forms should be completed for species marked: § (Species of interest),

‡ (regionally rare), † (provincially rare). An up-to-date version of this sheet is available from https://www.birdscanada.org/birdmon/atlas/summaryform.jsp?squareID=22TCT77&lang=EN Data current as of **13/07/2021 05:20**.

BIRDS CANADA
OISEAUX CANADA

Square Summary (22TCT67)

#species				#hours		#pc done	
poss	prob	conf	total	total	peak	road	offrd
7	27	11	45	26.3	13.4	0	1

Region summary (#7: Avalon, NL)

#squares	#sq with data	#species	#squares (pc)	
			target	compl.
168	69	127	0	0

Target number of point counts in this square: 15 in total: 15 road side, 0 off road.

SPECIES	Code	%
Canada Goose		10
Blue-winged Teal †		0
Northern Shoveler †		1
American Wigeon		1
Mallard	FY	13
American Black Duck	FY	23
Northern Pintail	T	8
Green-winged Teal		5
Ring-necked Duck		11
Greater Scaup		2
Common Goldeneye		2
Hooded Merganser †		0
Common Merganser		0
Red-breasted Merganser		2
Ruffed Grouse		5
Willow Ptarmigan		2
Rock Pigeon (Feral Pigeon)	T	8
Mourning Dove		1
Sora †		1
Semipalmated Plover †		1
Killdeer †		1
Least Sandpiper †		0
Wilson's Snipe	T	27
Spotted Sandpiper	D	24
Greater Yellowlegs		13
Willet †		0
Common Murre §		4
Thick-billed Murre §		1
Razorbill §		4
Black Guillemot §		14
Atlantic Puffin §		2
Black-legged Kittiwake §		15
Black-headed Gull †		0

SPECIES	Code	%
Ring-billed Gull §		13
Herring Gull §		20
Great Black-backed Gull §		13
Caspian Tern †		0
Common Tern §	D	24
Arctic Tern §		4
Common Loon	P	23
Leach's Storm-Petrel §		1
Northern Fulmar ‡		1
Northern Gannet §		1
Great Cormorant §		0
Double-crested Cormorant §		4
American Bittern		7
Osprey	AE	14
Northern Harrier		4
Sharp-shinned Hawk	H	2
Northern Goshawk	AE	2
Bald Eagle		8
Rough-legged Hawk †		1
Great Horned Owl		4
Short-eared Owl †		0
Boreal Owl †		0
Northern Saw-whet Owl †		0
Belted Kingfisher	H	18
American Three-toed Woodpecker †		0
Black-backed Woodpecker		1
Downy Woodpecker		2
Hairy Woodpecker		0
Northern Flicker	T	17
Merlin		7
Yellow-bellied Flycatcher	T	36
Alder Flycatcher		7
Blue-headed Vireo	S	5

SPECIES	Code	%
Philadelphia Vireo †		0
Red-eyed Vireo †	S	2
Canada Jay		11
Blue Jay	T	23
American Crow	NB	44
Common Raven	AE	31
Black-capped Chickadee	T	36
Boreal Chickadee	T	30
Horned Lark		7
Tree Swallow	NB	17
Bank Swallow † §		0
Barn Swallow †		2
Golden-crowned Kinglet	T	28
Ruby-crowned Kinglet	T	26
Red-breasted Nuthatch	T	13
Brown Creeper †		0
Winter Wren †		1
European Starling	FY	28
Gray-cheeked Thrush †		4
Swainson's Thrush ‡		0
Hermit Thrush		20
American Robin	CF	66
Cedar Waxwing	T	21
House Sparrow	S	14
American Pipit		15
Evening Grosbeak †		0
Pine Grosbeak		17
Purple Finch	NB	24
Red Crossbill †	T	14
White-winged Crossbill		1
Pine Siskin	T	17
American Goldfinch	T	39
Chipping Sparrow †		0

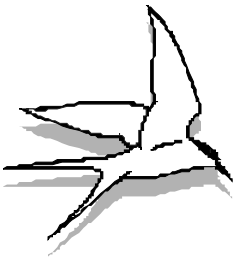
Breeding Bird Atlas - Summary Sheet for Square 22TCT67 (page 2 of 2)

SPECIES	Code	%
Fox Sparrow	T	46
Dark-eyed Junco	NE	56
White-throated Sparrow	T	49
Savannah Sparrow		53
Song Sparrow	T	33
Lincoln's Sparrow		0
Swamp Sparrow	M	44
Red-winged Blackbird †		0
Brown-headed Cowbird †		0
Rusty Blackbird †		1
Common Grackle		13
Ovenbird		1
Northern Waterthrush	T	40
Black-and-white Warbler	T	34
Tennessee Warbler		1
Mourning Warbler		5
Common Yellowthroat		18
American Redstart		14
Cape May Warbler †		0
Magnolia Warbler		8
Bay-breasted Warbler †		0
Yellow Warbler	M	49
Blackpoll Warbler	T	52
Palm Warbler ‡		0
Yellow-rumped Warbler	T	50
Black-throated Green Warbler	S	17
Wilson's Warbler	S	34
Red Squirrel		0

This list includes all breeding species expected in the region #7 (Avalon). Underlined species are those that you should try to add to this square (22TCT67). They have not yet been reported in this square, but have been reported in more than 50% of the squares in this region so far. "Code" is the code for the highest breeding evidence for that species in square 22TCT67 over the last 5 years. The % columns give the percentage of squares in that region where that species was reported (this gives an idea of the expected chance of finding that species in region #7). Rare/Colonial Species Report Forms should be completed for species marked: § (Species of interest), ‡ (regionally rare), † (provincially rare). Current as of 17/05/2021. An up-to-date version of this sheet is available from http://www.birdscanada.org/birdmon/atlas/summaryform.jsp?squareID=22TCT67&lang=EN

APPENDIX F

Atlantic Canada Conservation Data Centre (AC CDC) Results



Atlantic Canada CDC Canada Atlantique

2012 Edition

Part I. Conservation Data Centre Subnational Rarity Ranks

Biological diversity or biodiversity can be described at a number of levels, from molecules to ecosystems. Biodiversity is a combination of species diversity (the variety of species), genetic diversity (the genetic variability among individuals of that species), and ecological diversity (the variety of ecosystems/habitats in which they live). Conservation Data Centres (CDCs), as part of The NatureServe* international network, track biodiversity at two levels: species and ecological communities. Species and ecological communities are referred to as **elements** of biodiversity. Elements are ranked in each jurisdiction (province or state) and at global and national levels in order to help prioritize conservation efforts.

NatureServe and all CDCs (called Heritage Programs in the US) use a standardized element ranking system that has evolved over some 30 years, with input from hundreds of scientists, managers and conservationists. The following material describes this element ranking system at the subnational (S) or provincial level and explains how ranks are assigned for species elements of biodiversity. (The community ranking process is slightly different.)

* Formerly known as The Nature Conservancy (TNC)

Definitions of Provincial (subnational) ranks - SRANKS

S1 **Critically Imperiled—**Critically imperiled in the jurisdiction because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the jurisdiction.

S2 **Imperiled**—Imperiled in the jurisdiction because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from jurisdiction.

S3 **Vulnerable—**Vulnerable in the jurisdiction due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation.

S4 **Apparently Secure—**Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5 **Secure—**Common, widespread, and abundant in the jurisdiction.

SX Pr**esumed Extirpated—**Species or ecosystem is believed to be extirpated from the jurisdiction (i.e., nation or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.

SH **Possibly Extirpated—** Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching or some evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.

S#S# **Range Rank —** A numeric range rank (e.g., S2S3 or S1S3) is used to indicate any range of uncertainty about the status of the species or ecosystem. Ranges cannot skip more than two ranks (e.g., SU is used rather than S1S4).

SU **Unrankable—**Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.

SNR **Unranked—**National or subnational conservation status not yet assessed.

SNA **Not Applicable —**A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities.

Not applicable cases:
Hybrid – Element represents an interspecific hybrid without conservation value. (Note that hybrids may be assigned a numeric rank if they do have a conservation value.)

Exotic Origin – Element is not native to the nation or subnation.

Accidental/Nonregular – Element is not regularly found in the nation or subnation, in other words, infrequent and outside of normal range.

Not Confidently Present – Element's presence in the nation or subnation has been reported, but the report is unconfirmed or doubtful; Element has been falsely reported, and may or may not potentially occur; Element may potentially occur (e.g., habitat is suitable); Element was never present in the nation or subnation despite presence in surrounding areas.

No Definable Occurrences – Element is native and appears regularly but lacks practical conservation concern in the subnation because it is transient or occurs in a dispersed, unpredictable manner.

Synonym – Element reported as occurring in the nation or subnation, but the national or provincial data center does not recognize this taxon; therefore the Element is not assigned a national or subnational rank.

Rank Qualifier

S#? **Inexact Numeric Rank—**Denotes inexact numeric rank. This designation should not be used with any of the variant national or subnational conservation status ranks or NX, SX, NH, or SH.

Breeding Status Qualifiers[4]

B **Breeding—**Conservation status refers to the breeding population of the species in the nation or state/province.

N **Nonbreeding—**Conservation status refers to the non-breeding population of the species in the nation or state/province.

M **Migrant—**Migrant species occurring regularly on migration at particular staging areas or concentration spots where the species might warrant conservation attention. Conservation status refers to the aggregating transient population of the species in the nation or state/province.

[4] 4A breeding status is only used for species that have distinct breeding and/or non-breeding populations in the nation or state/province. A breeding-status S-rank can be coupled with its complementary non-breeding-status S-rank if the species also winters in the nation or state/province. In addition, a breeding-status S-rank can also be coupled with a migrant-status S-rank if, on migration, the species occurs regularly at particular staging areas or concentration spots where it might warrant conservation attention. Multiple conservation status ranks (typically two, or rarely three) are separated by commas (e.g., S2B,S3N or SHN,S4B,S1M).

Part II. The Ranking Process

To rank species elements, 8-10 different biological criteria are assessed for each species.
The ten factors considered in assigning status ranks are described below.

Ranking Matrix Eight ranking criteria and value of letter scores for each criterion.

	MATRIX SCORE								
	A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**
CRITERIA									
Population size	1-50	50-250	250-1000	1000-2500	2500-10000	10000-100000	100000-1000000	>1000000	
Range Extent	<100km²	100-250km²	250-1000km²	1000-5000km²	5000-20000 km²	20000-200000 km²	200000 – 2500000 km²		
Short-term Trend	Decline >90%	Decline of 80-90%	Decline of 70-80%	Decline of 50-70%	Decline of 30-50%	Decline of 10-30%	Relatively Stable (<10% change)	Increase of 10-25%	Increase of >25%
Long-term Trend	Decline >90%	Decline of 80-90%	Decline of 70-80%	Decline of 50-70%	Decline of 30-50%	Decline of 10-30%	Relatively Stable (<10% change)	Increase of 10-25%	Increase of >25%
Area of Occupancy	<0.4km²	0.4-4km²	4-20km²	20-100km²	100-500km²	500-2000km²	2000-20000km²	>20000 km²	
Number of Element Occurrences (EOs)	0-5	6-20	21-100	>100					
Number of EOs with Good Viability	No occurrences with excellent or good viability or ecological integrity	Very few (1-3) occurrences with excellent or good viability or ecological integrity	Few (4-12) occurrences with excellent or good viability or ecological integrity	Some (13-40) occurrences with excellent or good viability or ecological integrity	Many (41-125) occurrences with excellent or good viability or ecological integrity	Very Many (>125) occurrences with excellent or good viability or ecological integrity			

Environmental Specificity	Very Narrow	Narrow	Moderate	Broad					
Threat Scope	Pervasive (71-100%)	Large (31-70%)	Restricted (11-30%)	Small (1-10%)					
Threat Severity	Pervasive (71-100%)	Large (31-70%)	Restricted (11-30%)	Small (1-10%)					

1. Population Size

Population size is the estimated current total population of the species which is naturally occurring and wild within the area of interest (globe, nation, or subnation), and that is of reproductive age or stage (at an appropriate time of the year), including mature but currently non-reproducing individuals, which should be included in counts or estimates. Abundance is measured in different ways depending on the biology of the species. For animal populations it is usually measured by the number of individuals, for plants it may be measured by the area occupied by a distinct population, and for aquatic invertebrates it may be measured by the stream length that the species occupies:

Z = Zero, no individuals believed extant (i.e., species presumed extinct)
A = 1–50 individuals
B = 50–250 individuals
C = 250–1,000 individuals
D = 1,000–2,500 individuals
E = 2,500–10,000 individuals
F = 10,000–100,000 individuals
G = 100,000–1,000,000 individuals
H = >1,000,000 individuals
U = Unknown
Null = Factor not assessed

*A value range (e.g., DE) can also be used to indicate uncertainty.
(DE would indicate between 1000 – 10000 individuals).

2. Range Extent

This denotes the approximate range of the species as a percentage of the province's area. It is defined as the current area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of occurrence, but, *excluding* significant areas where the species does not occur due to unsuitable habitat. Thus the estimate of range for a species exhibiting a linear use of coastal forests or riverine habitats would not consider tracts of unsuitable habitat in the interior of the polygon.

Z = Zero (no occurrences believed extant; species presumed extinct or ecosystem believed eliminated throughout its range)
A = <100 km²
(less than about 40 square miles)
B = 100–250 km²
(about 40–100 square miles)
C = 250–1,000 km²
(100–400 square miles)
D = 1,000–5,000 km²
(400–2,000 square miles)
E = 5,000–20,000 km²
(2,000–8,000 square miles)
F = 20,000–200,000 km²
(8,000–80,000 square miles)
G = 200,000–2,500,000 km²
(80,000–1,000,000 square miles)
H = >2,500,000 km²
(greater than 1,000,000 square miles)

3. Short-term Trend

The rating code that best describes the observed, estimated, inferred, or suspected degree of change in population size, extent of occurrence (range extent), area of occupancy, number of occurrences, and/or number of occurrences or percent area with good viability or ecological integrity over the short term, whichever most significantly affects the conservation status assessment in the area of interest (globe, nation, or subnation). Consider short-term historical trend within ten years or three generations (for long-lived taxa), whichever is the longer (up to a maximum of 100 years), or, for communities and systems, typically 30 years, depending on the characteristics of the type.

The trend may be recent or current, and the trend may or may not be known to be continuing. Trends may be smooth, irregular, or sporadic. Fluctuations will not normally count as trends, but an observed change should not be considered as merely a fluctuation rather than a trend unless there is evidence for this. Conservation Status Assessments: Factors for Assessing Extinction Risk 25
In considering trends, do not consider newly discovered but presumably long existing occurrences, nor newly discovered individuals in previously poorly known areas.

Also, consider fragmentation of previously larger occurrences into a greater number of smaller occurrences to represent a decreasing area of occupancy as well as decreasing

number of good occurrences or populations.

A = Decline of >90%
B = Decline of 80–90%
C = Decline of 70–80%
D = Decline of 50–70%
E = Decline of 30–50%
F = Decline of 10–30%
G = Relatively Stable (≤10% change)
H = Increase of 10–25%
I = Increase of >25%
U = Short-term trend unknown
Null = Factor not assessed

4. Long-term Trend

The rating code that best describes the observed, estimated, inferred, or suspected degree of change in population size, extent of occurrence (range extent), area of occupancy, number of occurrences, and/or number of occurrences or percent area with good viability or ecological integrity over the long term (ca. 200 years) in the area of interest (globe, nation, or subnation).

A = Decline of >90%
B = Decline of 80–90%
C = Decline of 70–80%
D = Decline of 50–70%
E = Decline of 30–50%
F = Decline of 10–30%
G = Relatively Stable (≤10% change)
H = Increase of 10–25%
I = Increase of >25%
U = Long-term trend unknown
Null = Factor not assessed

5. Area of Occupancy

Area of occupancy for taxa can be defined as (modified from the International Union for the Conservation of Nature 2001):
"...the area within its 'extent of occurrence', which is occupied by a taxon or ecosystem type, excluding cases of vagrancy. The measure reflects the fact that a taxon or type will not usually occur throughout the area of its extent of occurrence, which may contain unsuitable or unoccupied habitats. In some cases, (e.g., irreplaceable colonial nesting sites, crucial feeding sites for migratory taxa) the area of occupancy is the smallest area essential at any stage to the survival of existing populations of a taxon. The size of the area of occupancy will be a function of the scale at which it is measured, and should be at a scale appropriate to relevant biological or ecological aspects of the taxon or type, the nature of threats and the available data."

A = <0.4km²
B = 0.4-4
C = 4-20 km²
D = 20-100 km²
E = 100-500 km²
F = 500-2000 km²
G = 2000-20000 km²
H = >20000 km²

5b. Linear Distance of Occupancy

Ecosystems that occur as linear strips. They are often ecotonal between terrestrial and aquatic ecosystems. In undisturbed conditions, typical occurrences range in linear distance from 0.5 to 100 km.

A = <4km²
B = 4-40
C = 40-200 km²
D = 200-1000 km²
E = 1000-5000 km²
F = 5000-20000 km²
G = 20000-200000 km²
H = >200000 km²

6. Number of Element Occurrences (EOs)

An "element occurrence" is the mapping unit of CDC methodology. It is generally defined as an area of land or water on which an "element of biodiversity" (plant and animal species or natural community) is or was present. It is a physical location important to the conservation of a species or community, an area worth preserving to insure the survival of a community or species at risk. For a species it is generally the habitat occupied by a local population, for a community it is the area containing a stand or patch. What constitutes an occurrence also varies between species (e.g. hibernacula, den sites, breeding ponds where adults, egg masses and/or larvae have been identified, breeding colonies, etc.). Some species can have more than one type of occurrence, for example breeding and wintering occurrences.

A single letter code (below) represents the number of estimated occurrences believed extant for the species in the province. When a species' distribution is extremely limited and there are very few site occurrences, it is very susceptible to any number of ecological disturbances, both predictable and unpredictable. This criteria is therefore an important factor influencing SRANK when the number of occurrences is few. If the letter code for this field is A or B, the species usually qualifies for a rank of S1 or S2.

A = 0 - 5 occurrences
B = 6 - 20 occurrences
C = 21 - 100 occurrences
D = 101+ occurrences

7. Number of EOs with Good Viability

For species, an occurrence with at least good (i.e., excellent-to-good) viability exhibits favorable characteristics with respect to population size and/or quality and quantity of occupied habitat; and, if current conditions prevail, the occurrence is likely to persist for the foreseeable future (i.e., at least 20–30 years) in its current condition or better. See Hammerson et al. (2008) for more details. For ecosystems, an occurrence has excellent-to-good ecological integrity when it exhibits favorable characteristics with respect to reference conditions for structure, composition, and function, operating within the bounds of natural or historic disturbance regimes, and is of exemplary size (Faber-Langendoen et al. 2008). One would expect only minor to moderate alterations to these characteristics for an occurrence to maintain good ecological integrity.

For many occurrences, viability or ecological integrity assessments or ranks have been applied by biologists and ecologists throughout the NatureServe network. For species, these Element Occurrence (EO) ranks estimate the probability of persistence of the occurrence. For ecosystems, the rank is a succinct assessment of the degree to which, under current conditions, an occurrence of an ecosystem matches reference conditions for that system, without any presumptions made about future status or persistence. Ranks for species and ecosystems are based on a set of "occurrence rank factors," namely size (including population size and/or occupied area), abiotic and biotic condition, and landscape context. These factors may be further refined to specific indicators or metrics. The overall ranks range from A = Excellent viability/integrity, to D = Poor viability/integrity

A = No occurrences with excellent or good (assessed as A or B) viability or ecological integrity
B = Very few (1–3) occurrences with excellent or good viability or ecological integrity
C = Few (4–12) occurrences with excellent or good viability or ecological Integrity
D = Some (13–40) occurrences with excellent or good viability or ecological integrity
E = Many (41–125) occurrences with excellent or good viability or ecological integrity
F = Very many (>125) occurrences with excellent or good viability or ecological integrity
U = Unknown number of occurrences with excellent or good viability or ecological integrity
Null = Factor not assessed

8. Environmental Specificity

Environmental Specificity is the degree to which a species or ecosystem depends on a relatively scarce set of habitats, substrates, food types, or other abiotic and/or biotic factors within the overall range. Relatively narrow requirements are thought to increase the vulnerability of a species or ecosystem. This factor is most important when the number of occurrences, and the range extent or area of occupancy, are largely unknown.

A = Very Narrow. Specialist or ecosystem with key requirements scarce. For

species, specific habitat(s), substrate(s), food type(s), hosts, breeding/ non-breeding microhabitats, or other abiotic and/or biotic factor(s) are used or required by the species or ecosystem in the area of interest, with these habitat(s) and/or other requirements furthermore being scarce within the generalized range of the species or ecosystem within the area of interest, and the population (or the number of breeding attempts) expected to decline significantly if any of these key requirements become unavailable. For ecosystems, environmental requirements are both narrow
and scarce (e.g., calcareous seepage fens).

B = Narrow. Specialist or ecosystem with key requirements common. Specific habitat(s) or other abiotic and/or biotic factors (see above) are used or required by the species or ecosystem, but these key requirements are common and within the generalized range of the species or ecosystem within the area of interest. For ecosystems, environmental requirements are narrow but common (e.g., floodplain forest, alpine tundra).

C = Moderate. Generalist or community with some key requirements scarce. Broad-scale or diverse (general) habitat(s) or other abiotic and/or biotic factors are used or required by the species or ecosystem, but some key requirements are scarce in the generalized range of the species or ecosystem within the area of interest. For ecosystems, environmental requirements are broad but scarce (e.g., talus or cliff forests and woodlands, alvars, many rock outcrop communities dependent more on thin, droughty soils per se than specific substrate factors).

D = Broad. Generalist or community with all key requirements common. Broad-scale or diverse (general) habitat(s) or abiotic and/or biotic factors are used or required by the species or ecosystem, with all key requirements common in the generalized range of the species or ecosystem in the area of interest. For animals, if the preferred food(s) or breeding/non-breeding microhabitat(s) become unavailable, the species switches to an alternative with no resulting decline in numbers of individuals or number of breeding attempts. For ecosystems, environmental requirements are broad and common (e.g., forests or prairies on glacial till, or forests and meadows on montane slopes).

9. Threat Severity

Within the scope (as defined spatially and temporally in assessing the scope of the Threat), severity is the level of damage to the species or ecosystem from the Threat that can reasonably be expected with continuation of current circumstances and trends (including potential new threats) (Table 7). Note that severity of Threats is assessed within a ten-year or three-generation time frame, whichever is longer (up to 100 years).

For species, severity is usually measured as the degree of reduction of the species' population. Surrogates for adult population size (e.g., area) should be used with caution, as

occupied areas, for example, will have uneven habitat suitability and uneven population density. For ecosystems, severity is typically measured as the degree of degradation or decline in integrity (of one or more key characteristics).

Extreme	Within the scope, the Threat is likely to destroy or eliminate the occurrences of an ecological community, system or species, or reduce the species population by 71–100%
Serious	Within the scope, the Threat is likely to seriously degrade/reduce the effected occurrences or habitat or, for species, to reduce the species population by 31–70%
Moderate	Within the scope, the Threat is likely to moderately degrade/reduce the effected occurrences or habitat or, for species, to reduce the species population by 11–30%
Slight	Within the scope, the Threat is likely to only slightly degrade/reduce the effected occurrences or habitat or, for species, to reduce the species population by 1–10%

10. Threat Scope

Scope is defined herein as the proportion of the species or ecosystem that can reasonably be expected to be affected (that is, subject to one or more stresses) by the Threat within ten years with continuation of current circumstances and trends (Table 6). Current circumstances and trends include both existing as well as potential new threats. The ten-year time frame can be extended for some longer-term threats, such as global warming, that need to be addressed today. For species, scope is measured as the proportion of the species' population in the area of interest (globe, nation, or subnation) affected by the Threat. For ecosystems, scope is measured as the proportion of the occupied area of interest (globe, nation, or subnation) affected by the Threat. If a species or ecosystem is evenly distributed, then the proportion of the population or area affected is equivalent to the proportion of the range extent affected by the Threat; however, if the population or area is patchily distributed, then the proportion differs from that of range extent.

Pervasive Affects all or most (71–100%) of the total population or occurrences
Large Affects much (31–70%) of the total population or occurrences
Restricted Affects some (11–30%) of the total population or occurrences.
Small Affects a small (1–10%) proportion of the total population or occurrences.

11. Intrinsic Vulnerability

Note that this factor is not used if the Threats status factor has been assessed.

Intrinsic Vulnerability is the observed, inferred, or suspected degree to which characteristics of the species or ecosystem (such as life history or behavior characteristics of species, or likelihood of regeneration or recolonization for ecosystems) make it vulnerable or resilient to natural or anthropogenic stresses or catastrophes. For ecosystems, Intrinsic Vulnerability is most readily assessed using the dominant species and vegetation structure that characterize the ecosystem, but it can also refer to ecological processes that make an ecosystem vulnerable or lack resiliency (e.g., shoreline fens along estuarine and marine coasts subject to rising sea levels).

Since geographically or ecologically disjunct or peripheral occurrences may show additional vulnerabilities not generally characteristic of a species or ecosystem, characteristics of Intrinsic Vulnerability are to be assessed for the species or ecosystem throughout the area of interest, or at least for its better occurrences. Information on population size, number of occurrences, area of occupancy, extent of occurrence, or environmental characteristics that affect resiliency should not be considered when assessing Intrinsic Vulnerability; these are addressed using other status factors.

Note that the Intrinsic Vulnerability characteristics exist independent of human influence, but may make the species or ecosystem more susceptible to disturbance by human activities. The extent and effects of current or projected extrinsic influences themselves should be addressed in the comments field of the Threats status factor.

A = Highly Vulnerable. Species is slow to mature, reproduces infrequently, and/or has low fecundity such that populations are very slow (>20 years

or five generations) to recover from decreases in abundance; or species has low dispersal capability such that extirpated populations are unlikely to become reestablished through natural recolonization (unaided by humans). Ecosystem occurrences are highly susceptible to changes in composition and structure that rarely if ever are reversed through natural processes even over substantial time periods (>100 years).

B = Moderately Vulnerable. Species exhibits moderate age of maturity, frequency of reproduction, and/or fecundity such that populations generally tend to recover from decreases in abundance over a period of several years (on the order of 5–20 years or 2–5 generations); or species has moderate dispersal capability such that extirpated populations generally become reestablished through natural recolonization (unaided by humans). Ecosystem occurrences may be susceptible to changes in composition and structure but tend to recover through natural processes given reasonable time (10–100 years).

C = Not Intrinsically Vulnerable. Species matures quickly, reproduces frequently, and/or has high fecundity such that populations recover quickly (<5 years or 2 generations) from decreases in abundance; or species has high dispersal capability such that extirpated populations soon become reestablished through natural recolonization (unaided by humans). Ecosystem occurrences are resilient or resistant to irreversible changes in composition and structure and quickly recover (within 10 years).

U = Unknown

Null = Factor not assessed

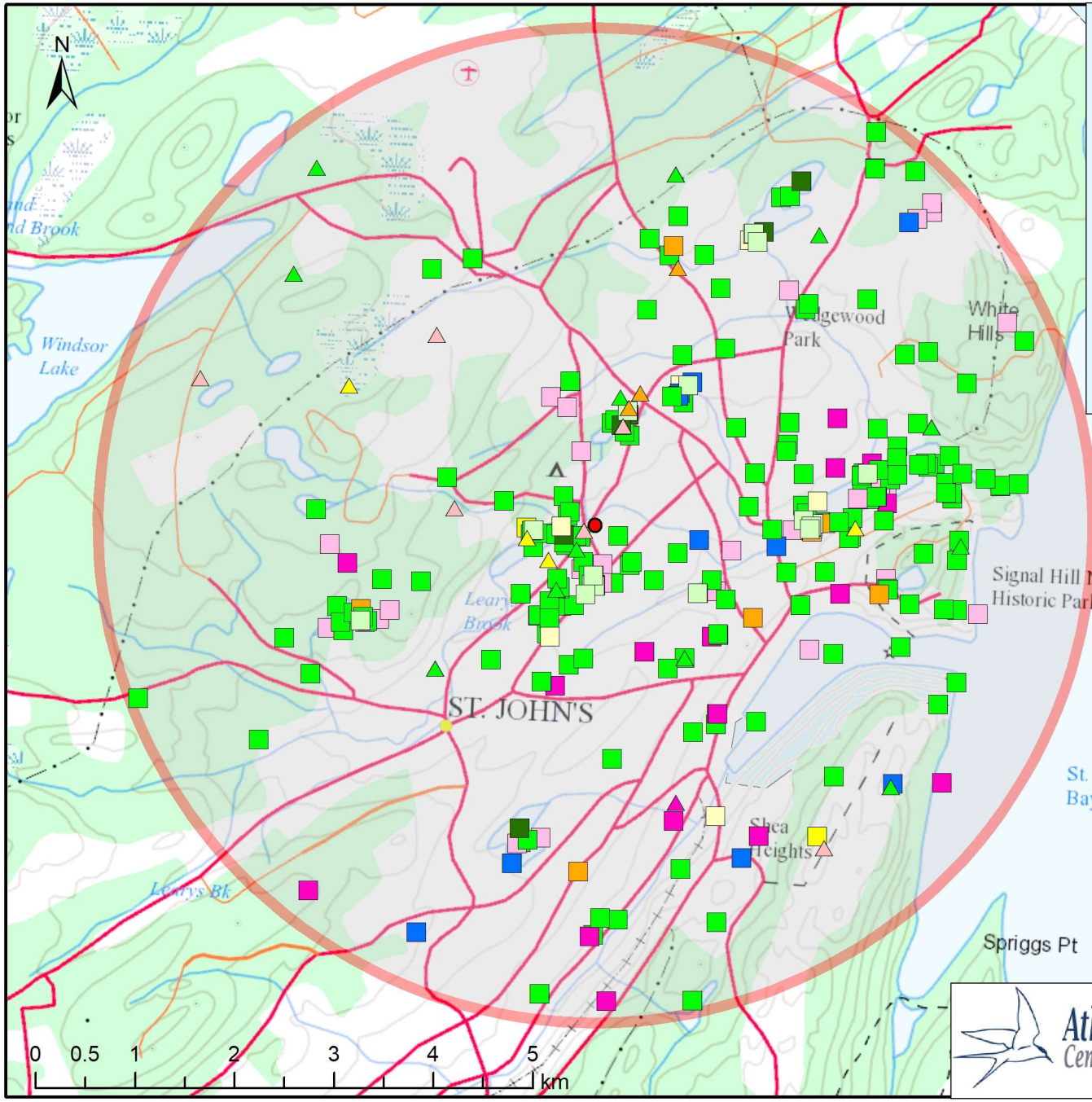
12. Other Considerations

Other considerations in determining the rank that are not apparent from the letter codes selected for the above criteria. Generally, these considerations will raise rather than lower the rank, e.g., "Never sexually reproduces" or "All occurrences are in areas under development".

References

Master, L., D. Faber-Langendoen, R. Bittman, G. A. Hammerson, B. Heidel, J. Nichols, L. Ramsay, and A. Tomaino. 2009. NatureServe Conservation Status Assessments: Factors for Assessing Extinction Risk. NatureServe, Arlington, VA.

GIS Scan of Rare and Provincially/Federally Listed Species for Long Pond in St. John's, Newfoundland and Labrador



Legend

Point of Interest (POI)

5 km Buffer Around POI

Rare Flora

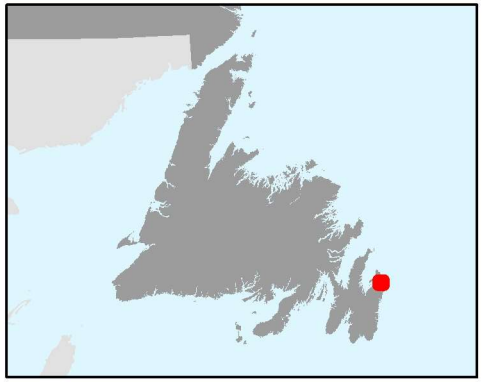
- 10m Accuracy
- 50m Accuracy
- 100m Accuracy
- 1000m Acc.
- 10000m Acc.

Rare Fauna

- 3-8m Accuracy
- 10m Accuracy
- 15-39m Accuracy
- 50-99m Accuracy
- 100m Accuracy
- 153-203m Acc.
- 304-384m Acc.
- 837-1037m Acc.
- 5000-12372m Acc.

Atlantic Canada Conservation Data Centre
April 22, 2021
For: CBCL Ltd.
Data Request: RQ0874

Datum: Transverse Mercator NAD83
Note: Interpretations of this map should always be conducted in relation with data provided in spreadsheets and any other communications.



Atlantic Canada Conservation Data Centre
Centre de données sur la conservation du Canada atlantique

GNAME	GCOMNAME	FAMILY	Observer	TotalNumber	Month	Day	Year	SRANK_2015	SRANK_2	NRANK	GRANK	GeneralStat	COSEWIC_ST	PROVINCIAL	SARA	DESCR_HABIT	SITE_NAME	Accuracy	SYNAME	CITATION	IDNUM
Pagophila eburnea	Ivory Gull	Laridae	Hugh Whitney	1	1		2007	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			100		Dr. Hugh Whitney, NL Depa	mstr1020871
Loxia curvirostra	Red Crossbill	Fringillidae		1	5	27	2000	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		ken Pond Botanical Garden; St. Joh	100		NF,Birds	mstr1007387
Loxia curvirostra	Red Crossbill	Fringillidae		1	3	28	1999	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Pippy Park; St. John's NL	100		NF,Birds	mstr1007388
Catharus minimus	Gray-Cheeked Thrush	Turdidae	Howard Clase	1	10	7	2002	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened			Oxen Pond	1000		NF,Birds	mstr1004311
Loxia curvirostra	Red Crossbill	Fringillidae	Greg Stroud	7	5	10	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered			100		Canadian Wildlife Service	mstr1009311
Chordeiles minor	Common Nighthawk	Caprimulgid	Todd Boland	1	7	31	2006	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened			100		Canadian Wildlife Service	mstr1009367
Loxia curvirostra	Red Crossbill	Fringillidae		1	5	31	2000	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		ical Garden; Mount Scio Road; St. .	100		NF RBA	mstr1007389
Loxia curvirostra	Red Crossbill	Fringillidae		1	4	28	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's; NL	100		Email correspondence	mstr1007390
Loxia curvirostra	Red Crossbill	Fringillidae		1	4	25	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's; NL	100		NF RBA	mstr1007391
Loxia curvirostra	Red Crossbill	Fringillidae		1	4	28	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's	1000		NF,Birds	mstr1007440
Loxia curvirostra	Red Crossbill	Fringillidae		1	5	14	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's	1000		NF,Birds	mstr1007441
Loxia curvirostra	Red Crossbill	Fringillidae		1	4	17	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's	1000		NF,Birds	mstr1007442
Loxia curvirostra	Red Crossbill	Fringillidae		1	5	6	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		MUN Campus; St. John's	1000		NF,Birds	mstr1007443
Loxia curvirostra	Red Crossbill	Fringillidae	Peter Thomas	1	11	24	2006	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban forest	Pippy Park; St. John's	10		Canadian Wildlife Service	mstr1007371
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	1	11	20	2006	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban park	Mundy Pond; St. John's	100		NF,Birds	mstr1007428
Loxia curvirostra	Red Crossbill	Fringillidae	Bruce Mactavish	12	4	11	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban forest		1000		Canadian Wildlife Service	mstr1009289
Loxia curvirostra	Red Crossbill	Fringillidae	Michael Parmente	5	4	13	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Larch Forest		1000		Canadian Wildlife Service	mstr1009314
Euphagus carolinus	Rusty Blackbird	Icteridae	John Wells	1	5	17	2000	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Long Pond; St. John's	1000		NF,Birds	mstr1007606
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	1	11	19	2006	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban forest	Long Pond; St. John's	1000		Email correspondence	mstr1007455
Loxia curvirostra	Red Crossbill	Fringillidae	Jean-Guy Landry;	1	6	20	1971	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban forest	St. John's	10000		Nest Record Card	mstr1007487
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	10	4	6	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	European Larch		1000		Canadian Wildlife Service	mstr1009288
Euphagus carolinus	Rusty Blackbird	Icteridae	Brian Dalzell	1	3	18	2000	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St. John's; Fox Avenue	100		NatureNB	mstr1007567
Pagophila eburnea	Ivory Gull	Laridae		1	12	27	1999	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		St. John's CBC;	1000		NF,Birds	mstr1006586
Pagophila eburnea	Ivory Gull	Laridae		1	12	28	1999	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		St. John's CBC;	1000		NF,Birds	mstr1006587
Pagophila eburnea	Ivory Gull	Laridae		1	1	0	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		ohn's harbour and lower Waterford \	1000		NF,Birds	mstr1006588
Pagophila eburnea	Ivory Gull	Laridae		1	2	1	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		St. John's;	1000		NF,Birds	mstr1006589
Loxia curvirostra	Red Crossbill	Fringillidae		1	3	21	2000	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Strawberry Marsh Road; St. John's	100		NF RBA	mstr1007392
Loxia curvirostra	Red Crossbill	Fringillidae		1	5	5	1967	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	urban forest	Kents Pond; St. John's	1000		Nest Record Card	mstr1007457
Asio flammeus	Short-eared Owl	Strigidae		1	12	27	2002	S3B,SUM	S3B	44B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	unknown		10000		Canadian Wildlife Service, C	mstr1009255
Asio flammeus	Short-eared Owl	Strigidae	Todd Boland	1	2	25	2004	S3B,SUM	S3B	44B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	urban		100		Canadian Wildlife Service	mstr1009227
Loxia curvirostra	Red Crossbill	Fringillidae	Dan	1	1	2	2008	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	backyard feeder		1000		Canadian Wildlife Service	mstr1009441
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	12	26	1979	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St John's	10000		The Osprey, Christmas Bird	mstr1004643
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	12	26	1976	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St John's	5000		The Osprey, Christmas Bird	mstr1005030
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	12	26	1980	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St John's	5000		The Osprey, Christmas Bird	mstr1005031
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	12	26	1988	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St John's	5000		Am Birds, Christmas Bird C	mstr1005032
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	12	26	1968	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern		St John's	5000		Am Birds, Christmas Bird C	mstr1006372
Chroicocephalus ridibundu	Black-headed Gull	Laridae		44	0	0	1967	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016213
Charadrius vociferus	Killdeer	Charadriidae		1	0	0	1967	S3B,SUM	S2B	45B,N4N5N	G5	Sensitive	ndidate (Low Prior					10		Christmas Bird Count	mstr1016227
Anas acuta	Northern Pintail	Anatidae		1	0	0	1967	S3B,SUM	S3B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016229
Podilymbus podiceps	Pied-billed Grebe	Podicipedida		1	0	0	1967	S1B,SUM	S1B	45B,N4N5N	G5	Undetermine						10		Christmas Bird Count	mstr1016230
Loxia curvirostra	Red Crossbill	Fringillidae		59	0	0	1967	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered			10		Christmas Bird Count	mstr1016233
Plectrophenax nivalis	Snow Bunting	Emberizidae		7	0	0	1967	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016235
Troglodytes troglodytes	Winter Wren	Troglodytida		1	0	0	1967	S3B,SUM	S3S4B	N5B	G5	Secure						10		Christmas Bird Count	mstr1016238
Certhia americana	Brown Creeper	Certhiidae		5	0	0	1968	S3	S3B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016247
Chroicocephalus ridibundu	Black-headed Gull	Laridae		48	0	0	1968	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016248
Zenaida macroura	Mourning Dove	Columbidae		3	0	0	1968	S3	S2B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016259
Plectrophenax nivalis	Snow Bunting	Emberizidae		2	0	0	1968	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016263
Megaceryle alcyon	Belted Kingfisher	Alcedinidae		1	0	0	1969	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low					10		Christmas Bird Count	mstr1016267
Chroicocephalus ridibundu	Black-headed Gull	Laridae		52	0	0	1969	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016272
Acanthis flammea	Common Redpoll	Fringillidae		480	0	0	1969	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016275
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		400	0	0	1969	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern					10		Christmas Bird Count	mstr1016280
Histrionicus histrionicus	Harlequin Duck	Anatidae		4	0	0	1969	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern			10		Christmas Bird Count	mstr1016285
Loxia curvirostra	Red Crossbill	Fringillidae		110	0	0	1969	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered			10		Christmas Bird Count	mstr1016294
Plectrophenax nivalis	Snow Bunting	Emberizidae		10	0	0	1969	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016296
Megaceryle alcyon	Belted Kingfisher	Alcedinidae		1	0	0	1970	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low					10		Christmas Bird Count	mstr1016300
Certhia americana	Brown Creeper	Certhiidae		4	0	0	1970	S3	S3B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016306
Chroicocephalus ridibundu	Black-headed Gull	Laridae		100	0	0	1970	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016307
Acanthis flammea	Common Redpoll	Fringillidae		23	0	0	1970	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016310
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		220	0	0	1970	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern					10		Christmas Bird Count	mstr1016314
Accipiter gentilis	Northern Goshawk	Accipitridae		1	0	0	1970	S3	S3B	44B,N4N5N	G5	Secure						10		Christmas Bird Count	mstr1016323
Podilymbus podiceps	Pied-billed Grebe	Podicipedida		1	0	0	1970	S1B,SUM	S1B	45B,N4N5N	G5	Undetermine						10		Christmas Bird Count	mstr1016325
Plectrophenax nivalis	Snow Bunting	Emberizidae		150	0	0	1970	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016332
Troglodytes troglodytes	Winter Wren	Troglodytida		8	0	0	1970	S3B,SUM	S3S4B	N5B	G5	Secure						10		Christmas Bird Count	mstr1016335
Megaceryle alcyon	Belted Kingfisher	Alcedinidae		1	0	0	1971	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low					10		Christmas Bird Count	mstr1016338
Chroicocephalus ridibundu	Black-headed Gull	Laridae		27	0	0	1971	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016344
Quiscalus quiscula	Common Grackle	Icteridae		1	0	0	1971	S5B,S3?N, SUM	S5B	45B,NUN,N	G5	Secure						10		Christmas Bird Count	mstr1016346
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		7	0	0	1971	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern					10		Christmas Bird Count	mstr1016351
Calidris maritima	Purple Sandpiper	Scolopacida		6	0	0	1971	S3N,SUM	S3N	43N4B,N3N	G5	Secure						10		Christmas Bird Count	mstr1016362
Loxia curvirostra	Red Crossbill	Fringillidae		23	0	0	1971	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered			10		Christmas Bird Count	mstr1016363
Plectrophenax nivalis	Snow Bunting	Emberizidae		6	0	0	1971	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016365
Chroicocephalus ridibundu	Black-headed Gull	Laridae		27	0	0	1972	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016375
Quiscalus quiscula	Common Grackle	Icteridae		1	0	0	1972	35B,S3?N, SUM	S5B	45B,NUN,N	G5	Secure						10		Christmas Bird Count	mstr1016376
Acanthis flammea	Common Redpoll	Fringillidae		2	0	0	1972	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016377
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		220	0	0	1972	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern					10		Christmas Bird Count	mstr1016383
Anas acuta	Northern Pintail	Anatidae		1	0	0	1972	S3B,SUM	S3B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016394
Sphyrapicus varius	Yellow-bellied Sapsucke	Picidae		1	0	0	1972	S2B,SUM	S2B	N5B,N5M	G5	May be at risk						10		Christmas Bird Count	mstr1016404
Spizella arborea	American Tree Sparrow	Emberizidae		0	0	0	1973	S3B,SUM	S2B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016407
Certhia americana	Brown Creeper	Certhiidae		3	0	0	1973	S3	S3B	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016413
Chroicocephalus ridibundu	Black-headed Gull	Laridae		9	0	0	1973	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive						10		Christmas Bird Count	mstr1016414
Acanthis flammea	Common Redpoll	Fringillidae		4	0	0	1973	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016417
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		81	0	0	1973	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern					10		Christmas Bird Count	mstr1016422
Accipiter gentilis	Northern Goshawk	Accipitridae		3	0	0	1973	S3	S3B	44B,N4N5N	G5	Secure						10		Christmas Bird Count	mstr1016435
Podilymbus podiceps	Pied-billed Grebe	Podicipedida		0	0	0	1973	S1B,SUM	S1B	45B,N4N5N	G5	Undetermine						10		Christmas Bird Count	mstr1016437
Calidris maritima	Purple Sandpiper	Scolopacida		5	0	0	1973	S3N,SUM	S3N	43N4B,N3N	G5	Secure						10		Christmas Bird Count	mstr1016440
Alca torda	Razorbill	Alcidae		1	0	0	1973	S3B,S3M	S3B	45B,N4N,N	G5	Secure						10		Christmas Bird Count	mstr1016441
Plectrophenax nivalis	Snow Bunting	Emberizidae		11	0	0	1973	S5M,S2N	S5N	45B,N5N,N	G5	Secure						10		Christmas Bird Count	mstr1016446

Bubo scandiacus	Snowy Owl	Strigidae	0	0	0	1973	S3N,SUM	SNA	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016447
Certhia americana	Brown Creeper	Certhiidae	0	0	0	1974	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016455
Chroicocephalus ridibundu	Black-headed Gull	Laridae	26	0	0	1974	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016456
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	111	0	0	1974	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016465
Charadrius vociferus	Killdeer	Charadriidae	1	0	0	1974	S3B,SUM	S2B	45B,N4N5N	G5	Sensitive	ndidate (Low Prior			10	Christmas Bird Count	mstr1016472
Somateria spectabilis	King Eider	Anatidae	0	0	0	1974	S2N,SUM	S3N	UB,NUN,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1016473
Zenaida macroura	Mourning Dove	Columbidae	25	0	0	1974	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016475
Alca torda	Razorbill	Alcidae	1	0	0	1974	S3B,S3M	S3B	45B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1016479
Loxia curvirostra	Red Crossbill	Fringillidae	25	0	0	1974	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016480
Troglodytes troglodytes	Winter Wren	Troglodytida	1	0	0	1974	S3B,SUM	S3S4B	N5B	G5	Secure				10	Christmas Bird Count	mstr1016485
Chroicocephalus ridibundu	Black-headed Gull	Laridae	11	0	0	1975	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016494
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	104	0	0	1975	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016502
Plectrophenax nivalis	Snow Bunting	Emberizidae	6	0	0	1975	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016517
Porzana carolina	Sora	Rallidae	1	0	0	1975	S2B,SUM	S1B	N5B,N5M	G5	Jndetermine				10	Christmas Bird Count	mstr1016518
Spizella arborea	American Tree Sparrow	Emberizidae	1	0	0	1976	S3B,SUM	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016522
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	1	0	0	1976	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1016523
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1976	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016528
Chroicocephalus ridibundu	Black-headed Gull	Laridae	4	0	0	1976	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016529
Acanthis flammea	Common Redpoll	Fringillidae	3	0	0	1976	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016532
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	317	0	0	1976	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016537
Accipiter gentilis	Northern Goshawk	Accipitridae	1	0	0	1976	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1016546
Loxia curvirostra	Red Crossbill	Fringillidae	2	0	0	1976	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016551
Chroicocephalus ridibundu	Black-headed Gull	Laridae	3	0	0	1977	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016567
Quiscalus quiscula	Common Grackle	Icteridae	2	0	0	1977	55B,S37N, SUN	S5B	45B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1016569
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	90	0	0	1977	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016575
Histrionicus histrionicus	Harlequin Duck	Anatidae	1	0	0	1977	S3B, S2N,SUM	S3B,S2N	44B,N3N,N4	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1016580
Zenaida macroura	Mourning Dove	Columbidae	0	0	0	1977	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016584
Loxia curvirostra	Red Crossbill	Fringillidae	20	0	0	1977	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016591
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	1	0	0	1978	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1016601
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1978	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016607
Chroicocephalus ridibundu	Black-headed Gull	Laridae	34	0	0	1978	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016608
Quiscalus quiscula	Common Grackle	Icteridae	4	0	0	1978	55B,S37N, SUN	S5B	45B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1016610
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	145	0	0	1978	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016616
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1978	S3N,SUM	S3N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016627
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1978	S1B,SUM	S1B	45B,N4N5N	G5	Jndetermine				10	Christmas Bird Count	mstr1016629
Loxia curvirostra	Red Crossbill	Fringillidae	41	0	0	1978	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016632
Troglodytes troglodytes	Winter Wren	Troglodytida	1	0	0	1978	S3B,SUM	S3S4B	N5B	G5	Secure				10	Christmas Bird Count	mstr1016639
Chroicocephalus ridibundu	Black-headed Gull	Laridae	5	0	0	1979	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016648
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	334	0	0	1979	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016656
Accipiter gentilis	Northern Goshawk	Accipitridae	1	0	0	1979	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1016668
Plectrophenax nivalis	Snow Bunting	Emberizidae	21	0	0	1979	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016676
Falco sparverius	American Kestrel	Falconidae	0	0	0	1980	S2B,SUM	S2B	45B,N1N,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1016682
Certhia americana	Brown Creeper	Certhiidae	2	0	0	1980	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016688
Chroicocephalus ridibundu	Black-headed Gull	Laridae	13	0	0	1980	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016690
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	664	0	0	1980	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016700
Histrionicus histrionicus	Harlequin Duck	Anatidae	1	0	0	1980	S3B, S2N,SUM	S3B,S2N	44B,N3N,N4	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1016704
Zenaida macroura	Mourning Dove	Columbidae	0	0	0	1980	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016709
Porzana carolina	Sora	Rallidae	1	0	0	1980	S2B,SUM	S1B	N5B,N5M	G5	Jndetermine				10	Christmas Bird Count	mstr1016718
Certhia americana	Brown Creeper	Certhiidae	2	0	0	1981	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016730
Chroicocephalus ridibundu	Black-headed Gull	Laridae	62	0	0	1981	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016732
Quiscalus quiscula	Common Grackle	Icteridae	0	0	0	1981	55B,S37N, SUN	S5B	45B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1016734
Acanthis flammea	Common Redpoll	Fringillidae	2	0	0	1981	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016737
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	471	0	0	1981	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016744
Histrionicus histrionicus	Harlequin Duck	Anatidae	1	0	0	1981	S3B, S2N,SUM	S3B,S2N	44B,N3N,N4	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1016749
Somateria spectabilis	King Eider	Anatidae	1	0	0	1981	S2N,SUM	S3N	UB,NUN,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1016753
Zenaida macroura	Mourning Dove	Columbidae	3	0	0	1981	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016754
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	16	0	0	1981	S1B,SUM	S1S2B	45B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1016761
Euphagus carolinus	Rusty Blackbird	Icteridae	1	0	0	1981	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1016764
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1982	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016784
Chroicocephalus ridibundu	Black-headed Gull	Laridae	46	0	0	1982	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016786
Acanthis flammea	Common Redpoll	Fringillidae	3	0	0	1982	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016790
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	369	0	0	1982	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016796
Charadrius vociferus	Killdeer	Charadriidae	7	0	0	1982	S3B,SUM	S2B	45B,N4N5N	G5	Sensitive	ndidate (Low Prior			10	Christmas Bird Count	mstr1016805
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1982	S3N,SUM	S3N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016809
Loxia curvirostra	Red Crossbill	Fringillidae	6	0	0	1982	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016814
Chroicocephalus ridibundu	Black-headed Gull	Laridae	25	0	0	1983	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016828
Quiscalus quiscula	Common Grackle	Icteridae	5	0	0	1983	55B,S37N, SUN	S5B	45B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1016830
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	2	0	0	1983	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016837
Accipiter gentilis	Northern Goshawk	Accipitridae	5	0	0	1983	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1016846
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1983	S1B,SUM	S1B	45B,N4N5N	G5	Jndetermine				10	Christmas Bird Count	mstr1016848
Calidris maritima	Purple Sandpiper	Scolopacida	32	0	0	1983	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1016852
Chroicocephalus ridibundu	Black-headed Gull	Laridae	50	0	0	1984	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016867
Acanthis flammea	Common Redpoll	Fringillidae	20	0	0	1984	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016871
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	315	0	0	1984	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016878
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	1984	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016888
Accipiter gentilis	Northern Goshawk	Accipitridae	2	0	0	1984	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1016890
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1984	S1B,SUM	S1B	45B,N4N5N	G5	Jndetermine				10	Christmas Bird Count	mstr1016894
Calidris maritima	Purple Sandpiper	Scolopacida	6	0	0	1984	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1016899
Loxia curvirostra	Red Crossbill	Fringillidae	51	0	0	1984	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016900
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	3	0	0	1984	S1B,SUM	S1S2B	45B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1016902
Buteo lagopus	Rough-legged Hawk	Accipitridae	2	0	0	1984	S2S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016905
Plectrophenax nivalis	Snow Bunting	Emberizidae	15	0	0	1984	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016908
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	1985	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1016915
Bucephala albeola	Bufflehead	Anatidae	1	0	0	1985	S2N,SUM	S1S2N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016923
Chroicocephalus ridibundu	Black-headed Gull	Laridae	81	0	0	1985	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016925
Quiscalus quiscula	Common Grackle	Icteridae	0	0	0	1985	55B,S37N, SUN	S5B	45B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1016928
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	505	0	0	1985	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1016938

Tringa melanoleuca	Greater Yellowlegs	Scolopacida	0	0	0	1985	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1016944
Charadrius vociferus	Killdeer	Charadriidae	1	0	0	1985	S3B,SUM	S2B	5B,N4N5N	G5	Sensitive	ndidate (Low Prior			10	Christmas Bird Count	mstr1016949
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1985	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1016950
Anas platyrhynchos	Mallard	Anatidae	0	0	0	1985	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016951
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	1985	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016953
Accipiter gentilis	Northern Goshawk	Accipitridae	6	0	0	1985	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1016955
Anas acuta	Northern Pintail	Anatidae	1	0	0	1985	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016956
Seiurus aurocapilla	Ovenbird	Parulidae	0	0	0	1985	S3B,SUM	S5B	N5B,N5M	G5	Secure				10	Christmas Bird Count	mstr1016958
Calidris maritima	Purple Sandpiper	Scolopacida	3	0	0	1985	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1016963
Loxia curvirostra	Red Crossbill	Fringillidae	13	0	0	1985	S1S2	S2S3	5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1016964
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1985	S2S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016966
Plectrophenax nivalis	Snow Bunting	Emberizidae	12	0	0	1985	S5M,S2N	S5N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016969
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	4	0	0	1986	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1016979
Certhia americana	Brown Creeper	Certhiidae	4	0	0	1986	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016988
Chroicocephalus ridibundu	Black-headed Gull	Laridae	42	0	0	1986	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1016990
Acanthis flammea	Common Redpoll	Fringillidae	38	0	0	1986	2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1016993
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	436	0	0	1986	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017000
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1986	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1017010
Accipiter gentilis	Northern Goshawk	Accipitridae	3	0	0	1986	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017014
Calidris maritima	Purple Sandpiper	Scolopacida	0	0	0	1986	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017021
Loxia curvirostra	Red Crossbill	Fringillidae	10	0	0	1986	S1S2	S2S3	5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1017022
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	4	0	0	1986	S1B,SUM	S1S2B	5B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1017024
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1986	S2S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017027
Euphagus carolinus	Rusty Blackbird	Icteridae	1	0	0	1986	S2S3B,SUM	S3B	4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1017028
Plectrophenax nivalis	Snow Bunting	Emberizidae	2	0	0	1986	S5M,S2N	S5N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017030
Falco sparverius	American Kestrel	Falconidae	1	0	0	1987	S2B,SUM	S2B	5B,N1N,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1017040
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	1987	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017043
Certhia americana	Brown Creeper	Certhiidae	0	0	0	1987	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017049
Chroicocephalus ridibundu	Black-headed Gull	Laridae	32	0	0	1987	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017050
Quiscalus quiscula	Common Grackle	Icteridae	1	0	0	1987	5B,S3?N, SUM	S5B	5B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1017052
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	721	0	0	1987	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017061
Falco rusticolus	Gyrfalcon	Falconidae	1	0	0	1987	S2S3N,SUM	S2S3N	4N5B,N5N	G5	Secure				10	Christmas Bird Count	mstr1017067
Somateria spectabilis	King Eider	Anatidae	5	0	0	1987	S2N,SUM	S3N	UB,NUN,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1017072
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1987	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1017073
Anas platyrhynchos	Mallard	Anatidae	3	0	0	1987	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017074
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	1987	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017077
Accipiter gentilis	Northern Goshawk	Accipitridae	5	0	0	1987	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017079
Calidris maritima	Purple Sandpiper	Scolopacida	1	0	0	1987	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017084
Loxia curvirostra	Red Crossbill	Fringillidae	0	0	0	1987	S1S2	S2S3	5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1017085
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	1	0	0	1987	S1B,SUM	S1S2B	5B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1017086
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1987	S2S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017089
Plectrophenax nivalis	Snow Bunting	Emberizidae	43	0	0	1987	S5M,S2N	S5N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017092
Bubo scandiacus	Snowy Owl	Strigidae	7	0	0	1987	S3N,SUM	SNA	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017093
Spizella arborea	American Tree Sparrow	Emberizidae	0	0	0	1988	S3B,SUM	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017104
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	1	0	0	1988	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017107
Chroicocephalus ridibundu	Black-headed Gull	Laridae	93	0	0	1988	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017115
Acanthis flammea	Common Redpoll	Fringillidae	0	0	0	1988	2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017118
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	2279	0	0	1988	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017127
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1988	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1017136
Anas platyrhynchos	Mallard	Anatidae	3	0	0	1988	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017138
Zenaida macroura	Mourning Dove	Columbidae	4	0	0	1988	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017140
Accipiter gentilis	Northern Goshawk	Accipitridae	10	0	0	1988	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017142
Anas acuta	Northern Pintail	Anatidae	0	0	0	1988	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017143
Lanius excubitor	Northern Shrike	Laniidae	3	0	0	1988	S3N,SUM	S3N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017144
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	0	0	0	1988	S1B,SUM	S1B	5B,N4N5N	G5	Jndetermine				10	Christmas Bird Count	mstr1017145
Buteo lagopus	Rough-legged Hawk	Accipitridae	3	0	0	1988	S2S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017152
Bubo scandiacus	Snowy Owl	Strigidae	12	0	0	1988	S3N,SUM	SNA	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017156
Calidris fuscicollis	White-rumped Sandpipe	Scolopacida	0	0	0	1988	S3M	S5N	N5B,N5M	G5	Secure				10	Christmas Bird Count	mstr1017161
Troglodytes troglodytes	Winter Wren	Troglodytida	1	0	0	1988	S3B,SUM	S3S4B	N5B	G5	Secure				10	Christmas Bird Count	mstr1017165
Anthus rubescens	American Pipit	Motacillidae	1	0	0	1989	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1017173
Anas americana	American Wigeon	Anatidae	1	0	0	1989	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1017175
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	4	0	0	1989	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017176
Melanitta nigra	Black Scoter	Anatidae	1	0	0	1989	S2B,S2N,SUM	2B,S3M,S1	N4B,N4N	G5	Secure				10	Christmas Bird Count	mstr1017178
Chroicocephalus ridibundu	Black-headed Gull	Laridae	71	0	0	1989	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017185
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	110	0	0	1989	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017197
Histrionicus histrionicus	Harlequin Duck	Anatidae	1	0	0	1989	S3B, S2N,SUM	S3B,S2N	4B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1017202
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1989	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1017207
Anas platyrhynchos	Mallard	Anatidae	5	0	0	1989	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017208
Zenaida macroura	Mourning Dove	Columbidae	12	0	0	1989	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017212
Fulmarus glacialis	Northern Fulmar	Procellariida	1	0	0	1989	S1B,S1M	S1B,S5M	5B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1017214
Accipiter gentilis	Northern Goshawk	Accipitridae	5	0	0	1989	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017215
Anas acuta	Northern Pintail	Anatidae	1	0	0	1989	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017218
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1989	S1B,SUM	S1B	5B,N4N5N	G5	Jndetermine				10	Christmas Bird Count	mstr1017220
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1989	S2S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017227
Bubo scandiacus	Snowy Owl	Strigidae	1	0	0	1989	S3N,SUM	SNA	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017230
Anthus rubescens	American Pipit	Motacillidae	1	0	0	1990	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1017242
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	1990	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017246
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1990	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017252
Chroicocephalus ridibundu	Black-headed Gull	Laridae	79	0	0	1990	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017254
Quiscalus quiscula	Common Grackle	Icteridae	0	0	0	1990	5B,S3?N, SUM	S5B	5B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1017256
Acanthis flammea	Common Redpoll	Fringillidae	2	0	0	1990	2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017259
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	701	0	0	1990	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017266
Somateria spectabilis	King Eider	Anatidae	2	0	0	1990	S2N,SUM	S3N	UB,NUN,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1017277
Larus fuscus	Lesser Black-backed Gu	Laridae	2	0	0	1990	S3N,SUM	S3N	UN,N4N5M	G5	Secure				10	Christmas Bird Count	mstr1017278
Anas platyrhynchos	Mallard	Anatidae	21	0	0	1990	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017280
Zenaida macroura	Mourning Dove	Columbidae	3	0	0	1990	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017284
Accipiter gentilis	Northern Goshawk	Accipitridae	4	0	0	1990	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017286

Circus cyaneus	Northern Harrier	Accipitridae	1	0	0	1990	S3B,SUM	S3?B	N5B,N4N	G5	Secure				10	Christmas Bird Count	mstr1017287
Anas acuta	Northern Pintail	Anatidae	2	0	0	1990	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017289
Calidris maritima	Purple Sandpiper	Scolopacida	15	0	0	1990	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017295
Loxia curvirostra	Red Crossbill	Fringillidae	9	0	0	1990	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	10	Christmas Bird Count	mstr1017296
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	1	0	0	1990	S1B,SUM	S1S2B	45B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1017299
Asio flammeus	Short-eared Owl	Strigidae	2	0	0	1990	S3B,SUM	S3B	44B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1017305
Plectrophenax nivalis	Snow Bunting	Emberizidae	5	0	0	1990	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017306
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	0	0	0	1991	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017318
Chroicocephalus ridibundu	Black-headed Gull	Laridae	70	0	0	1991	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017325
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	432	0	0	1991	S4	S4B,S5N	I4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017339
Falco rusticolus	Gyrfalcon	Falconidae	1	0	0	1991	S2S3N,SUM	S2S3N	I4N5B,N5N	G5	Secure				10	Christmas Bird Count	mstr1017345
Somateria spectabilis	King Eider	Anatidae	1	0	0	1991	S2N,SUM	S3N	UB,NUN,N	G5	Undetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1017350
Larus fuscus	Lesser Black-backed Gu	Laridae	3	0	0	1991	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017351
Anas platyrhynchos	Mallard	Anatidae	39	0	0	1991	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017352
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	1991	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017356
Accipiter gentilis	Northern Goshawk	Accipitridae	7	0	0	1991	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017359
Anas acuta	Northern Pintail	Anatidae	21	0	0	1991	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017360
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1991	S3N,SUM	S3N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017361
Seiurus aurocapilla	Ovenbird	Parulidae	1	0	0	1991	S3B,SUM	S5B	N5B,N5M	G5	Secure				10	Christmas Bird Count	mstr1017362
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1991	S1B,SUM	S1B	45B,N4N5N	G5	Undetermine				10	Christmas Bird Count	mstr1017363
Calidris maritima	Purple Sandpiper	Scolopacida	2	0	0	1991	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017367
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1991	S2S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017372
Aythya fuligula	Tufted Duck	Anatidae	2	0	0	1991	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1017378
Anthus rubescens	American Pipit	Motacillidae	1	0	0	1992	S3B, S4M	S3B,S5M	45B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1017386
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	0	0	0	1992	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017391
Spizella passerina	Chipping Sparrow	Emberizidae	0	0	0	1992	S2S3B,SUM	S2B	N5B,N5M	G5	Secure				10	Christmas Bird Count	mstr1017396
Chroicocephalus ridibundu	Black-headed Gull	Laridae	62	0	0	1992	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017397
Acanthis flammea	Common Redpoll	Fringillidae	65	0	0	1992	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017401
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	1	0	0	1992	S4	S4B,S5N	I4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017408
Phalacrocorax carbo	Great Cormorant	Phalacrocor	3	0	0	1992	S3B,S3M,S3N	S3B	I3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1017414
Falco rusticolus	Gyrfalcon	Falconidae	1	0	0	1992	S2S3N,SUM	S2S3N	I4N5B,N5N	G5	Secure				10	Christmas Bird Count	mstr1017415
Larus fuscus	Lesser Black-backed Gu	Laridae	2	0	0	1992	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017420
Anas platyrhynchos	Mallard	Anatidae	25	0	0	1992	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017421
Zenaida macroura	Mourning Dove	Columbidae	0	0	0	1992	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017423
Accipiter gentilis	Northern Goshawk	Accipitridae	15	0	0	1992	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017425
Anas acuta	Northern Pintail	Anatidae	19	0	0	1992	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017427
Calidris maritima	Purple Sandpiper	Scolopacida	77	0	0	1992	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017432
Plectrophenax nivalis	Snow Bunting	Emberizidae	4	0	0	1992	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017438
Bubo scandiacus	Snowy Owl	Strigidae	3	0	0	1992	S3N,SUM	SNA	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017439
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1993	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017459
Chroicocephalus ridibundu	Black-headed Gull	Laridae	23	0	0	1993	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017460
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	44	0	0	1993	S4	S4B,S5N	I4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017472
Somateria spectabilis	King Eider	Anatidae	1	0	0	1993	S2N,SUM	S3N	UB,NUN,N	G5	Undetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1017484
Larus fuscus	Lesser Black-backed Gu	Laridae	0	0	0	1993	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017485
Aythya affinis	Lesser Scaup	Anatidae	2	0	0	1993	S3N,SUM	S2N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017486
Anas platyrhynchos	Mallard	Anatidae	64	0	0	1993	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017488
Zenaida macroura	Mourning Dove	Columbidae	17	0	0	1993	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017489
Accipiter gentilis	Northern Goshawk	Accipitridae	10	0	0	1993	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017491
Circus cyaneus	Northern Harrier	Accipitridae	1	0	0	1993	S3B,SUM	S3?B	N5B,N4N	G5	Secure				10	Christmas Bird Count	mstr1017492
Anas acuta	Northern Pintail	Anatidae	39	0	0	1993	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017493
Calidris maritima	Purple Sandpiper	Scolopacida	22	0	0	1993	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017499
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	0	0	0	1993	S1B,SUM	S1S2B	45B,N5N,N	G5	Sensitive				10	Christmas Bird Count	mstr1017501
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1993	S2S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017504
Plectrophenax nivalis	Snow Bunting	Emberizidae	1	0	0	1993	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017508
Bubo scandiacus	Snowy Owl	Strigidae	0	0	0	1993	S3N,SUM	SNA	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017509
Anthus rubescens	American Pipit	Motacillidae	1	0	0	1994	S3B, S4M	S3B,S5M	45B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1017522
Anas americana	American Wigeon	Anatidae	2	0	0	1994	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine				10	Christmas Bird Count	mstr1017524
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	1	0	0	1994	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017527
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1994	S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017535
Dendroica tigrina	Cape May Warbler	Parulidae	1	0	0	1994	S2B,SUM	S2B	N5B,N5M	G5	Secure				10	Christmas Bird Count	mstr1017537
Chroicocephalus ridibundu	Black-headed Gull	Laridae	9	0	0	1994	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017539
Acanthis flammea	Common Redpoll	Fringillidae	8	0	0	1994	i2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017542
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	481	0	0	1994	S4	S4B,S5N	I4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017548
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1994	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017556
Aythya affinis	Lesser Scaup	Anatidae	2	0	0	1994	S3N,SUM	S2N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017557
Anas platyrhynchos	Mallard	Anatidae	161	0	0	1994	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017558
Zenaida macroura	Mourning Dove	Columbidae	6	0	0	1994	S3	S2B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017559
Accipiter gentilis	Northern Goshawk	Accipitridae	8	0	0	1994	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017561
Anas acuta	Northern Pintail	Anatidae	59	0	0	1994	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017562
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1994	S3N,SUM	S3N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017563
Calidris maritima	Purple Sandpiper	Scolopacida	33	0	0	1994	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017571
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1994	S2S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017575
Plectrophenax nivalis	Snow Bunting	Emberizidae	1	0	0	1994	S5M,S2N	S5N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017579
Anas americana	American Wigeon	Anatidae	1	0	0	1995	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine				10	Christmas Bird Count	mstr1017593
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	1	0	0	1995	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1017594
Chroicocephalus ridibundu	Black-headed Gull	Laridae	14	0	0	1995	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1017602
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	1	0	0	1995	S4	S4B,S5N	I4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1017613
Pagophila eburnea	Ivory Gull	Laridae	2	0	0	1995	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	10	Christmas Bird Count	mstr1017621
Larus fuscus	Lesser Black-backed Gu	Laridae	3	0	0	1995	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017622
Anas platyrhynchos	Mallard	Anatidae	141	0	0	1995	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017623
Accipiter gentilis	Northern Goshawk	Accipitridae	8	0	0	1995	S3	S3B	44B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1017625
Circus cyaneus	Northern Harrier	Accipitridae	0	0	0	1995	S3B,SUM	S3?B	N5B,N4N	G5	Secure				10	Christmas Bird Count	mstr1017626
Anas acuta	Northern Pintail	Anatidae	143	0	0	1995	S3B,SUM	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017627
Lanius excubitor	Northern Shrike	Laniidae	3	0	0	1995	S3N,SUM	S3N	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017628
Calidris maritima	Purple Sandpiper	Scolopacida	24	0	0	1995	S3N,SUM	S3N	I3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1017634
Buteo lagopus	Rough-legged Hawk	Accipitridae	0	0	0	1995	S2S3	S3B	45B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1017638
Aythya fuligula	Tufted Duck	Anatidae	3	0	0	1995	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1017645

Spizella arborea	American Tree Sparrow	Emberizidae	1	0	0	1996	S3B,SUM	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017656
Anas americana	American Wigeon	Anatidae	1	0	0	1996	S3B,SUM	S3B	45B,N5N,N	G5	Undetermined					10	Christmas Bird Count	mstr1017657
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	0	0	0	1996	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low				10	Christmas Bird Count	mstr1017659
Spizella passerina	Chipping Sparrow	Emberizidae	1	0	0	1996	S2S3B,SUM	S2B	N5B,N5M	G5	Secure					10	Christmas Bird Count	mstr1017667
Chroicocephalus ridibundu	Black-headed Gull	Laridae	63	0	0	1996	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive					10	Christmas Bird Count	mstr1017668
Acanthis flammea	Common Redpoll	Fringillidae	26	0	0	1996	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017673
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	61	0	0	1996	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern				10	Christmas Bird Count	mstr1017681
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1996	S3N,SUM	S3N	4UN,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017692
Aythya affinis	Lesser Scaup	Anatidae	1	0	0	1996	S3N,SUM	S2N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017693
Anas platyrhynchos	Mallard	Anatidae	174	0	0	1996	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017695
Zenaida macroura	Mourning Dove	Columbidae	38	0	0	1996	S3	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017697
Accipiter gentilis	Northern Goshawk	Accipitridae	15	0	0	1996	S3	S3B	44B,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017699
Anas acuta	Northern Pintail	Anatidae	120	0	0	1996	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017700
Lanius excubitor	Northern Shrike	Laniidae	4	0	0	1996	S3N,SUM	S3N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017701
Calidris maritima	Purple Sandpiper	Scolopacida	14	0	0	1996	S3N,SUM	S3N	43N4B,N3N	G5	Secure					10	Christmas Bird Count	mstr1017706
Anas americana	American Wigeon	Anatidae	0	0	0	1997	S3B,SUM	S3B	45B,N5N,N	G5	Undetermined					10	Christmas Bird Count	mstr1017722
Certhia americana	Brown Creeper	Certhiidae	1	0	0	1997	S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017730
Chroicocephalus ridibundu	Black-headed Gull	Laridae	90	0	0	1997	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive					10	Christmas Bird Count	mstr1017733
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	15	0	0	1997	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern				10	Christmas Bird Count	mstr1017743
Larus fuscus	Lesser Black-backed Gu	Laridae	4	0	0	1997	S3N,SUM	S3N	4UN,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017752
Aythya affinis	Lesser Scaup	Anatidae	1	0	0	1997	S3N,SUM	S2N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017753
Anas platyrhynchos	Mallard	Anatidae	230	0	0	1997	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017754
Zenaida macroura	Mourning Dove	Columbidae	0	0	0	1997	S3	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017757
Accipiter gentilis	Northern Goshawk	Accipitridae	13	0	0	1997	S3	S3B	44B,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017759
Anas acuta	Northern Pintail	Anatidae	202	0	0	1997	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017760
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1997	S3N,SUM	S3N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017761
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	1997	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		10	Christmas Bird Count	mstr1017762
Alca torda	Razorbill	Alcidae	1	0	0	1997	S3B,S3M	S3B	45B,N4N,N	G5	Secure					10	Christmas Bird Count	mstr1017766
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1997	S2S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017771
Plectrophenax nivalis	Snow Bunting	Emberizidae	1	0	0	1997	S5M,S2N	S5N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017776
Bubo scandiacus	Snowy Owl	Strigidae	4	0	0	1997	S3N,SUM	SNA	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017778
Aythya fuligula	Tufted Duck	Anatidae	1	0	0	1997	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					10	Christmas Bird Count	mstr1017781
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	5	0	0	1998	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low				10	Christmas Bird Count	mstr1017792
Certhia americana	Brown Creeper	Certhiidae	2	0	0	1998	S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017800
Chroicocephalus ridibundu	Black-headed Gull	Laridae	64	0	0	1998	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive					10	Christmas Bird Count	mstr1017803
Acanthis flammea	Common Redpoll	Fringillidae	0	0	0	1998	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017807
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	213	0	0	1998	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern				10	Christmas Bird Count	mstr1017816
Ardea herodias	Great Blue Heron	Ardeidae	0	0	0	1998	S2B,SUM	S2B	45B,N3N,N	G5	Secure					10	Christmas Bird Count	mstr1017820
Charadrius vociferus	Killdeer	Charadriidae	1	0	0	1998	S3B,SUM	S2B	45B,N4N5N	G5	Sensitive	ndidate (Low Prior				10	Christmas Bird Count	mstr1017826
Larus fuscus	Lesser Black-backed Gu	Laridae	1	0	0	1998	S3N,SUM	S3N	4UN,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017827
Aythya affinis	Lesser Scaup	Anatidae	0	0	0	1998	S3N,SUM	S2N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017828
Anas platyrhynchos	Mallard	Anatidae	299	0	0	1998	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017830
Zenaida macroura	Mourning Dove	Columbidae	15	0	0	1998	S3	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017831
Accipiter gentilis	Northern Goshawk	Accipitridae	9	0	0	1998	S3	S3B	44B,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017833
Anas acuta	Northern Pintail	Anatidae	283	0	0	1998	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017834
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	1998	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		10	Christmas Bird Count	mstr1017837
Podilymbus podiceps	Pied-billed Grebe	Podicipedida	1	0	0	1998	S1B,SUM	S1B	45B,N4N5N	G5	Undetermined					10	Christmas Bird Count	mstr1017838
Alca torda	Razorbill	Alcidae	1	0	0	1998	S3B,S3M	S3B	45B,N4N,N	G5	Secure					10	Christmas Bird Count	mstr1017842
Aythya fuligula	Tufted Duck	Anatidae	2	0	0	1998	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					10	Christmas Bird Count	mstr1017852
Anas americana	American Wigeon	Anatidae	2	0	0	1999	S3B,SUM	S3B	45B,N5N,N	G5	Undetermined					10	Christmas Bird Count	mstr1017864
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	3	0	0	1999	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low				10	Christmas Bird Count	mstr1017867
Melanitta nigra	Black Scoter	Anatidae	1	0	0	1999	S2B,S2N,SUM	2B,S3M,S1	N4B,N4N	G5	Secure					10	Christmas Bird Count	mstr1017869
Chroicocephalus ridibundu	Black-headed Gull	Laridae	77	0	0	1999	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive					10	Christmas Bird Count	mstr1017872
Certhia americana	Brown Creeper	Certhiidae	2	0	0	1999	S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017876
Bucephala albeola	Bufflehead	Anatidae	1	0	0	1999	S2N,SUM	S1S2N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017877
Quiscalus quiscula	Common Grackle	Icteridae	0	0	0	1999	55B,S3?N, SUM	S5B	45B,NUN,N	G5	Secure					10	Christmas Bird Count	mstr1017880
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	13	0	0	1999	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern				10	Christmas Bird Count	mstr1017891
Phalacrocorax carbo	Great Cormorant	Phalacrocor	9	0	0	1999	S3B,S3M,S3N	S3B	43N4B,N3N	G5	Sensitive					10	Christmas Bird Count	mstr1017896
Larus fuscus	Lesser Black-backed Gu	Laridae	2	0	0	1999	S3N,SUM	S3N	4UN,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017902
Anas platyrhynchos	Mallard	Anatidae	240	0	0	1999	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017904
Zenaida macroura	Mourning Dove	Columbidae	14	0	0	1999	S3	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017906
Accipiter gentilis	Northern Goshawk	Accipitridae	5	0	0	1999	S3	S3B	44B,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017908
Circus cyaneus	Northern Harrier	Accipitridae	1	0	0	1999	S3B,SUM	S3?B	N5B,N4N	G5	Secure					10	Christmas Bird Count	mstr1017909
Anas acuta	Northern Pintail	Anatidae	249	0	0	1999	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017910
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	1999	S3N,SUM	S3N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017911
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	1999	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		10	Christmas Bird Count	mstr1017913
Buteo lagopus	Rough-legged Hawk	Accipitridae	1	0	0	1999	S2S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017919
Aythya fuligula	Tufted Duck	Anatidae	1	0	0	1999	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					10	Christmas Bird Count	mstr1017926
Anas americana	American Wigeon	Anatidae	2	0	0	2000	S3B,SUM	S3B	45B,N5N,N	G5	Undetermined					10	Christmas Bird Count	mstr1017937
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	7	0	0	2000	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low				10	Christmas Bird Count	mstr1017940
Melanitta nigra	Black Scoter	Anatidae	2	0	0	2000	S2B,S2N,SUM	2B,S3M,S1	N4B,N4N	G5	Secure					10	Christmas Bird Count	mstr1017942
Chroicocephalus ridibundu	Black-headed Gull	Laridae	56	0	0	2000	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive					10	Christmas Bird Count	mstr1017945
Certhia americana	Brown Creeper	Certhiidae	4	0	0	2000	S3	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017950
Acanthis flammea	Common Redpoll	Fringillidae	115	0	0	2000	2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017957
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	208	0	0	2000	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern				10	Christmas Bird Count	mstr1017967
Pagophila eburnea	Ivory Gull	Laridae	1	0	0	2000	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		10	Christmas Bird Count	mstr1017975
Larus fuscus	Lesser Black-backed Gu	Laridae	6	0	0	2000	S3N,SUM	S3N	4UN,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017976
Aythya affinis	Lesser Scaup	Anatidae	1	0	0	2000	S3N,SUM	S2N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017977
Anas platyrhynchos	Mallard	Anatidae	440	0	0	2000	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017978
Zenaida macroura	Mourning Dove	Columbidae	31	0	0	2000	S3	S2B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017981
Accipiter gentilis	Northern Goshawk	Accipitridae	3	0	0	2000	S3	S3B	44B,N4N5N	G5	Secure					10	Christmas Bird Count	mstr1017983
Anas acuta	Northern Pintail	Anatidae	318	0	0	2000	S3B,SUM	S3B	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017985
Lanius excubitor	Northern Shrike	Laniidae	2	0	0	2000	S3N,SUM	S3N	45B,N5N,N	G5	Secure					10	Christmas Bird Count	mstr1017987
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		10	Christmas Bird Count	mstr1017989
Calidris maritima	Purple Sandpiper	Scolopacida	65	0	0	2000	S3N,SUM	S3N	43N4B,N3N	G5	Secure					10	Christmas Bird Count	mstr1017993
Loxia curvirostra	Red Crossbill	Fringillidae	0	0	0	2000	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		10	Christmas Bird Count	mstr1017994
Aythya fuligula	Tufted Duck	Anatidae	6	0	0	2000	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					10	Christmas Bird Count	mstr1018007

Troglodytes troglodytes	Winter Wren	Troglodytida	1	0	0	2000	S3B,SUM	S3S4B	N5B	G5	Secure				10	Christmas Bird Count	mstr1018012
Anthus rubescens	American Pipit	Motacillidae	0	0	0	2001	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1018021
Anas americana	American Wigeon	Anatidae	4	0	0	2001	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1018023
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	10	0	0	2001	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1018025
Chroicocephalus ridibundu	Black-headed Gull	Laridae	65	0	0	2001	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1018028
Certhia americana	Brown Creeper	Certhiidae	1	0	0	2001	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018034
Bucephala albeola	Bufflehead	Anatidae	1	0	0	2001	S2N,SUM	S1S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018035
Acanthis flammea	Common Redpoll	Fringillidae	1	0	0	2001	i2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018041
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	193	0	0	2001	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1018052
Ardea herodias	Great Blue Heron	Ardeidae	0	0	0	2001	S2B,SUM	S2B	5B,N3N,N	G5	Secure				10	Christmas Bird Count	mstr1018056
Phalacrocorax carbo	Great Cormorant	Phalacrocor	2	0	0	2001	S3B,S3M,S3N	S3B	3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1018057
Somateria spectabilis	King Eider	Anatidae	0	0	0	2001	S2N,SUM	S3N	UB,NUN,N	G5	Jndetermine	ate (Group 3, Low			10	Christmas Bird Count	mstr1018063
Larus fuscus	Lesser Black-backed Gu	Laridae	4	0	0	2001	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018064
Aythya affinis	Lesser Scaup	Anatidae	1	0	0	2001	S3N,SUM	S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018065
Anas platyrhynchos	Mallard	Anatidae	419	0	0	2001	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018068
Zenaida macroura	Mourning Dove	Columbidae	6	0	0	2001	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018071
Accipiter gentilis	Northern Goshawk	Accipitridae	2	0	0	2001	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018073
Anas acuta	Northern Pintail	Anatidae	243	0	0	2001	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018074
Lanius excubitor	Northern Shrike	Laniidae	3	0	0	2001	S3N,SUM	S3N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018075
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	10	Christmas Bird Count	mstr1018076
Calidris maritima	Purple Sandpiper	Scolopacida	40	0	0	2001	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1018080
Alca torda	Razorbill	Alcidae	1	0	0	2001	S3B,S3M	S3B	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1018081
Aythya fuligula	Tufted Duck	Anatidae	7	0	0	2001	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1018092
Anthus rubescens	American Pipit	Motacillidae	1	0	0	2002	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1018102
Anas americana	American Wigeon	Anatidae	2	0	0	2002	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1018104
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	3	0	0	2002	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1018106
Chroicocephalus ridibundu	Black-headed Gull	Laridae	17	0	0	2002	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1018110
Certhia americana	Brown Creeper	Certhiidae	3	0	0	2002	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018116
Quiscalus quiscula	Common Grackle	Icteridae	1	0	0	2002	S5B,S3?N, SUI	S5B	5B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1018120
Acanthis flammea	Common Redpoll	Fringillidae	14	0	0	2002	i2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018123
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	173	0	0	2002	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1018128
Phalacrocorax carbo	Great Cormorant	Phalacrocor	0	0	0	2002	S3B,S3M,S3N	S3B	3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1018133
Larus fuscus	Lesser Black-backed Gu	Laridae	4	0	0	2002	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018141
Aythya affinis	Lesser Scaup	Anatidae	2	0	0	2002	S3N,SUM	S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018142
Anas platyrhynchos	Mallard	Anatidae	415	0	0	2002	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018145
Zenaida macroura	Mourning Dove	Columbidae	59	0	0	2002	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018147
Accipiter gentilis	Northern Goshawk	Accipitridae	1	0	0	2002	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018149
Anas acuta	Northern Pintail	Anatidae	295	0	0	2002	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018151
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	0	0	0	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	10	Christmas Bird Count	mstr1018152
Calidris maritima	Purple Sandpiper	Scolopacida	12	0	0	2002	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1018156
Aythya fuligula	Tufted Duck	Anatidae	11	0	0	2002	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1018165
Anthus rubescens	American Pipit	Motacillidae	1	0	0	2003	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1018175
Anas americana	American Wigeon	Anatidae	8	0	0	2003	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1018177
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	2003	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1018179
Chroicocephalus ridibundu	Black-headed Gull	Laridae	42	0	0	2003	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1018182
Quiscalus quiscula	Common Grackle	Icteridae	1	0	0	2003	S5B,S3?N, SUI	S5B	5B,NUN,N	G5	Secure				10	Christmas Bird Count	mstr1018188
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	34	0	0	2003	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1018196
Phalacrocorax carbo	Great Cormorant	Phalacrocor	6	0	0	2003	S3B,S3M,S3N	S3B	3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1018201
Larus fuscus	Lesser Black-backed Gu	Laridae	4	0	0	2003	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018208
Aythya affinis	Lesser Scaup	Anatidae	3	0	0	2003	S3N,SUM	S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018209
Anas platyrhynchos	Mallard	Anatidae	422	0	0	2003	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018212
Zenaida macroura	Mourning Dove	Columbidae	2	0	0	2003	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018213
Accipiter gentilis	Northern Goshawk	Accipitridae	3	0	0	2003	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018215
Anas acuta	Northern Pintail	Anatidae	188	0	0	2003	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018216
Calidris maritima	Purple Sandpiper	Scolopacida	45	0	0	2003	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1018220
Asio flammeus	Short-eared Owl	Strigidae	1	0	0	2003	S3B,SUM	S3B	4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	10	Christmas Bird Count	mstr1018227
Aythya fuligula	Tufted Duck	Anatidae	10	0	0	2003	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1018230
Anas americana	American Wigeon	Anatidae	10	0	0	2004	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1018242
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	2004	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1018244
Chroicocephalus ridibundu	Black-headed Gull	Laridae	108	0	0	2004	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1018248
Certhia americana	Brown Creeper	Certhiidae	2	0	0	2004	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018252
Acanthis flammea	Common Redpoll	Fringillidae	12	0	0	2004	i2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018258
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	180	0	0	2004	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1018266
Phalacrocorax carbo	Great Cormorant	Phalacrocor	9	0	0	2004	S3B,S3M,S3N	S3B	3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1018272
Larus fuscus	Lesser Black-backed Gu	Laridae	10	0	0	2004	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018279
Aythya affinis	Lesser Scaup	Anatidae	4	0	0	2004	S3N,SUM	S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018280
Anas platyrhynchos	Mallard	Anatidae	434	0	0	2004	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018283
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	2004	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018286
Accipiter gentilis	Northern Goshawk	Accipitridae	7	0	0	2004	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018288
Anas acuta	Northern Pintail	Anatidae	346	0	0	2004	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018289
Lanius excubitor	Northern Shrike	Laniidae	1	0	0	2004	S3N,SUM	S3N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018290
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	1	0	0	2004	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	10	Christmas Bird Count	mstr1018293
Calidris maritima	Purple Sandpiper	Scolopacida	47	0	0	2004	S3N,SUM	S3N	3N4B,N3N	G5	Secure				10	Christmas Bird Count	mstr1018297
Aythya fuligula	Tufted Duck	Anatidae	7	0	0	2004	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				10	Christmas Bird Count	mstr1018307
Anthus rubescens	American Pipit	Motacillidae	0	0	0	2005	S3B, S4M	S3B,S5M	5B,N4N,N	G5	Secure				10	Christmas Bird Count	mstr1018319
Anas americana	American Wigeon	Anatidae	10	0	0	2005	S3B,SUM	S3B	5B,N5N,N	G5	Jndetermine				10	Christmas Bird Count	mstr1018321
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	2	0	0	2005	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low			10	Christmas Bird Count	mstr1018323
Chroicocephalus ridibundu	Black-headed Gull	Laridae	108	0	0	2005	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive				10	Christmas Bird Count	mstr1018327
Certhia americana	Brown Creeper	Certhiidae	2	0	0	2005	S3	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018333
Acanthis flammea	Common Redpoll	Fringillidae	12	0	0	2005	i2S3B, S4N,SUI	S5	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018339
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	180	0	0	2005	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern			10	Christmas Bird Count	mstr1018347
Phalacrocorax carbo	Great Cormorant	Phalacrocor	9	0	0	2005	S3B,S3M,S3N	S3B	3N4B,N3N	G5	Sensitive				10	Christmas Bird Count	mstr1018353
Larus fuscus	Lesser Black-backed Gu	Laridae	10	0	0	2005	S3N,SUM	S3N	4UN,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018360
Aythya affinis	Lesser Scaup	Anatidae	4	0	0	2005	S3N,SUM	S2N	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018361
Anas platyrhynchos	Mallard	Anatidae	434	0	0	2005	S3B,SUM	S3B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018364
Zenaida macroura	Mourning Dove	Columbidae	1	0	0	2005	S3	S2B	5B,N5N,N	G5	Secure				10	Christmas Bird Count	mstr1018367
Accipiter gentilis	Northern Goshawk	Accipitridae	7	0	0	2005	S3	S3B	4B,N4N5N	G5	Secure				10	Christmas Bird Count	mstr1018369

Anas acuta	Northern Pintail	Anatidae		346	0	0	2005	S3B,SUM	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018370
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae		1	0	0	2005	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t					10	Christmas Bird Count	mstr1018372
Calidris maritima	Purple Sandpiper	Scolopacida		47	0	0	2005	S3N,SUM	S3N	I3N4B,N3N	G5	Secure								10	Christmas Bird Count	mstr1018376
Calidris alba	Sanderling	Scolopacida		0	0	0	2005	S3M	S4N	43B,N4N5N	G5	Secure								10	Christmas Bird Count	mstr1018383
Plectrophenax nivalis	Snow Bunting	Emberizidae		0	0	0	2005	S5M,S2N	S5N	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018386
Aythya fuligula	Tufted Duck	Anatidae		7	0	0	2005	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide								10	Christmas Bird Count	mstr1018390
Anas americana	American Wigeon	Anatidae		4	0	0	2006	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine								10	Christmas Bird Count	mstr1018405
Megaceryle alcyon	Belted Kingfisher	Alcedinidae		2	0	0	2006	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low							10	Christmas Bird Count	mstr1018408
Chroicocephalus ridibundu	Black-headed Gull	Laridae		185	0	0	2006	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive								10	Christmas Bird Count	mstr1018412
Certhia americana	Brown Creeper	Certhiidae		2	0	0	2006	S3	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018417
Acanthis flammea	Common Redpoll	Fringillidae		1	0	0	2006	S2S3B, S4N,SUI	S5	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018422
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		92	0	0	2006	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern							10	Christmas Bird Count	mstr1018430
Phalacrocorax carbo	Great Cormorant	Phalacrocor		43	0	0	2006	S3B,S3M,S3N	S3B	I3N4B,N3N	G5	Sensitive								10	Christmas Bird Count	mstr1018435
Charadrius vociferus	Killdeer	Charadriidae		1	0	0	2006	S3B,SUM	S2B	45B,N4N5N	G5	Sensitive	ndidate (Low Prior							10	Christmas Bird Count	mstr1018443
Larus fuscus	Lesser Black-backed Gu	Laridae		10	0	0	2006	S3N,SUM	S3N	4UN,N4N5M	G5	Secure								10	Christmas Bird Count	mstr1018444
Aythya affinis	Lesser Scaup	Anatidae		4	0	0	2006	S3N,SUM	S2N	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018445
Anas platyrhynchos	Mallard	Anatidae		289	0	0	2006	S3B,SUM	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018447
Zenaida macroura	Mourning Dove	Columbidae		1	0	0	2006	S3	S2B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018449
Accipiter gentilis	Northern Goshawk	Accipitridae		3	0	0	2006	S3	S3B	44B,N4N5N	G5	Secure								10	Christmas Bird Count	mstr1018451
Anas acuta	Northern Pintail	Anatidae		252	0	0	2006	S3B,SUM	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018452
Calidris maritima	Purple Sandpiper	Scolopacida		6	0	0	2006	S3N,SUM	S3N	I3N4B,N3N	G5	Secure								10	Christmas Bird Count	mstr1018457
Alca torda	Razorbill	Alcidae		1	0	0	2006	S3B,S3M	S3B	45B,N4N,N	G5	Secure								10	Christmas Bird Count	mstr1018458
Aythya fuligula	Tufted Duck	Anatidae		9	0	0	2006	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide								10	Christmas Bird Count	mstr1018468
Anas americana	American Wigeon	Anatidae		3	0	0	2007	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine								10	Christmas Bird Count	mstr1018481
Megaceryle alcyon	Belted Kingfisher	Alcedinidae		2	0	0	2007	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low							10	Christmas Bird Count	mstr1018485
Chroicocephalus ridibundu	Black-headed Gull	Laridae		50	0	0	2007	S1B, S3N,SUM	S1B,S3N	43B,N3N4N	G5	Sensitive								10	Christmas Bird Count	mstr1018488
Anas discors	Blue-winged Teal	Anatidae		1	0	0	2007	SUB, S1M	S2B	N5B,N5M	G5	Sensitive								10	Christmas Bird Count	mstr1018490
Bucephala albeola	Bufflehead	Anatidae		1	0	0	2007	S2N,SUM	S1S2N	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018493
Coccothraustes vespertin	Evening Grosbeak	Fringillidae		42	0	0	2007	S4	S4B,S5N	44B,N4N,NI	G5	Secure	Special Concern							10	Christmas Bird Count	mstr1018503
Phalacrocorax carbo	Great Cormorant	Phalacrocor		18	0	0	2007	S3B,S3M,S3N	S3B	I3N4B,N3N	G5	Sensitive								10	Christmas Bird Count	mstr1018508
Falco rusticolus	Gyrfalcon	Falconidae		1	0	0	2007	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure								10	Christmas Bird Count	mstr1018511
Larus fuscus	Lesser Black-backed Gu	Laridae		7	0	0	2007	S3N,SUM	S3N	4UN,N4N5M	G5	Secure								10	Christmas Bird Count	mstr1018517
Aythya affinis	Lesser Scaup	Anatidae		2	0	0	2007	S3N,SUM	S2N	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018518
Anas platyrhynchos	Mallard	Anatidae		387	0	0	2007	S3B,SUM	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018520
Zenaida macroura	Mourning Dove	Columbidae		2	0	0	2007	S3	S2B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018523
Accipiter gentilis	Northern Goshawk	Accipitridae		2	0	0	2007	S3	S3B	44B,N4N5N	G5	Secure								10	Christmas Bird Count	mstr1018525
Anas acuta	Northern Pintail	Anatidae		212	0	0	2007	S3B,SUM	S3B	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018526
Lanius excubitor	Northern Shrike	Laniidae		2	0	0	2007	S3N,SUM	S3N	45B,N5N,N	G5	Secure								10	Christmas Bird Count	mstr1018527
Calidris maritima	Purple Sandpiper	Scolopacida		65	0	0	2007	S3N,SUM	S3N	I3N4B,N3N	G5	Secure								10	Christmas Bird Count	mstr1018531
Loxia curvirostra	Red Crossbill	Fringillidae		10	0	0	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered					10	Christmas Bird Count	mstr1018532
Agelaius phoeniceus	Red-winged Blackbird	Icteridae		1	0	0	2007	S1B,SUM	S1S2B	45B,N5N,N	G5	Sensitive								10	Christmas Bird Count	mstr1018534
Aythya fuligula	Tufted Duck	Anatidae		10	0	0	2007	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide								10	Christmas Bird Count	mstr1018541
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	20	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's Harbour		100	NF.Birds	mstr1006898
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	3	9	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	River outflow		Rennies River Outflow		10	NF.Birds	mstr1006817
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	12	11	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	urban lake				100	Canadian Wildlife Service	mstr1009469
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Paul Lingear	1	10	2	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's		10000	The Osprey	mstr1007003
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Vars. Obs.	1	0	0	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's		10000	The Osprey	mstr1007005
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Jytte Selno	1	3	2	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's		10000	NF.Birds	mstr1007007
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	12	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's		10000	The Osprey	mstr1007008
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Vars. Obs.	1	12	26	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			St. John's		10000	The Osprey	mstr1007010
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Jared Clarke	1	1	26	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	urban lake				1000	Canadian Wildlife Service	mstr1009471
Chordeiles minor	Common Nighthawk	Caprimulgid	Todd Boland	0	6	2	1998	SNA	SNA	N4B,N3M	G5	May be at ris	Special Concern	Threatened	Threatened	Lake				100	Canadian Wildlife Service	mstr1009369
Chaetura pelagica	Chimney Swift	Apodidae	Todd Boland	1	5	31	1998	SNR	SNR	N4B,N3M	G4G5	grant/ Accide	Threatened	Threatened	Threatened	Lake				1000	Canadian Wildlife Service	mstr1009339
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	1	5	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			Quidi Vidi Lake		100	NF.Birds	mstr1006863
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Doug Phelan	1	1	7	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			Quidi Vidi Lake		100	NF.Birds	mstr1006896
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dwayne Sabine	1	1	13	2004	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t			Virginia River Trail		1000	Canadian Wildlife Service	mstr1006979
Asio flammeus	Short-eared Owl	Strigidae	John Wells	1	1	7	2008	S3B,SUM	S3B	44B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	scrub				100	Canadian Wildlife Service	mstr1009456
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	10	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	freshwater lake				1000	Canadian Wildlife Service	mstr1009239
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	8	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	freshwater lake				1000	Canadian Wildlife Service	mstr1009240
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	22	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	freshwater lake				1000	Canadian Wildlife Service	mstr1009242
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	14	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	freshwater lake				1000	Canadian Wildlife Service	mstr1009244
Pagophila eburnea	Ivory Gull	Laridae		1	1	16	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi;		1000	NF.Birds	mstr1006590
Pagophila eburnea	Ivory Gull	Laridae		1	1	15	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			of Virginia River; Quidi Vidi Lake; St		1000	NF.Birds	mstr1006591
Pagophila eburnea	Ivory Gull	Laridae		1	1	12	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi ;		1000	NF.Birds	mstr1006592
Pagophila eburnea	Ivory Gull	Laridae		1	1	0	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Gut		1000	NF.Birds	mstr1006593
Pagophila eburnea	Ivory Gull	Laridae		1	2	2	2002	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Gut;		1000	NF.Birds	mstr1006594
Pagophila eburnea	Ivory Gull	Laridae		1	2	5	2002	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Gut;		1000	NF.Birds	mstr1006595
Pagophila eburnea	Ivory Gull	Laridae		1	2	5	2002	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Gut;		1000	NF.Birds	mstr1006596
Pagophila eburnea	Ivory Gull	Laridae		1	1	0	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Lake		1000	NF.Birds	mstr1006597
Pagophila eburnea	Ivory Gull	Laridae		1	1	12	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Lake; St. John's		1000	NF.Birds	mstr1006598
Pagophila eburnea	Ivory Gull	Laridae		1	1	30	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered			Quidi Vidi Lake; St. John's		1000	NF.Birds	mstr1006599
Euphagus carolinus	Rusty Blackbird	Icteridae	Jared Clarke	1	4	27	2003	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern			Lundrigan's Marsh		100	NF.Birds	mstr1007570
Euphagus carolinus	Rusty Blackbird	Icteridae	Ken Knowles	1	5	19	2002	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern			Lundrigan's Marsh		100	NF.Birds	mstr1007572
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	11	27	1977	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern			St John's Narrows		1000	Montevecchi list	mstr1005033
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	11	27	1988	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern			St John's Narrows; Chain Rock		1000	The Osprey	mstr1005034
Histrionicus histrionicus	Harlequin Duck	Anatidae		1	5	21	1988	S3B, S2N,SUM	S3B,S2N	44B,N3N,N	G4	Secure	Special Concern	Vulnerable	Special Concern			Cape Spear QV Lake		1000	The Osprey	mstr1006208
Chordeiles minor	Common Nighthawk	Caprimulgid	Dave Brown	1	9	24	2002	SNA	SNA	N4B,N3M	G5	May be at ris	Special Concern	Threatened	Threatened					100	Canadian Wildlife Service	mstr1009366
Loxia curvirostra	Red Crossbill	Fringillidae		1	8	13	2004	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered			East End; St. John's		100	NF.Birds	mstr1007438
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	4	2011	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	west end of Quid		Quidi Vidi Lake, West End		10	Bruce Mactavish, NF.birds,	mstr1021740
Asio flammeus	Short-eared Owl	Strigidae	Todd Boland	1	2	25	2004	S3B,SUM	S3B	44B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern					1000	Wildlife Division SEOW Sigh	mstr1021994
Chaetura pelagica	Chimney Swift	Apodidae	Anne Hughes, Toc	1	5	10	2009	SNR	SNR	N4B,N3M	G4G5	grant/ Accide	Threatened	Threatened	Threatened			Quidi Vidi Lake		1000	NF.Birds	mstr1022070
Hirundo rustica	Barn Swallow	Hirundinidae	gryan@mail.gov.n	5	6	3	2006	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					North East		1000	Nf.Birds, Data Entry by WD	mstr1027810
Hirundo rustica	Barn Swallow	Hirundinidae	Lisa Giroux	1	4	20	2012	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					Bowring Park Duck Pond		1000	Nf.Birds, Data Entry by WD	mstr1027834
Hirundo rustica	Barn Swallow	Hirundinidae	Jared Clarke	1	6	11	2003	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					Long Pond		1000	Nf.Birds, Data Entry by WD	mstr1028002
Hirundo rustica	Barn Swallow	Hirundinidae	Jared Clarke	1	5	31	2004	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					Long Pond		1000	Nf.Birds, Data Entry by WD	mstr1028005
Hirundo rustica	Barn Swallow	Hirundinidae	Anne Hughes	1	6	9	2008	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					Long Pond		1000	Nf.Birds, Data Entry by WD	mstr1028027
Hirundo rustica	Barn Swallow	Hirundinidae	Anne Hughes	1	5	10	2009	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened					Quidi Vidi Lake		1000	Nf.Birds, Data Entry by WD	mstr1028134

Hirundo rustica	Barn Swallow	Hirundinidae	Anne Hughes	1	5	22	2011	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Kent's Pond	1000	Nf,Birds, Data Entry by WD	mstr1028206
Hirundo rustica	Barn Swallow	Hirundinidae	Anne Hughes	1	6	15	2000	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Kenny's Pond	1000	Nf,Birds, Data Entry by WD	mstr1028210
Hirundo rustica	Barn Swallow	Hirundinidae	Bruce Mactavish &	1	6	3	2010	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			West End of Virginia Lake	1000	Nf,Birds, Data Entry by WD	mstr1028260
Hirundo rustica	Barn Swallow	Hirundinidae	Lesley Sweetapple	2	6	8	2010	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Virginia Lake	1000	Nf,Birds, Data Entry by WD	mstr1028262
Hirundo rustica	Barn Swallow	Hirundinidae	Bruce Mactavish	1	5	29	2011	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Lundrigan's Marsh, Virginia Lake	1000	Nf,Birds, Data Entry by WD	mstr1028343
Hirundo rustica	Barn Swallow	Hirundinidae	Jared Clarke	2	6	10	2003	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028815
Hirundo rustica	Barn Swallow	Hirundinidae	Todd Boland	3	5	28	2006	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened			Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028816
Ursus maritimus	Polar Bear	Ursidae	Ian Stirling	1	5	9	1993	SNA	SNA	N3	G3	Sensitive	Special Concern	Vulnerable	Special Concern		1000	DFO	mstr1033422
Somatochlora walshii	Brushed-tipped Emerald	Corduliidae	Larson D.J.		7	11	1978	S3S4	S4S5	N5	G5	Secure				"Long Pond, St. Johns"	1000	2DDragonflydata.xls	mstr1035058
Somatochlora walshii	Brushed-tipped Emerald	Corduliidae	Larson D.J.		7	23	1978	S3S4	S4S5	N5	G5	Secure				"Long Pond, St. Johns"	1000	2DDragonflydata.xls	mstr1035059
Ophiogomphus colubrinus	Boreal Snake Tail/ Club	Gomphidae	Larson D.J.		7	23	1978	S3	S3?	N5	G5	Undetermined				LongPond, St. Johns	1000	2DDragonflydata.xls	mstr1035087
Enallagma civile	Northern Bluet	Coenagrionid	Larson D.J.		6	22	1979	S2	S3S4	N5	G5	Undetermined				"Pippy Park, St. Johns"	1000	2DDragonflydata.xls	mstr1035112
Colias eurytheme	Orange Sulphur	Pieridae	Ross					S3	S3B	N5B,N5M	G5	Secure				St. Johns	1000	Ross Newfoundland Data..xl	mstr1040895
Callophrys augustinus	Brown Elfin	Lycaenidae	Ross					S3		N5	G5	Secure				St. Johns	1000	Ross Newfoundland Data..xl	mstr1041080
Callophrys augustinus	Brown Elfin	Lycaenidae	Ross					S3		N5	G5	Secure				Oxen Pond	1000	Ross Newfoundland Data..xl	mstr1041081
Danaus plexippus	Monarch	Nymphalidae	Ross					SNA	SNA	N3B,NNRM	G4	grant/ Accide	Special Concern		Special Concern	St. Johns	1000	Ross Newfoundland Data..xl	mstr1041941
Danaus plexippus	Monarch	Nymphalidae	Ross					SNA	SNA	N3B,NNRM	G4	grant/ Accide	Special Concern		Special Concern	en Pond Botanical Garden, St. Joh	1000	Ross Newfoundland Data..xl	mstr1041942
Catharus minimus	Gray-cheeked Thrush	Turdidae	R. Burrows	1	7	17	1988	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Oxen Pond, St. John's	1000	Gray-Cheeked Thrush, SSA	mstr1042098
Catharus minimus	Gray-cheeked Thrush	Turdidae	R. Burrows	1	5	28	1988	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Oxen Pond, St. John's	1000	Gray-Cheeked Thrush, SSA	mstr1042099
Catharus minimus	Gray-cheeked Thrush	Turdidae	R. Burrows	1	5	28	1989	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Oxen Pond, St. John's	1000	Gray-Cheeked Thrush, SSA	mstr1042100
Catharus minimus	Gray-cheeked Thrush	Turdidae	B. Mactavish, J. P		5	29	1988	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		St. JohnÃ†s	10000	Gray-Cheeked Thrush, SSA	mstr1042101
Catharus minimus	Gray-cheeked Thrush	Turdidae	B, S, Jackson	1	5	27	1980	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Long Pond	1000	Gray-Cheeked Thrush, SSA	mstr1042102
Catharus minimus	Gray-cheeked Thrush	Turdidae	R, Burrows	1	5	28	1988	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Long Pond	1000	Gray-Cheeked Thrush, SSA	mstr1042103
Catharus minimus	Gray-cheeked Thrush	Turdidae	R, Burrows	1	6	2	1990	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		Kents Pond, St. John's	1000	Gray-Cheeked Thrush, SSA	mstr1042104
Catharus minimus	Gray-cheeked Thrush	Turdidae	B Mactavish	2	5	25	1989	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened		White Hills, St. John's	1000	Gray-Cheeked Thrush, SSA	mstr1042106
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Gene Herzberg	1	5	17	2009	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Lundrigan's Marsh	1000	Nf,Birds, Data Entry by WD	mstr1028337
Euphagus carolinus	Rusty Blackbird	Icteridae	Harry B.	1	5	21	2002	S2S3B,SUM	S3B	I4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern	St. John's Area	1000	Nf,Birds, Data Entry by WD	mstr1027838
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	7	2009	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1027946
Circus cyaneus	Northern Harrier	Accipitridae	Jytte Selno	1	9	30	2001	S3B,SUM	S37B	N5B,N4N	G5	Secure				Cuckhold Cove Trail	1000	Nf,Birds, Data Entry by WD	mstr1028925
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Jytte Selno	1	5	29	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1028234
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	John Pratt	1	10	15	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1028235
Falco rusticolus	Gyrfalcon	Falconidae	David Shepherd	1	10	24	2006	S2S3N,SUM	S2S3N	I4N5B,N5N	G5	Secure				25 Anderson Avenue, St. John's	1000	Nf,Birds, Data Entry by WD	mstr1027881
Catharus minimus	Gray-Cheeked Thrush	Turdidae	Howard Clase	1	10	7	2002	S2B,SUM	S2S3B	N5B,N5M	G5	Secure	andidate (Mid Priori	Threatened			1000	Nf,Birds, Data Entry by WD	mstr1027917
Circus cyaneus	Northern Harrier	Accipitridae	Jared Clarke	1	1	4	2012	S3B,SUM	S37B	N5B,N4N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027829
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	12	26	1998	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1027839
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	1	24	1999	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027840
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	12	27	1999	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1027842
Pagophila eburnea	Ivory Gull	Laridae	Paul Linegar	1	12	28	1999	S1N,SUM	S2N	I1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027843
Loxia curvirostra	Red Crossbill	Fringillidae	Anne Hughes	2	3	18	2000	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027844
Accipiter gentilis	Northern Goshawk	Accipitridae	Dirk Hilbers	1	5	26	2003	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027851
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Libby Creelman	1	12	31	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1027854
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	1	11	2004	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027855
Falco rusticolus	Gyrfalcon	Falconidae	Paul Linegar	1	12	28	2004	S2S3N,SUM	S2S3N	I4N5B,N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027857
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	2	5	2006	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027860
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Paul Linegar	2	12	29	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf,Birds, Data Entry by WD	mstr1027869
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	2	10	24	2009	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027871
Falco sparverius	American Kestrel	Falconidae	Ken Knowles	1	10	5	2995	S2B,SUM	S2B	I5B,N1N,N	G5	Undetermine	ate (Group 3, Low				1000	Nf,Birds, Data Entry by WD	mstr1027873
Accipiter gentilis	Northern Goshawk	Accipitridae	Mark Maftei	1	3	22	2011	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027833
Pagophila eburnea	Ivory Gull	Laridae	Todd Boland	1	12	27	1999	S1N,SUM	S2N	I1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027790
Loxia curvirostra	Red Crossbill	Fringillidae	Anne Hughes	2	4	10	2000	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027791
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	5	2	2	2002	S1N,SUM	S2N	I1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027795
Asio flammeus	Short-eared Owl	Strigidae	Paul Linegar	1	12	27	2002	S3B,SUM	S3B	I4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern		1000	Nf,Birds, Data Entry by WD	mstr1027798
Aegolius acadicus	Northern Saw-Whet Owl	Strigidae	Neighbour of Paul	1	4	21	2003	S3?	S1?	I5B,N5N,N	G5	Undetermine					1000	Nf,Birds, Data Entry by WD	mstr1027800
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Paul Linegar	1	12	28	2004	S2S3	S3B	I5B,N5N,N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027805
Bubo scandiacus	Snowy Owl	Strigidae	Paul Linegar	1	12	28	2004	S3N,SUM	SNA	I5B,N5N,N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027806
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	10	12	27	2006	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027811
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	25	2	17	2008	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	ine and spruce t	1000	Nf,Birds, Data Entry by WD	mstr1027812
Accipiter gentilis	Northern Goshawk	Accipitridae	Paul Linegar	1	12	29	2008	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027817
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	-99	12	29	2008	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Nf,Birds, Data Entry by WD	mstr1027818
Accipiter gentilis	Northern Goshawk	Accipitridae	Paul Linegar	1	12	30	2011	S3	S3B	I4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027825
Circus cyaneus	Northern Harrier	Accipitridae	Paul Linegar	1	12	30	2011	S3B,SUM	S37B	N5B,N4N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027826
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Jared Clarke	-99	1	2	2012	S2S3	S3B	I5B,N5N,N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027827
Bubo scandiacus	Snowy Owl	Strigidae	golfman_otto@yai	1	12	5	2008	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				115 Forest Road	1000	Nf,Birds, Data Entry by WD	mstr1027971
Bubo scandiacus	Snowy Owl	Strigidae	Wayne Tucker	1	11	12	2001	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				23 Oakridge Drive	1000	Nf,Birds, Data Entry by WD	mstr1028258
Loxia curvirostra	Red Crossbill	Fringillidae	Dave Brown	2	3	30	2000	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	45 Smithville Crescent	1000	Nf,Birds, Data Entry by WD	mstr1027985
Loxia curvirostra	Red Crossbill	Fringillidae	Ian Jones	6	12	31	2008	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	50m West of Inco Innovation Centre	1000	Nf,Birds, Data Entry by WD	mstr1027922
Accipiter gentilis	Northern Goshawk	Accipitridae	John Wells	1	3	24	2003	S3	S3B	I4B,N4N5N	G5	Secure				Above Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028048
Bubo scandiacus	Snowy Owl	Strigidae	Anne Hughes	1	11	26	2001	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				Culture Centre near Memorial Univ	1000	Nf,Birds, Data Entry by WD	mstr1027965
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Chris Brown	1	1	3	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	all Field, North Side of Quidi Vidi Lal	1000	Nf,Birds, Data Entry by WD	mstr1028188
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	12	16	2007	S3	S3B	I4B,N4N5N	G5	Secure				Bally Hall Golf Course	1000	Nf,Birds, Data Entry by WD	mstr1028231
Bubo scandiacus	Snowy Owl	Strigidae	John Pratt	1	11	11	2001	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				Bally Hally Estates Area	1000	Nf,Birds, Data Entry by WD	mstr1028199
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	15	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Bally Hally Golf Course	1000	Nf,Birds, Data Entry by WD	mstr1028191
Bubo scandiacus	Snowy Owl	Strigidae	golfman_otto@yai	1	2	21	2010	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				Bally Hally Golf Course	1000	Nf,Birds, Data Entry by WD	mstr1028192
Accipiter gentilis	Northern Goshawk	Accipitridae	Doug Phelan	-99	1	13	2003	S3	S3B	I4B,N4N5N	G5	Secure				Hally Golf Gourse - 100 Logy Bay I	1000	Nf,Birds, Data Entry by WD	mstr1028189
Falco sparverius	American Kestrel	Falconidae	golfman_otto_yah	1	11	21	2006	S2B,SUM	S2B	I5B,N1N,N	G5	Undetermine	ate (Group 3, Low			Bally Haly Golf Course	1000	Nf,Birds, Data Entry by WD	mstr1028200
Loxia curvirostra	Red Crossbill	Fringillidae	Dan Jeddore	1	12	31	2007	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Barnes Road	1000	Nf,Birds, Data Entry by WD	mstr1027896
Asio flammeus	Short-eared Owl	Strigidae	Todd Boland	1	2	25	2004	S3B,SUM	S3B	I4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	Behind St. Pat's Ballpark	1000	Nf,Birds, Data Entry by WD	mstr1027802
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	20	4	12	2008	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	In larch trees Behind the NRC Building	1000	Nf,Birds, Data Entry by WD	mstr1027814
Loxia curvirostra	Red Crossbill	Fringillidae	Dave Fifield	6	4	28	2002	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	n Arts & Music Building, Memorial U	1000	Nf,Birds, Data Entry by WD	mstr1027923
Asio flammeus	Short-eared Owl	Strigidae	Bruce Mactavish	1	12	6	2003	S3B,SUM	S3B	I4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	en Long Pond Road and Pine Bud A	1000	Nf,Birds, Data Entry by WD	mstr1027943
Chordeiles minor	Common Nighthawk	Caprimulgidi	Todd Boland	1	7	31	2006	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened	Botantical Gardens	1000	Nf,Birds, Data Entry by WD	mstr1028181
Loxia curvirostra	Red Crossbill	Fringillidae	Jared Clarke	1	5	25	2003	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Cape Spear - Lundrigan's Marsh	1000	Nf,Birds, Data Entry by WD	mstr1028341
Falco rusticolus	Gyrfalcon	Falconidae	Paul B.	1	11	8	2004	S2S3N,SUM	S2S3N	I4N5B,N5N	G5	Secure				Building, Memorial University of Ne	1000	Nf,Birds, Data Entry by WD	mstr1027935
Loxia curvirostra	Red Crossbill	Fringillidae	Jared Clarke	1	5	14	2002	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	istry-Physics Building, Memorial Uni	1000	Nf,Birds, Data Entry by WD	mstr1027940
Bubo scandiacus	Snowy Owl	Strigidae	Doug Phalen	1	11	26	2001	S3N,SUM	SNA	I5B,N5N,N	G5	Secure				r of Newfoundland Drive & Logy Bay	1000	Nf,Birds, Data Entry by WD	mstr1028232
Accipiter gentilis	Northern Goshawk	Accipitridae	John Wells	1	10	11	2002	S3	S3B	I4B,N4N5N	G5	Secure				Cuckold's Cove Trail, Signal Hill	1000	Nf,Birds, Data Entry by WD	mstr1027954
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	3	21	2003	S3	S3B	I4B,N4N5N	G5	Secure				Cuckold's Cove Trail, Signal Hill	1000	Nf,Birds, Data Entry by WD	mstr1027955

Chordeiles minor	Common Nighthawk	Caprimulgid	Dave Brown	1	9	25	2002	SNA	SNA	N4B,N3M	G5	May be at ris	Special Concern	Threatened	Threatened		Dead Man's Pond, Signal Hill	100	Nf,Birds, Data Entry by WD	mstr1027372
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Bruce Mactavish	1	3	24	2002	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027796
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Bruce Mactavish	1	1	11	2004	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027801
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Bruce Mactavish	1	3	6	2005	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027807
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Jared Clarke	1	1	1	2006	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027808
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Jared Clarke	1	2	5	2006	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027809
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Bruce Mactavish	1	1	11	2009	S2S3	S3B	45B,N5N,N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027820
Accipiter gentilis	Northern Goshawk	Accipitridae	Jytte Selno	1	3	16	2001	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1027876
Falco rusticolus	Gyrfalcon	Falconidae	Dave Brown	1	11	28	2004	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028096
Accipiter gentilis	Northern Goshawk	Accipitridae	Todd Boland	4	1	24	1998	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028263
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	12	13	1998	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028264
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	2	2	13	1999	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028266
Accipiter gentilis	Northern Goshawk	Accipitridae	Todd Boland	1	3	28	1999	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028267
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	12	6	1999	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028268
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	3	1	18	2000	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028269
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	6	2000	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028270
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	18	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028272
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	4	8	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028273
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	3	12	2002	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028275
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	3	24	2002	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028277
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	John Wells & Bruc	1	3	24	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028278
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	11	5	2002	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028281
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	2	1	2	2003	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028282
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	2	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028283
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	-99	1	1	2004	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028285
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	29	2004	S3	S3B	44B,N4N5N	G5	Secure				Dump	Dump	1000	Nf,Birds, Data Entry by WD	mstr1028287
Falco rusticolus	Gyrfalcon	Falconidae	Jared Clarke	1	11	28	2004	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028288
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	1	9	2005	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028289
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	2	20	2005	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028291
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	20	2005	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028292
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	2	27	2005	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028294
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	27	2005	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028295
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	3	6	2005	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028296
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	3	6	2005	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028297
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	2	1	1	2006	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028304
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	3	5	2006	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028311
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	5	2006	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028312
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	12	10	2006	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028315
Falco rusticolus	Gyrfalcon	Falconidae	Paul Linegar	1	12	28	2006	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028316
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	25	2007	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028318
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	25	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028319
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	2	3	11	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028322
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	11	25	2007	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028323
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Jared Clarke	1	11	25	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028324
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	3	1	2	2008	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028326
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	3	1	6	2008	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028328
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	4	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028330
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	2	25	2008	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028331
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	25	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028332
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	2	1	1	2009	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028333
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	3	8	2009	S3	S3B	44B,N4N5N	G5	Secure					Dump	1000	Nf,Birds, Data Entry by WD	mstr1028334
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	8	2009	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Dump	1000	Nf,Birds, Data Entry by WD	mstr1028335
Accipiter gentilis	Northern Goshawk	Accipitridae	Doug Hynes	1	8	23	2007	S3	S3B	44B,N4N5N	G5	Secure					East Coast Trail	1000	Nf,Birds, Data Entry by WD	mstr1027864
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	-99	7	7	2011	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		East End	1000	Nf,Birds, Data Entry by WD	mstr1027823
Loxia curvirostra	Red Crossbill	Fringillidae	Libby Creelman	-99	8	13	2004	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		East End	1000	Nf,Birds, Data Entry by WD	mstr1028240
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	1	1	30	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		East End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028061
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	18	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		East End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028079
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	golfman_otto_yah	1	2	26	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		East End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028120
Pagophila eburnea	Ivory Gull	Laridae	Kenneth Knowles	-99	1	16	1998	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Quidi Vidi Lake at Chicken Proces	1000	Nf,Birds, Data Entry by WD	mstr1028186
Falco rusticolus	Gyrfalcon	Falconidae	Jared Clarke	1	12	11	2004	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					East of Virginia River Outflow	1000	Nf,Birds, Data Entry by WD	mstr1028143
Loxia curvirostra	Red Crossbill	Fringillidae	John Wells	1	5	6	2002	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Pine Clump.	ducation Building, Memorial Univers	1000	Nf,Birds, Data Entry by WD	mstr1027912
Falco rusticolus	Gyrfalcon	Falconidae	Jared Clarke	1	5	19	2004	S2S3N,SUM	S2S3N	44N5B,N5N	G5	Secure					Building, Memorial University of Ne	1000	Nf,Birds, Data Entry by WD	mstr1027913
Falco sparverius	American Kestrel	Falconidae	Howard Clase	1	12	2	2011	S2B,SUM	S2B	45B,N1N,N	G5	Undetermine	ate (Group 3, Low				ı Avenue/Allandale Road Intersectior	1000	Nf,Birds, Data Entry by WD	mstr1027942
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne-Marie McEln	1	3	2	2001	S3	S3B	44B,N4N5N	G5	Secure					Flower Hill	1000	Nf,Birds, Data Entry by WD	mstr1027788
Euphagus carolinus	Rusty Blackbird	Icteridae	Marion Gregory	1	3	18	2000	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Fox Avenue	1000	Nf,Birds, Data Entry by WD	mstr1028213
Bubo scandiacus	Snowy Owl	Strigidae	Dave Fifield	1	4	26	1998	S3N,SUM	SNA	45B,N5N,N	G5	Secure					Harbour	1000	Nf,Birds, Data Entry by WD	mstr1030871
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	9	29	2008	S3	S3B	44B,N4N5N	G5	Secure					Health Sciences Centre	1000	Nf,Birds, Data Entry by WD	mstr1027952
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	John Pratt	1	1	26	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Hotel Newfoundland	1000	Nf,Birds, Data Entry by WD	mstr1027911
Euphagus carolinus	Rusty Blackbird	Icteridae	Ken Knowles	1	6	12	2000	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Kenny's Pond	1000	Nf,Birds, Data Entry by WD	mstr1028209
Euphagus carolinus	Rusty Blackbird	Icteridae	Gene Herzberg	1	5	24	2010	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Francophone Association Complex	1000	Nf,Birds, Data Entry by WD	mstr1027837
Falco sparverius	American Kestrel	Falconidae	Todd Boland	1	3	20	2002	S2B,SUM	S2B	45B,N1N,N	G5	Undetermine	ate (Group 3, Low				Kings Bridge Road	1000	Nf,Birds, Data Entry by WD	mstr1027947
Accipiter gentilis	Northern Goshawk	Accipitridae	Todd Boland	1	3	20	2002	S3	S3B	44B,N4N5N	G5	Secure					King's Bridge Road	1000	Nf,Birds, Data Entry by WD	mstr1027948
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	12	6	2000	S3	S3B	44B,N4N5N	G5	Secure					Landfill	1000	Nf,Birds, Data Entry by WD	mstr1027792
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	12	6	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Landfill Site	1000	Nf,Birds, Data Entry by WD	mstr1028271
Loxia curvirostra	Red Crossbill	Fringillidae	Nat & Dave	10	2	22	2009	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Left Pond in Pippy Park	1000	Nf,Birds, Data Entry by WD	mstr1028179
Euphagus carolinus	Rusty Blackbird	Icteridae	John Wells	1	5	17	2000	S2S3B,SUM	S3B	44B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Long Pond	100	Nf,Birds, Data Entry by WD	mstr1027992
Accipiter gentilis	Northern Goshawk	Accipitridae	Howard Clase	1	5	16	2003	S3	S3B	44B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028814
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne Hughes	1	7	15	2004	S3	S3B	44B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028010
Circus cyaneus	Northern Harrier	Accipitridae	Gene & Karen He	2	11	18	2006	S3B,SUM	S3?B	N5B,N4N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028817
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	-99	11	19	2006	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028020
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	10	4	7	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028818
Loxia curvirostra	Red Crossbill	Fringillidae	Michael Parmente	1	4	13	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028819
Loxia curvirostra	Red Crossbill	Fringillidae	Clyde Thornhill	-99	4	22	2007	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	In larch trees	Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028820
Accipiter gentilis	Northern Goshawk	Accipitridae	Todd Boland	1	4	13	2008	S3	S3B	44B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028024
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne Hughes	1	5	24	2008	S3	S3B	44B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028026
Loxia curvirostra	Red Crossbill	Fringillidae	Anne Hughes	5	1	22	2009	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	In larch trees	Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028029
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Alvan Buckley	1	12	16	2009	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028034

Accipiter gentilis	Northern Goshawk	Accipitridae	Brendan Kelly	1	6	21	2011	S3	S3B	N4B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028041
Accipiter gentilis	Northern Goshawk	Accipitridae	Michael Parmente	1	1	7	2012	S3	S3B	N4B,N4N5N	G5	Secure					Long Pond	100	Nf,Birds, Data Entry by WD	mstr1028042
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Alvan Buckley	1	12	15	2009	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		ond: Behind NRC: South West of th	1000	Nf,Birds, Data Entry by WD	mstr1028033
Euphagus carolinus	Rusty Blackbird	Icteridae	Ken Knowles	1	5	19	2002	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Lundrigan's Marsh	1000	Nf,Birds, Data Entry by WD	mstr1028339
Euphagus carolinus	Rusty Blackbird	Icteridae	Jared Clarke	1	4	27	2003	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Lundrigan's Marsh	1000	Nf,Birds, Data Entry by WD	mstr1028340
Falco sparverius	American Kestrel	Falconidae	Bruce Mactavish	1	11	9	2002	S2B,SUM	S2B	N5B,N1N,N	G5	Undetermine	ate (Group 3, Low				Macdonald Drive School	1000	Nf,Birds, Data Entry by WD	mstr1028216
Euphagus carolinus	Rusty Blackbird	Icteridae	Bruce Mactavish	1	5	5	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027063
Euphagus carolinus	Rusty Blackbird	Icteridae	Catherine Barrett	1	5	6	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027064
Euphagus carolinus	Rusty Blackbird	Icteridae	j.williams@nf.sym	2	5	7	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027065
Euphagus carolinus	Rusty Blackbird	Icteridae	Gene & Karen He	2	5	9	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027066
Euphagus carolinus	Rusty Blackbird	Icteridae	Ed Hayden	2	5	14	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern	On the hydro wire	Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027067
Euphagus carolinus	Rusty Blackbird	Icteridae	M. Roche	2	5	20	2012	S2S3B,SUM	S3B	N4B,NUN,N	G4	Secure	Special Concern	Vulnerable	Special Concern		Maddox Cove Road - Beaver Pond	1000	Nf,Birds, Data Entry by WD	mstr1027068
Accipiter gentilis	Northern Goshawk	Accipitridae	Ken Knowles	1	1	24	2004	S3	S3B	N4B,N4N5N	G5	Secure					Marine Drive	1000	Nf,Birds, Data Entry by WD	mstr1028357
Bubo scandiacus	Snowy Owl	Strigidae	Ken Knowles	1	3	22	2012	S3N,SUM	SNA	N5B,N5N,N	G5	Secure					y Queen of Peace Church, Torbay F	1000	Nf,Birds, Data Entry by WD	mstr1028255
Loxia curvirostra	Red Crossbill	Fringillidae	Dave Brown	12	4	16	2002	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		orial University of Newfoundland Ca	1000	Nf,Birds, Data Entry by WD	mstr1027929
Loxia curvirostra	Red Crossbill	Fringillidae	Jared Clarke	1	4	17	2002	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		orial University of Newfoundland Ca	1000	Nf,Birds, Data Entry by WD	mstr1027931
Circus cyaneus	Northern Harrier	Accipitridae	Jared Clarke	1	5	17	2002	S3B,SUM	S3?B	N5B,N4N	G5	Secure					Mount Scio Road	1000	Nf,Birds, Data Entry by WD	mstr1027959
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne Hughes	1	9	8	2002	S3	S3B	N4B,N4N5N	G5	Secure					MUN Botanical Gardens	1000	Nf,Birds, Data Entry by WD	mstr1028180
Bubo scandiacus	Snowy Owl	Strigidae	Jared Clarke	1	11	26	2001	S3N,SUM	SNA	N5B,N5N,N	G5	Secure					JN Daycare Centre near Burton's Pc	1000	Nf,Birds, Data Entry by WD	mstr1027958
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	1	11	20	2006	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Mundy Poind	1000	Nf,Birds, Data Entry by WD	mstr1027770
Dolichonyx oryzivorus	Bobolink	Icteridae	Dave Fifield	1	9	19	2000	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable			Mundy Pond	1000	Nf,Birds, Data Entry by WD	mstr1027764
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	4	5	2003	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Mundy Pond	1000	Nf,Birds, Data Entry by WD	mstr1027767
Falco rusticolus	Gyrfalcon	Falconidae	Dave Brown	1	11	7	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Mundy Pond	1000	Nf,Birds, Data Entry by WD	mstr1027769
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	2	25	2008	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Mundy Pond	1000	Nf,Birds, Data Entry by WD	mstr1027771
Accipiter gentilis	Northern Goshawk	Accipitridae	John Wells	1	11	27	2011	S3	S3B	N4B,N4N5N	G5	Secure					Mundy Pond	1000	Nf,Birds, Data Entry by WD	mstr1027778
Dolichonyx oryzivorus	Bobolink	Icteridae	slorenz@mail.com	1	10	4	2007	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable			Mundy Pond Towards Soccer Field	1000	Nf,Birds, Data Entry by WD	mstr1027760
Pagophila eburnea	Ivory Gull	Laridae	Todd Boland	2	2	7	2002	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Near Quidi Vidi Brewery	1000	Nf,Birds, Data Entry by WD	mstr1028148
Asio flammeus	Short-eared Owl	Strigidae	John Wells	1	1	7	2008	S3B,SUM	S3B	N4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern		Near the Geo Centre	1000	Nf,Birds, Data Entry by WD	mstr1027928
Falco rusticolus	Gyrfalcon	Falconidae	Karen Herzberg	1	2	1	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Near Virginia River End of Lake	1000	Nf,Birds, Data Entry by WD	mstr1028100
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	1	16	2003	S3	S3B	N4B,N4N5N	G5	Secure					Newfoundland Drive	1000	Nf,Birds, Data Entry by WD	mstr1028247
Loxia curvirostra	Red Crossbill	Fringillidae	Gene Herzberg	1	6	12	2011	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		North East	1000	Nf,Birds, Data Entry by WD	mstr1027757
Loxia curvirostra	Red Crossbill	Fringillidae	Gene & Karen He	3	2	22	2008	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		North East	1000	Nf,Birds, Data Entry by WD	mstr1027813
Loxia curvirostra	Red Crossbill	Fringillidae	Gene Herzberg	4	1	11	2009	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		North East	1000	Nf,Birds, Data Entry by WD	mstr1027819
Loxia curvirostra	Red Crossbill	Fringillidae	Gene Herzberg	11	1	31	2009	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		North East	1000	Nf,Birds, Data Entry by WD	mstr1027821
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne Hughes	2	6	24	2004	S3	S3B	N4B,N4N5N	G5	Secure					North Side of Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028009
Accipiter gentilis	Northern Goshawk	Accipitridae	Anne Hughes	1	3	24	2008	S3	S3B	N4B,N4N5N	G5	Secure					North Side of Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028823
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	12	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		North Side of Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1028187
Bubo scandiacus	Snowy Owl	Strigidae	Cliff Doran	1	11	2	2010	S3N,SUM	SNA	N5B,N5N,N	G5	Secure					orthern Radar - 25 Anderson Avenu	1000	Nf,Birds, Data Entry by WD	mstr1027882
Loxia curvirostra	Red Crossbill	Fringillidae	Michael Parmente	3	5	27	2000	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		Oxen Pond Botanical Garden	1000	Nf,Birds, Data Entry by WD	mstr1027914
Loxia curvirostra	Red Crossbill	Fringillidae	John Wells	1	4	3	2009	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		:al Education Building, Memorial Uni	1000	Nf,Birds, Data Entry by WD	mstr1027908
Accipiter gentilis	Northern Goshawk	Accipitridae	Dirk Hilbers	1	4	15	2003	S3	S3B	N4B,N4N5N	G5	Secure					Pippy Park	1000	Nf,Birds, Data Entry by WD	mstr1028183
Accipiter gentilis	Northern Goshawk	Accipitridae	Chris Brown	1	1	10	2003	S3	S3B	N4B,N4N5N	G5	Secure					Pleasantville	1000	Nf,Birds, Data Entry by WD	mstr1028197
Accipiter gentilis	Northern Goshawk	Accipitridae	Martin Renner	1	2	15	2000	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028144
Accipiter gentilis	Northern Goshawk	Accipitridae	Dave Brown	1	1	5	2002	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028147
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	John Pratt	1	2	27	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028149
Falco rusticolus	Gyrfalcon	Falconidae	Howard Clase	1	2	6	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028151
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	2	16	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028152
Loxia curvirostra	Red Crossbill	Fringillidae	Paul Linegar	10	2	27	2008	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	In larch trees	Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028154
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	12	4	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028158
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	1	4	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028159
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	1	5	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028161
Falco rusticolus	Gyrfalcon	Falconidae	David Shepherd	1	4	14	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028169
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	2	11	10	2009	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028174
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	2	2	1	2002	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1027889
Accipiter gentilis	Northern Goshawk	Accipitridae	Jytte Selno	1	2	11	2002	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1027890
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	1	12	2003	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1027891
Pagophila eburnea	Ivory Gull	Laridae	Howard Clase	1	1	12	1998	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1027892
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	2	2	5	2002	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1028082
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	2	2	9	2002	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		Quidi Vidi Gut	1000	Nf,Birds, Data Entry by WD	mstr1028084
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	12	2	2002	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1027847
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	1	25	1998	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028060
Chordeiles minor	Common Nighthawk	Caprimulgidi	Todd Boland	1	6	2	1998	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028063
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	12	21	1999	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028064
Accipiter gentilis	Northern Goshawk	Accipitridae	Dave Brown	1	1	15	2000	S3	S3B	N4B,N4N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028065
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	1	15	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028066
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	2	21	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028070
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	3	18	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028071
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	12	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028073
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	28	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028076
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	20	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028081
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	2	7	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028083
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	John Wells	1	2	11	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028085
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Ken Knowles	1	2	26	2003	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028088
Falco rusticolus	Gyrfalcon	Falconidae	Jared Clarke	1	1	20	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028090
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	1	30	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028091
Falco rusticolus	Gyrfalcon	Falconidae	Jared Clarke	1	2	29	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028092
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	3	13	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028094
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	3	20	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028095
Falco rusticolus	Gyrfalcon	Falconidae	Jennifer Harding	1	1	12	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028097
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	1	19	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure				On a pole.	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028098
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	1	28	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028099
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish &	1	2	5	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028101
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	3	19	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure					Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028102
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	12	11	2005	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure				East End of Lake	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028103
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	4	1	2006	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028106
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Derm Kenny	1	4	4	2006	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028108
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	14	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028109

Pagophila eburnea	Ivory Gull	Laridae	Paul Linegar	1	1	20	2007	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028110
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	22	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028111
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	23	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028112
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Jared Clarke	1	1	27	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028116
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	25	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028118
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	26	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028119
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	3	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028121
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	5	14	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028126
Pagophila eburnea	Ivory Gull	Laridae	Bruce Mactavish	1	1	13	2009	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028130
Buteo lagopus	Rough-Legged Hawk	Accipitridae	John Wells	1	1	23	2011	S2S3	S3B	N5B,N5N,N	G5	Secure				Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028137
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Ken Knowles	1	3	11	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	i Vidi Lake - Virginia River Inflow to	1000	Nf,Birds, Data Entry by WD	mstr1028218
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	golfman_otto_yah	1	2	16	2010	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	uidi Vidi Lake by Virginia River Outfl	1000	Nf,Birds, Data Entry by WD	mstr1028135
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Todd Boland	1	3	20	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	i Vidi Lake next to Rennies River Ou	1000	Nf,Birds, Data Entry by WD	mstr1028086
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	1	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	di Vidi Lake off the Virginia River Mc	1000	Nf,Birds, Data Entry by WD	mstr1028072
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	30	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi Lake West	1000	Nf,Birds, Data Entry by WD	mstr1028077
Pagophila eburnea	Ivory Gull	Laridae	Todd Boland	1	2	1	1998	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Quidi Vidi Lake/St. John's Harbour	1000	Nf,Birds, Data Entry by WD	mstr1028062
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Gene Herzberg	1	2	11	2012	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Quidi Vidi toward the Cemetery	1000	Nf,Birds, Data Entry by WD	mstr1028155
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	10	2	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Road South of Shea Heights	1000	Nf,Birds, Data Entry by WD	mstr1027753
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	1	24	2001	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Sewer Outlet	1000	Nf,Birds, Data Entry by WD	mstr1027793
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish,	2	1	5	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Signal Hill	1000	Nf,Birds, Data Entry by WD	mstr1027902
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	12	31	2007	S3	S3B	N4B,N4N5N	G5	Secure				Signal Hill	1000	Nf,Birds, Data Entry by WD	mstr1027956
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Jytte Selno	1	4	18	2001	S2S3	S3B	N5B,N5N,N	G5	Secure				Signal Hill Road	1000	Nf,Birds, Data Entry by WD	mstr1027925
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	10	5	2005	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Signall Hill	1000	Nf,Birds, Data Entry by WD	mstr1027899
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish,	2	1	5	2008	S3	S3B	N4B,N4N5N	G5	Secure				Signall Hill	1000	Nf,Birds, Data Entry by WD	mstr1027901
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	4	17	2004	S3	S3B	N4B,N4N5N	G5	Secure				Soccer Pitch	1000	Nf,Birds, Data Entry by WD	mstr1027803
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish &	2	1	5	2003	S3	S3B	N4B,N4N5N	G5	Secure				South Side of the Harbour	1000	Nf,Birds, Data Entry by WD	mstr1027835
Bubo scandiacus	Snowy Owl	Strigidae	Vincent	1	12	17	2009	S3N,SUM	SNA	N5B,N5N,N	G5	Secure				George's Court off Merrymeeting R	1000	Nf,Birds, Data Entry by WD	mstr1027886
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	11	9	2004	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure				Pat's Ball Park next to Carpasian R	1000	Nf,Birds, Data Entry by WD	mstr1027941
Loxia curvirostra	Red Crossbill	Fringillidae	Dave Fifield	1	3	19	2000	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Sycamore Place	1000	Nf,Birds, Data Entry by WD	mstr1027966
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Alex Bond	1	11	2	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	The Gut at Quidi Vidi Harbour	1000	Nf,Birds, Data Entry by WD	mstr1028157
Asio flammeus	Short-eared Owl	Strigidae	Todd Boland	1	9	1	1998	S3B,SUM	S3B	N4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	Thorburn Road	1000	Nf,Birds, Data Entry by WD	mstr1027883
Accipiter gentilis	Northern Goshawk	Accipitridae	Darroch Whitaker	1	12	29	2009	S3	S3B	N4B,N4N5N	G5	Secure				Thorburn Road	1000	Nf,Birds, Data Entry by WD	mstr1027884
Asio flammeus	Short-eared Owl	Strigidae	Todd Bolan	1	4	6	1998	S3B,SUM	S3B	N4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	Torbay Road	1000	Nf,Birds, Data Entry by WD	mstr1028252
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Howard Clase	1	3	8	2005	S2S3	S3B	N5B,N5N,N	G5	Secure				Torbay Road	1000	Nf,Birds, Data Entry by WD	mstr1028254
Asio flammeus	Short-eared Owl	Strigidae	Chris Brown	1	5	28	2002	S3B,SUM	S3B	N4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern	oad side of the Airport near the PAI	1000	Nf,Birds, Data Entry by WD	mstr1028256
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Bill Tucker	1	3	1	2003	S2S3	S3B	N5B,N5N,N	G5	Secure				Tracey Place	1000	Nf,Birds, Data Entry by WD	mstr1028233
Chordeiles minor	Common Nighthawk	Caprimulgidi	Bruce Mactavish	1	6	9	2008	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened	Tunis Court	1000	Nf,Birds, Data Entry by WD	mstr1028054
Buteo lagopus	Rough-Legged Hawk	Accipitridae	Jared Clarke	1	4	6	2012	S2S3	S3B	N5B,N5N,N	G5	Secure				University Avenue	1000	Nf,Birds, Data Entry by WD	mstr1027894
Pagophila eburnea	Ivory Gull	Laridae	Bill Montevecchi	1	1	15	1998	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Virginia River at Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028217
Pagophila eburnea	Ivory Gull	Laridae	Gene Herzberg	1	1	28	2007	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Virginia River Outlet	1000	Nf,Birds, Data Entry by WD	mstr1028220
Pagophila eburnea	Ivory Gull	Laridae	Paul Linegar	1	2	1	2007	S1N,SUM	S2N	N1B,N1N,N	G4	At risk	Endangered	Endangered	Endangered	Virginia River Outlet	1000	Nf,Birds, Data Entry by WD	mstr1028221
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Doug Phelan	1	1	13	2004	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Virginia River Trail	1000	Nf,Birds, Data Entry by WD	mstr1027920
Accipiter gentilis	Northern Goshawk	Accipitridae	Bruce Mactavish	1	1	30	2001	S3	S3B	N4B,N4N5N	G5	Secure				Waterford River	1000	Nf,Birds, Data Entry by WD	mstr1027794
Accipiter gentilis	Northern Goshawk	Accipitridae	Jared Clarke	1	6	1	2004	S3	S3B	N4B,N4N5N	G5	Secure				West End of Long Pond	1000	Nf,Birds, Data Entry by WD	mstr1028006
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Dave Brown	1	12	11	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi	1000	Nf,Birds, Data Entry by WD	mstr1028153
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	27	2002	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028047
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	2	14	2000	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028068
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	8	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028113
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	10	2007	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028114
Falco rusticolus	Gyrfalcon	Falconidae	Bruce Mactavish	1	2	22	2008	S2S3N,SUM	S2S3N	N4N5B,N5N	G5	Secure				West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028117
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	golfman_otto_yah	1	4	13	2008	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End of Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028125
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Bruce Mactavish	1	3	4	2011	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	West End Quidi Vidi Lake	1000	Nf,Birds, Data Entry by WD	mstr1028138
Bubo scandiacus	Snowy Owl	Strigidae	Jared Clarke	1	11	23	2001	S3N,SUM	SNA	N5B,N5N,N	G5	Secure				Window at Sobey's on Torbay Roac	1000	Nf,Birds, Data Entry by WD	mstr1028198
Accipiter gentilis	Northern Goshawk	Accipitridae	John Wells	2	1	6	2003	S3	S3B	N4B,N4N5N	G5	Secure				nen's Compensation Building, Fores	1000	Nf,Birds, Data Entry by WD	mstr1027970
Circus cyaneus	Northern Harrier	Accipitridae	Vincent	1	5	25	2009	S3B,SUM	S3?B	N5B,N4N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1027875
Bubo scandiacus	Snowy Owl	Strigidae	Todd Boland	1	4	13	1998	S3N,SUM	SNA	N5B,N5N,N	G5	Secure					10000	Nf,Birds, Data Entry by WD	mstr1028599
Bubo scandiacus	Snowy Owl	Strigidae	Wayne Tucker	1	11	12	2001	S3N,SUM	SNA	N5B,N5N,N	G5	Secure				uth Face on Roof of 23 Oakridge Dı	1000	Nf,Birds, Data Entry by WD	mstr1028259
Accipiter gentilis	Northern Goshawk	Accipitridae	Todd Boland	1	11	12	2000	S3	S3B	N4B,N4N5N	G5	Secure					1000	Nf,Birds, Data Entry by WD	mstr1030071
Loxia curvirostra	Red Crossbill	Fringillidae	J Wells	3	5	21	1971	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	St. John's	10000	Montevecchi B, & Wren S,	mstr1045456
Loxia curvirostra	Red Crossbill	Fringillidae	J Landry	4	6	14	1971	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	St. John's	10000	Montevecchi B, & Wren S,	mstr1045458
Loxia curvirostra	Red Crossbill	Fringillidae	G Greenlee	1	5	13	1969	S1S2	S2S3	N5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	St. John's	10000	Montevecchi B, & Wren S,	mstr1045459
Dolichonyx oryzivorus	Bobolink	Icteridae	B. Mactavish		9	24	1984	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		KentÃ†s Pond	1000	The Status of Bobolink (Doli	mstr1047821
Dolichonyx oryzivorus	Bobolink	Icteridae	C. Brown, M. Parr		6	25	1985	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047822
Dolichonyx oryzivorus	Bobolink	Icteridae	fide B. Mactavish		5	31	1986	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047823
Dolichonyx oryzivorus	Bobolink	Icteridae	M. Parmenter			0	1986	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047824
Dolichonyx oryzivorus	Bobolink	Icteridae	J. Pratt, D. Lemor		5	29	1988	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047825
Dolichonyx oryzivorus	Bobolink	Icteridae	D. Phelan		7	5	1988	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047826
Dolichonyx oryzivorus	Bobolink	Icteridae	P. Linegar, B. Mac		5	31	1989	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047827
Dolichonyx oryzivorus	Bobolink	Icteridae	B. Mactavish, K. K		7	25	1991	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Kilbride	1000	The Status of Bobolink (Doli	mstr1047828
Dolichonyx oryzivorus	Bobolink	Icteridae	R. Burrows		6	2	1989	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Larry's Bog, St. John's	100	The Status of Bobolink (Doli	mstr1047830
Dolichonyx oryzivorus	Bobolink	Icteridae	R. Burrows		9	0	1992	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Mundy Pond	100	The Status of Bobolink (Doli	mstr1047843
Dolichonyx oryzivorus	Bobolink	Icteridae	M. Parmenter		9	25	1983	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Mundy Pond	100	The Status of Bobolink (Doli	mstr1047844
Dolichonyx oryzivorus	Bobolink	Icteridae	L. Noseworthy		5	24	1987	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		Pippy Park, St. John's	1000	The Status of Bobolink (Doli	mstr1047863
Dolichonyx oryzivorus	Bobolink	Icteridae	unknown		5	15	1974	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		St. John's	10000	The Status of Bobolink (Doli	mstr1047896
Dolichonyx oryzivorus	Bobolink	Icteridae	D. Barton		6	1	1977	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		St. John's	10000	The Status of Bobolink (Doli	mstr1047897
Dolichonyx oryzivorus	Bobolink	Icteridae	L. M. Tuck		6	25	1977	S1B,SUM	S2B	N5B,N4N5N	G5	May be at risk	Threatened	Vulnerable		St. John's	10000	The Status of Bobolink (Doli	mstr1047898
Riparia riparia	Bank Swallow	Hirundinidae	unknown	1	5	7	2000	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Kenny's Pond, St. John's	1000	The Status of Bank Swallow	mstr1047963
Riparia riparia	Bank Swallow	Hirundinidae	D. Hibers	2	4	9	2003	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047976
Riparia riparia	Bank Swallow	Hirundinidae	A. Hughes	2	6	5	2003	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047977
Riparia riparia	Bank Swallow	Hirundinidae	J. Clarke	1	5	23	2004	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047978
Riparia riparia	Bank Swallow	Hirundinidae	J. Clarke	1	5	31	2004	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047979
Riparia riparia	Bank Swallow	Hirundinidae	J. Clarke	1	6	1	2004	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047980
Riparia riparia	Bank Swallow	Hirundinidae	J. Clarke	1	5	28	2006	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047981
Riparia riparia	Bank Swallow	Hirundinidae	D. Brown	1	5	27	2007	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Long Pond, St. John's	1000	The Status of Bank Swallow	mstr1047982
Riparia riparia	Bank Swallow	Hirundinidae	B. Mactavish, J. P	unknown	5	29	1988	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Mundy Pond, St. John's	1000	The Status of Bank Swallow	mstr1047988
Riparia riparia	Bank Swallow	Hirundinidae	B. Mactavish	unknown	9	28	1991	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Mundy Pond, St. John's	1000	The Status of Bank Swallow	mstr1047989
Riparia riparia	Bank Swallow	Hirundinidae	T. Boland	2	9	12	2004	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Mundy Pond, St. John's	1000	The Status of Bank Swallow	mstr1047990

Riparia riparia	Bank Swallow	Hirundinidae	G. Ryan	2	6	3	2006	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			NE. St. John's	10000	The Status of Bank Swallow	mstr1047992
Riparia riparia	Bank Swallow	Hirundinidae	H. Clase	unknown	6	3	1984	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Oxen Pond, St. John's	1000	The Status of Bank Swallow	mstr1048000
Riparia riparia	Bank Swallow	Hirundinidae	J. Wells	200	6	13	1984	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Oxen Pond, St. John's	1000	The Status of Bank Swallow	mstr1048001
Riparia riparia	Bank Swallow	Hirundinidae	D. Brown	1	8	26	2003	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Quidi Vidi Lake, St. John's	1000	The Status of Bank Swallow	mstr1048010
Riparia riparia	Bank Swallow	Hirundinidae	R. Burrows	unknown	5	16	1986	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			St. John's	10000	The Status of Bank Swallow	mstr1048023
Riparia riparia	Bank Swallow	Hirundinidae	R. Burrows, B. Ma	unknown	5	16	1986	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			St. John's	10000	The Status of Bank Swallow	mstr1048024
Riparia riparia	Bank Swallow	Hirundinidae	K. Knowles	1	9	26	1997	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			St. John's	10000	The Status of Bank Swallow	mstr1048025
Riparia riparia	Bank Swallow	Hirundinidae	fide J. Pratt	unknown	5	15	2000	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			St. John's	10000	The Status of Bank Swallow	mstr1048026
Riparia riparia	Bank Swallow	Hirundinidae	I. Stenhouse	unknown	5	27	2000	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			St. John's	10000	The Status of Bank Swallow	mstr1048027
Chaetura pelagica	Chimney Swift	Apodidae	Bruce Mactavish	1	8	30	2016	SNR	SNR	N4B,N3M	G4G5	grant/ Accide	Threatened	Threatened	Threatened	Quidi Vidi Lake, on The Blvd	10000	NF.Birds, Aug 30, 2016	MSTR1050954
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland	3	12	1	2016	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Nf.birds, December 2, 2016	MSTR1051364
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Frank King	1	12	12	2016	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	Nf.birds, December 12, 201	MSTR1051372
Pagophila eburnea	Ivory Gull	Laridae	Ken Knowles	1	12	9	2016	S1N,SUM	S2N	41B,N1N,N	G4	At risk	Endangered	Endangered	Endangered		1000	Nf.birds, December 9, 2016	MSTR1051374
Anas acuta	Northern Pintail	Anatidae	iNaturalist user: sa		1	7	2018	S3B,SUM	S3B	45B,N5N,N	G5	Secure					180	iNaturalist record export 201	MSTR1051971
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	iNaturalist user: sa		2	3	2018	S4B, S3N,SUM	S5B	45B,N4N5N	G5	Secure	ate (Group 3, Low			nies River Trail, St. John's, NL, Car	180	iNaturalist record export 201	MSTR1051805
Anas platyrhynchos	Mallard	Anatidae	iNaturalist user: ut		5	28	2017	S3B,SUM	S3B	45B,N5N,N	G5	Secure					8	iNaturalist record export 201	MSTR1052471
Usnea longissima	Old Man's Beard	Parmeliacea	iNaturalist user: ka		10	22	2017	S3S5	SNR	N5	G5	Secure				C A Pippy Park, St. John's, NL, CA	0	iNaturalist record export 201	MSTR1052652
Anas americana	American Wigeon	Anatidae	iNaturalist user: sa		11	10	2017	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine					12372	iNaturalist record export 201	MSTR1051708
Anas americana	American Wigeon	Anatidae	iNaturalist user: sa		11	21	2017	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine					968	iNaturalist record export 201	MSTR1051710
Anas platyrhynchos	Mallard	Anatidae	iNaturalist user: sa		11	7	2017	S3B,SUM	S3B	45B,N5N,N	G5	Secure					12372	iNaturalist record export 201	MSTR1052478
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	iNaturalist user: sa		8	27	2017	S3B, S4M	S4B,S5M	45B,N4N,N	G5	Secure				St. John's, NL, Canada	12372	iNaturalist record export 201	MSTR1052289
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		12	13	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				li Vidi Lake, St. John's, NL A1A, Car	968	iNaturalist record export 201	MSTR1052200
Podilymbus podiceps	Pied-billed Grebe	Podicipedidae	iNaturalist user: sa		12	13	2017	S1B,SUM	S1B	45B,N4N5N	G5	Undetermine					968	iNaturalist record export 201	MSTR1052689
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		11	21	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				li Vidi Lake, St. John's, NL A1A, Car	968	iNaturalist record export 201	MSTR1052972
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		12	2	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				ndy Pond, St. John's, NL A1E, Cana	367	iNaturalist record export 201	MSTR1052973
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		12	8	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				nts Pond, St. John's, NL A1B, Cana	314	iNaturalist record export 201	MSTR1052974
Anas acuta	Northern Pintail	Anatidae	iNaturalist user: sa		12	7	2017	S3B,SUM	S3B	45B,N5N,N	G5	Secure					968	iNaturalist record export 201	MSTR1052637
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Lancy Cheng	1	9	29	2017	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		1000	nf.birds, sept 29, 2017	MSTR1053263
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		10	29	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				St. John's, NL, Canada	12372	iNaturalist record export 201	MSTR1052969
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		11	7	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				St. John's, NL, Canada	12372	iNaturalist record export 201	MSTR1052970
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: sa		11	17	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				li Vidi Lake, St. John's, NL A1A, Car	968	iNaturalist record export 201	MSTR1052971
Morus bassanus	Northern Gannet	Sulidae	iNaturalist user: hc		7	10	2016	S2B,S2M	S1B	N4B,N5N	G5	Secure					0	iNaturalist record export 201	MSTR1052615
Riparia riparia	Bank Swallow	Hirundinidae	Alvan Buckley, Ca	-99	5	28	2016	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Virginia Lake	1000	Nf,birds, May 28, 2016	MSTR1051625
Riparia riparia	Bank Swallow	Hirundinidae	Bruce Mactavish	1	8	30	2016	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			Quidi Vidi Lake	10000	Nf,birds, August 30, 2016	MSTR1051632
Riparia riparia	Bank Swallow	Hirundinidae	Alvan Buckley	1	5	22	2017	S1S2B,SUM	S3B	N5B,N5M	G5	Secure	Threatened			QV Lake, near boathouse	1000	Nf,birds, May 22, 2017	MSTR1051636
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: na		2	7	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Â¼Â°Â‡Â£98 Burtons Pond Rd, St. .	36	iNaturalist record export 201	MSTR1052965
Aythya fuligula	Tufted Duck	Anatidae	iNaturalist user: ut		10	9	2017	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Pond Walk, St. John's, NL A1A 0E4	3	iNaturalist record export 201	MSTR1052968
Chaetura pelagica	Chimney Swift	Apodidae	Seb from Chile, fri	1	9	7	2017	SNR	SNR	N4B,N3M	G4G5	grant/ Accide	Threatened	Threatened	Threatened		100	nf,birds, sept 7, 2017	MSTR1053224
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Ed Hayden, Chris	1	4	25	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, Apr 25, 2018	MSTR1053361
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Alvan Buckley	2	4	25	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, Apr 25, 2018	MSTR1053362
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Bruce Mactavish	1	4	25	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, Apr 25, 2018	MSTR1053363
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Shawn Fitzpatrick	1	5	9	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, May 9, 2018	MSTR1053365
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Gene Herzberg	2	9	17	2016	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, September 17, 201	MSTR1053358
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Gene Herzberg	1	9	9	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, Sept 9, 2018	MSTR1053389
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Gene Herzberg	5	9	21	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, Sept 21, 2018	MSTR1053391
Loxia curvirostra	Red Crossbill	Fringillidae	Andrea Dicks, Wa	3	2	17	2018	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, feb 17, 2018	MSTR1053297
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Ed Hayden	2	8	11	2017	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, August 11, 2017	MSTR1053310
Aythya fuligula	Tufted Duck	Anatidae	Howard Clase	25	2	10	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					1000	nf,birds, feb 10, 2018	MSTR1053294
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Shawn Inikon	1	2	10	2018	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t		10000	nf.birds, feb 10, 2018	MSTR1053295
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Gene Herzberg	1	8	25	2016	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, August 25, 2016	MSTR1053347
Tringa flavipes	Lesser Yellowlegs	Scolopacida	Lancy Cheng	1	8	25	2016	S3M	S3N	4N5B,N5N	G5	Secure	Threatened				1000	nf,birds, August 25, 2016	MSTR1053353
Accipiter gentilis	Northern Goshawk	Accipitridae	Shawn Inikon		4	10	2018	S3	S3B	4B,N4N5N	G5	Secure					1000	nf,birds, April 10, 2018	MSTR1053846
Chordeiles minor	Common Nighthawk	Caprimulgidi	Todd Boland		4	10	2018	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened		1000	nf,birds, April 10, 2018	MSTR1053847
Loxia curvirostra	Red Crossbill	Fringillidae	Todd Boland		1	7	2019	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, Jan 7, 2018	MSTR1053929
Loxia curvirostra	Red Crossbill	Fringillidae	Geoff Smith		4	28	2019	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, Apr 28, 2019	MSTR1054328
Falco peregrinus subsp. a	Peregrine Falcon	Falconidae	Andrea Dicks		4	2	2017	S3M, S2N	S2M	N3B	G4T4	Sensitive	Special Concern	Vulnerable	Concern (anatum/t	Fort Amherst	1000	nf,birds, april 2, 2017	mstr1055294
Wilsonia canadensis	Canada Warbler	Parulidae	Todd Boland	1	9	21	1999	SNA	S1	N4B,N3M	G5	Undetermine	Special Concern				10000	NF.Birds, via CWS	mstr1055781
Wilsonia canadensis	Canada Warbler	Parulidae	Bruce Mactavish	1	9	20	2000	SNA	S1	N4B,N3M	G5	Undetermine	Special Concern				10000	NF.Birds, via CWS	mstr1055785
Chordeiles minor	Common Nighthawk	Caprimulgidi	Les Sweetapple		9	18	2019	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened		1000	nf,birds, Sep 18, 2019	mstr1056739
Chordeiles minor	Common Nighthawk	Caprimulgidi	Les Sweetapple, I		9	20	2019	SNA	SNA	N4B,N3M	G5	May be at risk	Special Concern	Threatened	Threatened		1000	nf,birds, Sep 20, 2019	mstr1056740
Vermivora ruficapilla	Nashville Warbler	Parulidae	Bruce Mactavish		11	10	2019	S2B,SUM	S1B	N5B,N5M	G5	Undetermine					1000	nf,birds, Nov 10, 2019	mstr1056816
Coccothraustes vespertin	Evening Grosbeak	Fringillidae	Todd Boland, Ann		12	1	2019	S4	S4B,S5N	4B,N4N,NI	G5	Secure	Special Concern				1000	nf,birds, Dec 1, 2019	mstr1056830
Quiscalus quiscula	Common Grackle	Icteridae	Todd Boland, Ann		12	1	2019	S5B,S3?N, SUA	S5B	45B,NUN,N	G5	Secure					1000	nf,birds, Dec 1, 2019	mstr1056831
Circus cyaneus	Northern Harrier	Accipitridae	Bruce Mactavish		12	15	2019	S3B,SUM	S3?B	N5B,N4N	G5	Secure					1000	nf,birds, Dec 15, 2019	mstr1056838
Asio flammeus	Short-eared Owl	Strigidae	45 CBC Participar		12	28	2019	S3B,SUM	S3B	4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern		5000	nf,birds, Dec 28, 2019	mstr1056850
Asio flammeus	Short-eared Owl	Strigidae	Michael Parmente		1	2	2020	S3B,SUM	S3B	4B,N3N,N	G5	Secure	Special Concern	Vulnerable	Special Concern		1000	nf,birds, Jan 2, 2020	mstr1056858
Hirundo rustica	Barn Swallow	Hirundinidae	Ed Hayden		5	20	2020	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened				1000	nf,birds, May 20, 2020	mstr1056916
Aythya fuligula	Tufted Duck	Anatidae	Frank King	4	2	3	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					1000	nf,birds, Feb 3, 2020	mstr1056982
Anas americana	American Wigeon	Anatidae	Frank King	27	2	3	2020	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine					1000	nf,birds, Feb 3, 2020	mstr1056983
Chroicocephalus ridibundu	Black-headed Gull	Laridae	Frank King	1	2	3	2020	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive					1000	nf,birds, Feb 3, 2020	mstr1056984
Larus fuscus	Lesser Black-backed G	Laridae	Frank King	2	2	3	2020	S3N,SUM	S3N	UN,N4N5N	G5	Secure					1000	nf,birds, Feb 3, 2020	mstr1056985
Aythya fuligula	Tufted Duck	Anatidae	Frank King	2	2	3	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide					1000	nf,birds, Feb 3, 2020	mstr1056986
Anas americana	American Wigeon	Anatidae	Frank King	4	2	3	2020	S3B,SUM	S3B	45B,N5N,N	G5	Undetermine					1000	nf,birds, Feb 3, 2020	mstr1056987
Loxia curvirostra	Red Crossbill	Fringillidae	Matt Eggington	2	3	25	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	Email submission to Endan	mstr1057015
Loxia curvirostra	Red Crossbill	Fringillidae	Alvan Buckley	a few	4	29	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		100	nf,birds, Apr 29, 2020	mstr1057040
Loxia curvirostra	Red Crossbill	Fringillidae	Howard Clase	1	4	30	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		100	nf,birds, Apr 30, 2020	mstr1057041
Hirundo rustica	Barn Swallow	Hirundinidae	Anne Hughes, Me	2	5	8	2020	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened				1000	nf,birds, May 8, 2020	mstr1057049
Quiscalus quiscula	Common Grackle	Icteridae	Gemma Rayner	1	5	8	2020	S5B,S3?N, SUA	S5B	45B,NUN,N	G5	Secure					1000	nf,birds, May 8, 2020	mstr1057050
Quiscalus quiscula	Common Grackle	Icteridae	Dave Brown	1	5	8	2020	S5B,S3?N, SUA	S5B	45B,NUN,N	G5	Secure					1000	nf,birds, May 8, 2020	mstr1057051
Hirundo rustica	Barn Swallow	Hirundinidae	Edmund Hayden	4	5	10	2020	S2B,SUM	S1S2B	I3N4B,N3N	G5	Secure	Threatened				100	nf,birds, May 10, 2020	mstr1057061
Loxia curvirostra	Red Crossbill	Fringillidae	Ian Jones, JW	2	5	13	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, May 13, 2020	mstr1057062
Loxia curvirostra	Red Crossbill	Fringillidae	Ian Jones, JW	6	5	19	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, May 19, 2020	mstr1057068
Loxia curvirostra	Red Crossbill	Fringillidae	Les Sweetapple	3	5	19	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, May 19, 2020	mstr1057069
Loxia curvirostra	Red Crossbill	Fringillidae	Howard Clase	1	5	17	2020	S1S2	S2S3	45B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered		1000	nf,birds, May 17, 2020	mstr1057072
Limnodromus griseus	Short-billed Dowitcher	Scolopacida	Gene Herzberg	1	9	2	2012	S3M	S3S4N	NUB,N5M	G5	Secure					1000	nf,birds, Sept 2, 2012	mstr1057103
Desmocerus palliatus	Eastern Elderberry Bore	Ceramyeida	inaturalist user: tiff		8	11	2019	S3		N5	G5					Division No. 1	64	iNaturalist record export 202	mstr1060082
Quiscalus quiscula	Common Grackle	Icteridae	inaturalist user: na		1	4	2019	S5B,S3?N, SUA	S5B	45B,NUN,N	G5	Secure				Division No. 1	99	iNaturalist record export 202	mstr1059981

Anas americana	American Wigeon	Anatidae	inaturalist user: na	11	13	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	19	iNaturalist record export 202	mstr1060669
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: bo	1	9	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	22	iNaturalist record export 202	mstr1060601
Chroicocephalus ridibundu	Black-headed Gull	Laridae	inaturalist user: db	4	28	2019	S1B, S3N,SUM	S1B,S3N	3B,N3N4N	G5	Sensitive		Division No. 1	8	iNaturalist record export 202	mstr1060940
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: bo	8	26	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	8	iNaturalist record export 202	mstr1060989
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	1037	iNaturalist record export 202	mstr1058520
Anas americana	American Wigeon	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	1037	iNaturalist record export 202	mstr1058522
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: m	2	16	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	1037	iNaturalist record export 202	mstr1058523
Anas americana	American Wigeon	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	1037	iNaturalist record export 202	mstr1058524
Anas americana	American Wigeon	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	1037	iNaturalist record export 202	mstr1058527
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: m	2	16	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	1037	iNaturalist record export 202	mstr1058530
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	1037	iNaturalist record export 202	mstr1058533
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: m	2	16	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	1037	iNaturalist record export 202	mstr1058534
Anas americana	American Wigeon	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	1037	iNaturalist record export 202	mstr1058536
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	1037	iNaturalist record export 202	mstr1058538
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: m	2	16	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	1037	iNaturalist record export 202	mstr1058542
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: m	2	16	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	1037	iNaturalist record export 202	mstr1058543
Anas americana	American Wigeon	Anatidae	inaturalist user: m	2	16	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	1037	iNaturalist record export 202	mstr1058550
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	12	17	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	968	iNaturalist record export 202	mstr1058613
Larus fuscus	Lesser Black-backed Gu	Laridae	inaturalist user: sa	12	17	2019	S3N,SUM	S3N	UN,N4N5N	G5	Secure		Division No. 1	968	iNaturalist record export 202	mstr1058614
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	1	4	2020	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	968	iNaturalist record export 202	mstr1058616
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	1	4	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	968	iNaturalist record export 202	mstr1058617
Anas acuta	Northern Pintail	Anatidae	inaturalist user: hn	1	30	2011	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	837	iNaturalist record export 202	mstr1058645
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: na	6	22	2018	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	384	iNaturalist record export 202	mstr1058825
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	27	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058941
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	27	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058942
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: sa	9	27	2018	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low	Division No. 1	352	iNaturalist record export 202	mstr1058943
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	10	1	2018	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059050
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	9	8	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059053
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	7	2	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058851
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	7	15	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058854
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	7	15	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	367	iNaturalist record export 202	mstr1058855
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	7	17	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	367	iNaturalist record export 202	mstr1058860
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	7	26	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058866
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	7	26	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058868
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	8	4	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058876
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	8	4	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058877
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	9	10	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058880
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	4	27	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	367	iNaturalist record export 202	mstr1058887
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	4	27	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058890
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	11	19	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	367	iNaturalist record export 202	mstr1058894
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	11	19	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058897
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	12	4	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058899
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	12	4	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	367	iNaturalist record export 202	mstr1058900
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	12	4	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	367	iNaturalist record export 202	mstr1058901
Quiscalus quiscula	Common Grackle	Icteridae	inaturalist user: sa	8	8	2018	35B,S3?N, SU	S5B	5B,NUN,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058909
Quiscalus quiscula	Common Grackle	Icteridae	inaturalist user: sa	8	8	2018	35B,S3?N, SU	S5B	5B,NUN,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058911
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: sa	8	8	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened	Division No. 1	352	iNaturalist record export 202	mstr1058912
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	8	8	2018	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058913
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	7	12	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058917
Circus cyaneus	Northern Harrier	Accipitridae	inaturalist user: sa	9	11	2018	S3B,SUM	S3?B	N5B,N4N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058920
Anas discors	Blue-winged Teal	Anatidae	inaturalist user: sa	9	11	2018	SUB, S1M	S2B	N5B,N5M	G5	Sensitive		Division No. 1	352	iNaturalist record export 202	mstr1058924
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: sa	9	11	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened	Division No. 1	352	iNaturalist record export 202	mstr1058925
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	9	11	2018	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058926
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: sa	9	11	2018	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low	Division No. 1	352	iNaturalist record export 202	mstr1058927
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	11	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058928
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	18	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058931
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	9	18	2018	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058934
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: sa	9	21	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened	Division No. 1	352	iNaturalist record export 202	mstr1058936
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	21	2018	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058938
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	9	27	2018	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058945
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: sa	8	15	2019	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low	Division No. 1	352	iNaturalist record export 202	mstr1058951
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	8	15	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058955
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	8	15	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058956
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: sa	8	23	2019	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low	Division No. 1	352	iNaturalist record export 202	mstr1058965
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	8	23	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058969
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	8	23	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058971
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: sa	8	28	2019	S3M	S3N	4N5B,N5N	G5	Secure	Threatened	Division No. 1	352	iNaturalist record export 202	mstr1058974
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	8	28	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058975
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	8	28	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058976
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	8	28	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058977
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: sa	8	28	2019	S4B, S3N,SUM	S5B	5B,N4N5N	G5	Secure	ate (Group 3, Low	Division No. 1	352	iNaturalist record export 202	mstr1058980
Ondatra zibethicus	Muskrat	Cricetidae	inaturalist user: sa	8	28	2019	S3S4	S5	N5	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058983
Ondatra zibethicus	Muskrat	Cricetidae	inaturalist user: sa	8	29	2019	S3S4	S5	N5	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058985
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	9	13	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058990
Anas americana	American Wigeon	Anatidae	inaturalist user: sa	9	13	2019	S3B,SUM	S3B	5B,N5N,N	G5	Undetermine		Division No. 1	352	iNaturalist record export 202	mstr1058991
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	9	13	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058992
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa	9	13	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	352	iNaturalist record export 202	mstr1058993
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: ric	8	25	2019	S3B, S4M	S4B,S5M	5B,N4N,N	G5	Secure		Division No. 1	344	iNaturalist record export 202	mstr1058999
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	6	17	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	314	iNaturalist record export 202	mstr1059015
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	7	17	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059048
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	11	2	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059058
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	11	2	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	304	iNaturalist record export 202	mstr1059059
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa	5	14	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059063
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa	11	12	2019	S3B,SUM	S3B	5B,N5N,N	G5	Secure		Division No. 1	304	iNaturalist record export 202	mstr1059065
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: sa	9	5	2018	S3M	S3N	4N5B,N5N	G5	Secure	Threatened	Division No. 1	182	iNaturalist record export 202	mstr1059361
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa	8	17	2019	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide		Division No. 1	203	iNaturalist record export 202	mstr1059183
Agelaius phoeniceus	Red-winged Blackbird	Icteridae	inaturalist user: sa	6	4	2019	S1B,SUM	S1S2B	5B,N5N,N	G5	Sensitive		Division No. 1	199	iNaturalist record export 202	mstr1059196

Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		9	21	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	186	iNaturalist record export 202	mstr1059314
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: sa		9	21	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	186	iNaturalist record export 202	mstr1059316
Aeshna subarctica	Subarctic Darner	Aeshnidae	inaturalist user: sa		8	19	2019	S3	S3?	N5	G5	Jndetermined				Division No. 1	185	iNaturalist record export 202	mstr1059326
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa		8	20	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059353
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		9	5	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	182	iNaturalist record export 202	mstr1059360
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa		9	17	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059369
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa		9	17	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059370
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		9	17	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	182	iNaturalist record export 202	mstr1059373
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa		9	30	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059379
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		9	30	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	182	iNaturalist record export 202	mstr1059380
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		10	17	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	182	iNaturalist record export 202	mstr1059384
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa		10	17	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059385
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa		10	23	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059386
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: sa		10	23	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059387
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa		10	23	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059390
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: sa		10	23	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	182	iNaturalist record export 202	mstr1059392
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa		10	26	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	182	iNaturalist record export 202	mstr1059394
Anas acuta	Northern Pintail	Anatidae	inaturalist user: sa		12	17	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	180	iNaturalist record export 202	mstr1059553
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	inaturalist user: sa		1	1	2020	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern			Division No. 1	155	iNaturalist record export 202	mstr1059780
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: tiff		9	26	2018	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	153	iNaturalist record export 202	mstr1059835
Anas acuta	Northern Pintail	Anatidae	inaturalist user: pa		3	7	2008	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	100	iNaturalist record export 202	mstr1059970
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: pa		3	7	2008	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	100	iNaturalist record export 202	mstr1059974
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: rya		8	22	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	64	iNaturalist record export 202	mstr1060087
Chroicocephalus ridibundu	Black-headed Gull	Laridae	inaturalist user: bo		2	21	2020	S1B, S3N,SUM	S1B,S3N	I3B,N3N4N	G5	Sensitive				Division No. 1	61	iNaturalist record export 202	mstr1060162
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: bo		2	21	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	61	iNaturalist record export 202	mstr1060163
Anas acuta	Northern Pintail	Anatidae	inaturalist user: pa		10	27	2009	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	50	iNaturalist record export 202	mstr1060236
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: lia		1	2	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	8	iNaturalist record export 202	mstr1061025
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: lia		1	2	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	8	iNaturalist record export 202	mstr1061027
Aegolius acadicus	Northern Saw-whet Owl	Strigidae	inaturalist user: db		4	28	2019	S3?	S1?	I5B,N5N,N	G5	Jndetermined				Division No. 1	25	iNaturalist record export 202	mstr1060545
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: kn		9	12	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	39	iNaturalist record export 202	mstr1060317
Desmocerus palliatus	Eastern Elderberry Bore	Ceramyeida	inaturalist user: na		9	10	2018	S3		N5	G5					Division No. 1	35	iNaturalist record export 202	mstr1060336
Anas acuta	Northern Pintail	Anatidae	inaturalist user: kn		9	19	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	31	iNaturalist record export 202	mstr1060446
Megaceryle alcyon	Belted Kingfisher	Alcedinidae	inaturalist user: bo		8	26	2019	S4B, S3N,SUM	S5B	I5B,N4N5N	G5	Secure	ate (Group 3, Low			Division No. 1	31	iNaturalist record export 202	mstr1060461
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: lia		1	2	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	31	iNaturalist record export 202	mstr1060480
Larus fuscus	Lesser Black-backed Gu	Laridae	inaturalist user: bo		2	21	2020	S3N,SUM	S3N	IUN,N4N5N	G5	Secure				Division No. 1	31	iNaturalist record export 202	mstr1060484
Anas acuta	Northern Pintail	Anatidae	inaturalist user: pa		3	2	2008	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	30	iNaturalist record export 202	mstr1060500
Anas acuta	Northern Pintail	Anatidae	inaturalist user: tyl		5	8	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	29	iNaturalist record export 202	mstr1060507
Desmocerus palliatus	Eastern Elderberry Bore	Ceramyeida	inaturalist user: na		9	11	2018	S3		N5	G5					Division No. 1	28	iNaturalist record export 202	mstr1060511
Tringa melanoleuca	Greater Yellowlegs	Scolopacida	inaturalist user: na		8	8	2018	S3B, S4M	S4B,S5M	I5B,N4N,N	G5	Secure				Division No. 1	27	iNaturalist record export 202	mstr1060522
Larus fuscus	Lesser Black-backed Gu	Laridae	inaturalist user: jhs		1	13	2020	S3N,SUM	S3N	IUN,N4N5N	G5	Secure				Division No. 1	24	iNaturalist record export 202	mstr1060571
Bombus vagans	Half-black Bumble Bee	Apidae	inaturalist user: de		7	19	2018	S3S5		N5	G4	Sensitive				Division No. 1	20	iNaturalist record export 202	mstr1060641
Anas acuta	Northern Pintail	Anatidae	inaturalist user: na		9	14	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	19	iNaturalist record export 202	mstr1060667
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: ma		8	8	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	18	iNaturalist record export 202	mstr1060677
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: bo		9	25	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	16	iNaturalist record export 202	mstr1060705
Anas americana	American Wigeon	Anatidae	inaturalist user: bo		8	26	2019	S3B,SUM	S3B	I5B,N5N,N	G5	Jndetermined				Division No. 1	15	iNaturalist record export 202	mstr1060775
Tringa flavipes	Lesser Yellowlegs	Scolopacida	inaturalist user: bo		8	26	2019	S3M	S3N	I4N5B,N5N	G5	Secure	Threatened			Division No. 1	15	iNaturalist record export 202	mstr1060776
Aythya fuligula	Tufted Duck	Anatidae	inaturalist user: lia		1	2	2020	S1N,SUM	SNA	N1N,NUM	G5	grant/ Accide				Division No. 1	15	iNaturalist record export 202	mstr1060814
Anas americana	American Wigeon	Anatidae	inaturalist user: bo		2	21	2020	S3B,SUM	S3B	I5B,N5N,N	G5	Jndetermined				Division No. 1	15	iNaturalist record export 202	mstr1060816
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: ka		10	3	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	6	iNaturalist record export 202	mstr1061102
Anas platyrhynchos	Mallard	Anatidae	inaturalist user: ka		10	3	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	6	iNaturalist record export 202	mstr1061103
Anas acuta	Northern Pintail	Anatidae	inaturalist user: ka		10	3	2018	S3B,SUM	S3B	I5B,N5N,N	G5	Secure				Division No. 1	6	iNaturalist record export 202	mstr1061104
Loxia curvirostra	Red Crossbill	Fringillidae	inaturalist user: jfn		7	16	2019	S1S2	S2S3	I5B,N5N,N	G5	At Risk	Threatened	Endangered	Endangered	Division No. 1	4	iNaturalist record export 202	mstr1061277
Contopus cooperi	Olive-sided Flycatcher	Tyrannidae	Alvan Buckley	1	6	5	2020	S3B,SUM	S3S4B	N4B,N3M	G4	At risk	Special Concern	Threatened	Threatened		1000	nf.birds, june 5, 2020	mstr1061388
Chaetura pelagica	Chimney Swift	Apodidae	Dave Brown	1	6	10	2020	SNR	SNR	N4B,N3M	G4G5	grant/ Accide	Threatened	Threatened	Threatened		1000	nf.birds, June 10, 2020	mstr1061392
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Howard Clase		12	8	2000	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Dec 8, 2000	mstr1061478
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Wanda	1	1	21	2001	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Jan 21, 2001	mstr1061480
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Jared Clarke, Jytt	10	12	6	2002	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Dec 6, 2002	mstr1061501
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Michael Parmente	20	11	13	2005	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Nov 13 2005	mstr1061535
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Bruce Mactavish	15	2	11	2007	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				5000	nf.birds, Feb 11 2007	mstr1061542
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Nevin Foltz	2	11	17	2008	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				100	nf.birds, Nov 17 2008	mstr1061562
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Dave Brown	11	10	7	2012	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Oct 7 2012	mstr1061599
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Bruce Mactavish		10	8	2012	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Oct 8, 2012	mstr1061600
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	David Smith	1	11	12	2014	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				100	nf.birds, Nov 12 2014	mstr1061626
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Avlan Buckley	1	4	24	2016	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				100	nf.birds, Apr 24 2016	mstr1061648
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Alvan Buckley, JT	6	10	28	2018	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Oct 28 2018	mstr1061660
Coccothraustes vespertinu	Evening Grosbeak	Fringillidae	Dave Brown	15-20	11	18	2018	S4	S4B,S5N	I4B,N4N,N	G5	Secure	Special Concern				1000	nf.birds, Nov 18 2018	mstr1061663

GNAME	GCOMNAME	OBSERVER	MONTH	DAY	YEAR	Verification	SRANK_2010	SRANK_2015	NRANK	GRANK	FAMILY	PROV_END_A	COSEWIC	DESCR_HABITA	ACCURACY_ME	SYNAME	SITE_NAME	SURVEYSITE	ACRONYMS_O	COLLECTION	SOURCES	IDNUM	EST_NF_ID
Sparganium fluctuans	Floating Bur-Reed	Robinson, B.L. & H. Schre			0	v	S2	S2S3	N5	G5	Sparganiaceae				1000	Sparganium and	Virginia Waters	Virginia Waters	GH; CAN	200	Bouchard, A. Di	SP26251	476097
Fraxinus nigra	Black Ash	Inkpen			0	v	S3	S3	N5	G5	Oleaceae			(cultivated?).	1000		St John's	St John's; Windsor La	NFLD	11	Bouchard, A. Di	SP24369	455413
Diphasiastrum digitatum	southern running-pine	Fernald, M.L., K.M. Wiega	8	7	1911	v	S2	S2	N5	G5	Lycopodiaceae			Dry humus on e	100	Lycopodium digit	St John's	St John's, south of.	GH, DAO	4393	Bouchard, A. Di	SP26426	376418
Potamogeton amplifolius	Large-Leaf Pondweed	Ayre, A.M.			1929	v	S2	S2S3	N5	G5	Potamogetonace				1000		Quidi Vidi	Quidi Vidi	NFLD	s.n.	Bouchard, A. Di	SP26202	628848
Scirpus cyperinus	Cottongrass Bulrush	Scott, Peter J.	8	4	1968	v	S2S3	S3S4	N5	G5	Cyperaceae			Wet ditch	1000	Eriophorum cype		St. John's, Penetangu	NFLD	538		SP26796	525578
Juncus militaris	Bayonet Rush	Maunder, John E.	8	22	1967	v	S3	S3	N5	G5	Juncaceae			Dry, grassy area	10		Rennies River	St. John's, Rennies R	NFM		Herbarium of the	SP43691	603241
Amelanchier fernaldii	Fernald Serviceberry	Maunder, John E.	6	6	1967		S1	S1	N3N4	G3?	Rosaceae		Candidate (Priority 3)	Dry, open woods	1000	Amelanchier san	Kent's Pond	St. John's, Kent's Pon	NFM		Herbarium Data	SP22199	619703
Carex rostrata	Beaked Sedge	Maunder, John E.	9	20	1967	v	S3S5	S3S4	N5	G5	Cyperaceae			Side of pond, we	100	Carex rostrata va	Long Pond	St. John's, Long Pond	NFM		Herbarium Data	SP22232	504185
Prunella vulgaris	Self-Heal	Maunder, John E.	7		1967	v	S3S4	S3S5	N5	G5	Lamiaceae				100		Kent's Pond	St. John's, Kent's Pon	NFM		Herbarium Data	SP22125	544712
Sparganium natans	Small Bur-Reed	Peter J. Scott	8	8	1968		S3S4	S3S4	N5	G5	Sparganiaceae			In water, just the	100	Sparganium mini	Penetanguishene	St. John's, end of Fire	NFLD	566	Jane Ayre Herba	SP21916	470969
Hordeum jubatum subsp. jubatum	foxtail barley, squirreltail g	Olsen, O.A.	9	10	1973	v	S1S2	S2S3	N5	G5T5	Poaceae			Gravelly roadside	1000	Crtesion jubatun	Memorial Univers	St. John's, MUN Cam	NFM		Herbarium Data	SP22228	273772
Carex viridula subsp. brachyrrhyncha var.	sarocky shore sedge	Olsen, O.A.	8	3	1973	v	S1	S1	N1	G5T1	Cyperaceae		Candidate (Priority 3)		1000	Carex saxilittoral	Memorial Univers	St. John's, M.U.N. Can	NFM	CW 028	Herbarium Data	SP42694	299269
Omalotheca sylvatica	Woodland Cudweed	Joanna Shannon	10	4	1991		S3S4	S3S4	N4N5	G4G5	Asteraceae			Grassy area, uns	10	Gnaphalium sylv	Memorial Univers	St. John's, MUN camp	NFLD	s.n.	Jane Ayre Herba	SP21619	451915
Matteuccia struthiopteris var. pensylvanica	ostrich fern		10	2	1994		S3S4	S3S4	N5	G5T5	Dryopteridaceae				100	Struthiopteris pe	Outer Ring Road	St. John's, C.A. Pippy			Pamela Pippy La	SP22099	997712
Ribes hirtellum	Smooth Gooseberry	Botanical Garden			1999		S3S4	S3S4	N5	G5	Grossulariaceae			Wetland/riparian	1000	Grossularia hirte	Juniper Ponds / I	St. Johns Outer Ring			MUN Botanical (	SP21765	468865
Persicaria amphibia	water smartweed	Botanical Garden			1999		S2	S2	N5	G5	Polygonaceae			Bog habitat.	1000	Polygonum ampl	Juniper Ponds / I	St. Johns Outer Ring			MUN Botanical (	SP21832	414337
Eriophorum russeolum	Russet Cotton-Grass	Hanel, C., Parsons, M., ar	6	12	2002	v	S3	S3	N5	G5	Cyperaceae			Bog patch in hun	10		Golf Course, N o	St. John's, C.A. Pippy	NFM	CH 020612-16	Field work.	SP22316	567005
Nymphaea odorata subsp. odorata	fragrant waterlily, water ny	Horwood, C.			2002		S3	S3	N5	G5	Nymphaeaceae			Standing water a	100	Castalia odorata	Fogarty's Wetlar	St. John's, C.A. Pippy			Horwood, C. 200	SP22438	533381
Prunella vulgaris	Self-Heal	Hanel, C., Parsons, M., ar	6	7	2002		S3S4	S3S5	N5	G5	Lamiaceae			Mature Picea an	10		Mount Scio Esca	St. John's, C.A. Pippy			Field work.	SP22451	544712
Eleocharis ovata	Ovate Spikerush	Ayre, A.M.			1.9E+07	v	S1	S1	N5	G5	Cyperaceae			Marsh.	1000	Scirpus ovatus; I	Quidi Vidi	Quidi Vidi.	GH; NFLD	s.n.	Bouchard, A. Di	SP25534	518908
Hordeum jubatum subsp. jubatum	foxtail barley, squirreltail g	Maunder, John E.	8	3	1967	v	S1S2	S2S3	N5	G5T5	Poaceae				1000	Crtesion jubatun		St. John's, near Arts /	NFM		Herbarium Data	SP22227	273772
Arabis alpina	Alpine Rockcress	Maunder, John E.	6	14	1968	v	S3	S3	N5	G5	Brassicaceae				50	Arabis alpina fon		St. John's, in garden	NFM		Herbarium Data	SP47657	298324
Fraxinus nigra	Black Ash	Maunder, John E.	7	18	1967	v	S3	S3	N5	G5	Oleaceae				50			St. John's, Kenny's Pi	NFM		Herbarium Data	SP50050	455413
Aralia hispida	Bristly Sarsaparilla	Maunder, John E.	9	20	1967	v	S4S5	S3S4	N5	G5	Araliaceae				50			St. John's, Torbay roa	NFM		Herbarium Data	SP49265	592087
Diphasiastrum sitchense	Sitka clubmoss, tufted gro	Tuomikoski, R.	6	3	1949	v	S3	S3S4	N5	G5	Lycopodiaceae				1000	Lycopodium sitch	Signal Hill	Signal Hill(NF)	CAN		Herbarium Data	SP53229	561120
Warnstorfia fluitans	a Moss	Tuomikoski, R.	6	3	1949	v		S3S4	N5	G5	Calliergonaceae				1000		Signal Hill	Signal Hill(NF)	CAN		Herbarium Data	SP55395	942313
Poa pratensis subsp. irrigata	spreading bluegrass	Robinson, B.L.; Schrenk, I	8	4	1894	v	S3	S3	NNA	G5TU	Poaceae			Open woods	1000	Poa irrigata; P. p	St. John's(NF)		CAN		Herbarium Data	SP52295	424365
Rhinanthus minor	Little Yellow-Rattle	Robinson, B.L.; Schrenk, I	7	31	1894	v	S3	S3	N5	G5	Scrophulariacea			Fields	1000		St. John's(NF)		CAN		Herbarium Data	SP54458	483438
Sphagnum strictum	a Peatmoss	Damman, A.W.H.; Tusko,	7	14	1964	v	S2	S3S4	N4N5	G5	Sphagnaceae			Small boggy poo	1000		St. John's(NF)	Soldiers Pond, SW of	CAN		Herbarium Data	SP55075	257282
Buxbaumia minakatae	Hump-Backed Elves	R. Tuomikoski			0	v	S1	S2?	N1N3	G2G4	Buxbaumiaceae		Candidate (Group 1, Hi		10000			Waterford Bridge, St.			Email Communic	SP70694	255674

ACRONYM	HERBARIUM	ADDRESS	PO_BOX	CITY	PROVINCE	POSTALCODE	COUNTRY	URL	PHONE	CORRESPONDENT	TITLE	EMAIL
ACAD	Acadia University	32 University Avenue	P.O. Box 48	Wolfville	Nova Scotia	B4P 2R6	Canada		[1] 902/ 585-1335	Ruth Newell	Curator	ruth.newell@acadiau.ca
ALTA	University of Alberta			Edmonton	Alberta	T6G 2E9	Canada	http://museums.ualberta.ca/vascularplants/index.aspx	[1] 780/ 492-5523	Jocelyn Hall	Curator of Vascular Plant Herbarium	jocelyn.hall@ualberta.ca
CAN	Canadian Museum of Nature		P.O. Box 3443 Station D	Ottawa	Ontario	K1P 6P4	Canada		[1] 613/ 364-4076.	Jennifer Doubt	Chief Collection Manager	jdoubt@mus-nature.ca
CO	Museum National d'Histoire Naturelle		B.P. 225	Concarneau		F-29125	France		[33] 2/ 98 97 0659	Marie Le Gal	Curator	ylegal@sb-roscoff.fr
DAO	Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada	Wm. Saunders Building, Central Experimental Farm 1350 Regent Street		Ottawa	Ontario	K1A 0C6	Canada	http://res2.agr.ca/ecorc/dao/index_e.htm	[1] 613/ 759-1373	Paul Catling	Curator	catlingp@agr.gc.ca
FFB	Atlantic Forestry Centre	Centre, Canadian Forest Service	P. O. Box 4000	Fredricton	New Brunswick	E3B 5P7	Canada	http://www.Atl.cfs.NRCan.gc.ca	[1] 506/ 452-3515	J. Hurley	Curator	J.Edward.Hurley@NRCan.gc.ca
GH	Gray Herbarium, Harvard University	22 Divinity Avenue		Cambridge	Massachusetts	02138-2020	USA	http://www.huh.harvard.edu	[1] 617/ 495-2365	Emily Wood	Manager of Systematics Collections	ewood@oeb.harvard.edu
GMNP	Gros Morne National Park		P.O. Box 130	Rocky Harbour	Newfoundland	A0K 4N0	Canada		Contact [1] 709/ 458-2418	Michael Burzunski	Chief Park Interpreter	Michael.Burzynski@pc.gc.ca
H	University of Helsinki		P.O. Box 7	Helsinki		FIN-00014	Finland	http://www.fmnh.helsinki.fi/english/botany/index.htm	[358] 9/ 1911	Pertti Uotila	Director, Head Curator of Phanerogams	pertti.uotila@helsinki.fi
LD	Botanical Museum	Östra Vallgatan 18		Lund		S-223 61	Sweden	http://www.biomus.lu.se/indexBe.html	[46] 46/ 222 95 58	Ingvar Kärnefelt	Director	ingvar.karnefelt@botmus.lu.se
MB	Herbarium fur Spezielle Botanik, Philipps Universitat			Marburg		D-35032	Germany	http://staff-www.uni-marburg.de/	[49] 6421/ 282 2091	Hans Weber	Curator	weberh@mailer.uni-marburg.de
MO	Missouri Botanical Gardens		P.O. Box 299	St. Louis	Missouri	63166-0299	USA	http://www.mobot.org/	[1] 314/ 577-5169	James Solomon	Curator of Vascular Plants	jim.solomon@mobot.org
MT	Herbier Marie-Victorin, Universite de Montreal	4101, rue Sherbrooke est		Montreal	Quebec	H1X 2B2	Canada	http://www.irbv.umontreal.ca/francais/herbier/accueil.htm	[1] 514/ 872-8496	Luc Brouillet	Curator	brouille@irbv.umontreal.ca; luc.brouillet@umontreal.ca
NASC	Massachusetts College of Liberal Arts	375 Church Street		North Adams	Massachusetts	01247-4100	USA		[1] 413/ 662-5342	C. Hellquist	Curator of Vascular Plants	bhellqui@mcla.mass.edu
NFLD	Ayre Herbarium, Memorial University of Newfoundland			St. John's	Newfoundland	A1B 3X9	Canada		[1] 709/ 737-7498	Peter Scott	Curator	pscott@mun.ca
NFM	Provincial Museum of Newfoundland and Labrador	9 Bonaventure Avenue	P.O. Box 1800	St. John's	Newfoundland	A1C 5P9	Canada	http://www.therooms.ca/museum/	[1] 709/ 729-5007	Nathalie Djan-Chekar	Curator	nathaliedjanchekar@therooms.ca
NY	New York Botanical Garden	William and Lynda Steere Herbarium		Bronx	New York	10458-5126	USA	http://www.nybg.org/	[1] 718/ 817-8626	Barbara Thiers	Director	bthiers@nybg.org
OAC	Univeristy of Guelph			Guelph	Ontario	N1G 2W1	Canada	http://www.uoguelph.ca/ib/facilities/herbarium.shtml	[1] 519/ 824-4120, ext. 58581	Carole Ann Lacroix	Curator of Phanerogam Collections	botcal@uoguelph.ca
QFA	Herbier Louis-Marie, Universite de Laval	Pavillon C.-E. Marchand Sainte-Foy		Quebec	Quebec	G1V 0A6	Canada	www.herbier.ulaval.ca	[1] 418/ 656-7538	Serge Payette	Curator	serge.payette@herbier.ulaval.ca
SLRO	Slippery Rock University	Herbarium Biology Department		Slippery Rock	Pennsylvania	16057-1326	USA		[1] 724/ 738-2489	Jerry Chmielewski	Curator	jerry.chmielewski@sru.edu
SWGC	Sir Wilfred Grenfell College			Corner Brook	Newfoundland		Canada			Henry Mann		hmann@swgc.mun.ca
TNNP	Terra Nova National Park			Terra Nova	Newfoundland		Canada			Greg Stroud		Greg.Stroud@pc.gc.ca
TRTE	Erindale College	Herbarium Department of Biology, 3359 Mississauga Road, N		Mississauga	Ontario	L5L 1C6	Canada		[1] 905/ 828-3984	Peter Ball	Curator	pball@credit.erin.utoronto.ca

ACRONYM	HERBARIUM	ADDRESS	PO_BOX	CITY	PROVINCE	POSTALCODE	COUNTRY	URL	PHONE	CORRESPONDENT	TITLE	EMAIL
TSM	Museo Civico di Storia Naturale	Piazza Hortis 4		Trieste		I-34123	Italy		[39] 040/ 6758658	Sergio Dolce	Director	dolces@comune.trieste.it
UAC	University of Calgary	Department of Biological Sciences		Calgary	Alberta	T2N 1N4	Canada		[1] 403/ 220-5262	C. Chinnappa	Curator	ccchinna@acs.ucalgary.ca
UBC	UBC Herbarium, Beaty Biodiversity Museum	3529-6270 University Boulevard		Vancouver	British Columbia	V6T 1Z4	Canada	http://www.beatymuseum.ubc.ca/herbarium/index.html	[1] 604/ 822-3344; 822-2133.	Jeannette Whitton	Director and Curator of Vascular Plants	jwhitton@interchange.ubc.ca
UNB	University of New Brunswick	Connell Memorial Herbarium Biology Department	P.O. Box 4400	Fredricton	New Brunswick	E3B 5AE	Canada	http://www.unb.ca/herbarium/	[1] 506/ 452-6205	Bev Benedict	Curator of Vascular Plants	bbenedic@unb.ca
US	Smithsonian Institute	United States National Herbarium Department of Botany NMNH, MRC-	P.O. Box 37012	Washington	District of Columbia	20013-7012	USA	http://www.nmnh.si.edu/sysbiology/	[1] 202/ 633-0920.	George Russell	Collections Manager	russellr@si.edu
UWO	University of Western Ontario	Herbarium, Department of Biology		London	Ontario	N6A 5B7	Canada		[1] 519/ 661-2111	Jane Bowles	Curator	jbowles@uwo.ca
WAT	University of Waterloo	Herbarium, Biology Department		Waterloo	Ontario	N2L 3G1	Canada	http://www.science.uwaterloo.ca/biology/	[1] 519/ 888-4567, ext. 3751	John Semple	Director	jcsemple@sciborg.uwaterloo.ca

NOTE: All contact information presented here has been extracted from the online Herbaria of the World Index, url: http://sweetgum.nybg.org/ih/index.php for more information please visit the url provided.

DATA DICTIONARY

GNAME	Scientific Name of taxon
GCOMNAME	Common name of taxon
FAMILY	Family of taxon
OBSERVER	Person or persons who observed the taxon
TOTAL NUMBER	The number of specimens at a given observation.
MONTH	Month of survey
DAY	Day of survey
YEAR	Year of survey
SRANK_2010	Subnational rank - CDC ranking system
SRANK_2015	Subnational rank - CDC ranking system
NRANK	National Rank - CDC ranking system
GRANK	Global Rank - CDC ranking system
GeneralStatusRanks	General Status text for the province
COSEWIC_STATUS	Denotes the COSEWIC status.
PROVINCIAL_STATUS	Denotes if the species is on the provincial endangered species list.
SARA	Denotes if the species is on the federal SARA list.
HABITAT	Description of the habitat where plant or animal was found
SITE_NAME	The name of the place where the occurrence occurred
ACCURACY	The accuracy in metres of the location.
SYNAME	Synonym for the plant or animal name in cases it is known by more than one scientific name.
ACRONYM OF HERBARIA	Acronym of the herbarium where this specimen is kept, see the complete definitions of the acronyms in the HERBARIA.xls
COLLECTION NUMBER	The collection number assigned to the specimen by the collector, this should be used to refer to the specimen when contacting the herbarium
CITATION	Primary source of the data
IDNUM	Field Office Number: Internal ACCDC record reference (not the EONUM)

DATA SOURCES:
All data housed at Atlantic Canada Conservation Data Centre (ACCDC). Refer to 'CITATION' field for data sources.

CAVEATS:
ACCDC rare taxa occurrence records are offered as a guide recognizing that the ability to find plants and animals will depend upon the season. The ACCDC makes a strong effort to verify the accuracy of all the data it obtains, generates and manages, but it will not be held responsible for inaccuracies in data that it provides.

PLEASE NOTE:
* ACCDC data is restricted for use by the specified data user only; any third party requiring data must make its own request to the ACCDC.
* Specified data users may not publish any information provided by the ACCDC or its partners without prior permission.
* To ensure the currency of the data, the ACCDC requires Data Users to destroy all copies of data 18 months after the date of receipt.
* ACCDC data reports are restricted to that data in our Data System at the time of the request.
* Data accuracy is qualified as to location (Accuracy) and time (Date)
* ACCDC data reports are not to be constructed as exhaustive inventories of taxa in an area.
* The non-occupancy of a taxon cannot be inferred by its absence in an ACCDC data report.
* Museum databases, which are the basis for more accessible public databases, such as those of the ACCDC, are works in progress. Essentially, they are finding aids and dynamic data records, constructed primarily to serve scientists engaged in the continuing, active process of plant systematics and taxonomy. Ongoing additions of new collections, and frequent upgrades to the identifications of all plant specimens housed in museum herbaria, may not always be reflected, in real time, by databases such as those of the ACCDC. Specifically, the conservation status of individual species recorded in the ACCDC database may not be absolutely current. It is therefore the responsibility of the data user to contact the relevant museums directly, in order to check for the most current identifications of specimens of interest, and to ascertain from the scientists concerned, their current understanding of the conservation status of individual species in question. The absolute conservation status of any given species is dynamic, and subject to change over short periods of time.

APPENDIX G

Mitigation Measures

Appendix G: Mitigation Measures

During construction (and where upgrades or repairs are scheduled throughout infrastructure lifespan), the City and their contractors will comply with all relevant federal, provincial and municipal acts and regulations such as the *Environmental Protection Act* (SNL 2002: Chapter E-14.2), *Wild Life Act*, *Occupational Health and Safety Act*, *Fisheries Act*, *Migratory Birds Convention Act*, *Species at Risk Act* and their respective regulations. Most mitigation measures to be implemented during construction will be outlined in a series of project specific plans that will serve as guidelines to ensuring due diligence. Other mitigation measures that will be abided by include BMPs and the following:

- The flood mitigation infrastructure will be constructed as part of the mitigation measures for surface water management and land users. The flood mitigation infrastructure will be constructed to the design criteria for a 1:100 AEP climate change event.
- A site-specific Environmental Protection Plan (EPP) will be prepared and followed. The EPP will include requirements and responsibilities for training and mitigation measures to reduce effects to terrestrial, aquatic and human health such as accidental spills/leaks and release of fuel and mechanical fluids, hazardous materials, dust, and deleterious substances. At a minimum, the following topics will be included:
    - Emergency Response Plan
    - Emergency Spill Response Plan including locations of spill response equipment
    - Erosion and Sediment Control Plan
    - Handling and storage of fuel, gasoline and associated products
    - Waste management strategy
    - Invasive Species Mitigation Plan
    - Operation and maintenance of machinery
- The Erosion and Sediment Control Plan will be implemented prior to construction and will describe the measures implemented to prevent loss of soil during construction. The plan will include protecting topsoil by stockpiling for reuse; preventing sedimentation of storm sewer or receiving streams; and preventing air pollution by dust and particulate matter. Temporary erosion and pollution control devices such as silt fences will be used to mitigate possible sources of pollutants. The plan at a minimum will address the following:
    - Site dewatering
    - Protecting topsoil by stockpiling for reuse
    - Preventing sedimentation to receiving streams
    - Preventing air pollution by dust and particulate matter
    - Temporary erosion and pollution control devices such as silt fences will be used to mitigate possible sources of pollutants and their removal at completion of the Project
- Fueling and storage of gasoline and associated products (e.g. oils, greases, diesel, hydraulic and transmission fluids), should occur in a designated refueling/storage area at least 30 m from any waterbody and on flat, paved terrain.
- All maintenance of equipment should occur at least 30 m from a waterbody on flat, paved terrain.

- In the event of a spill or leak, the operator must immediately notify NLECCM and the Environmental Emergencies 24 Hour Report Line (1-800-563-9089), abate the discharge and restore the affected area to the satisfaction of the NLECCM.
- Any quarried materials required for the proposed Project shall be purchased from a supplier permitted under the *Quarry Materials Act* (1998).
- All soils and water impacted via spills and releases will be disposed of off-site in accordance with applicable environmental legislation.
- All debris and waste materials will be disposed of in accordance with the provisions of the *Environmental Protection Act* and latest regulations, guidelines and policies. Non-hazardous construction and demolition debris will be either recycled or salvaged. Items may include cardboard, metal, concrete, plastic, clean wood, and glass. The disposal of waste materials not reused, resold or recycled will be at an approved waste disposal site.
- On completion of the Project, construction equipment, surplus materials and temporary works will be removed from the site.
- On completion of the Project, any disturbed areas will be restored to the original conditions or better.
- Only new or reused, clean materials will be used for the purposes of the berm construction, backfill, and grading.
- All construction activities will occur during working hours as defined in the permit, and in compliance with local by-laws.
- All heavy machinery should be in good working order and operated in a manner to maximize fuel efficiency, thereby reducing greenhouse gas emissions and effects to air quality, such as emission and noise.
- Fueling and storage of gasoline and associated products (e.g. oils, greases, diesel, hydraulic and transmission fluids), should occur in a designated refueling/storage area at least 30 m from any waterbody and on flat, paved terrain.
- All maintenance of equipment should occur at least 30 m from any waterbody on flat, paved terrain.
- Storm water management structures, such as duckbill valves, will be installed, if necessary, within the Long Pond flow control structure berm to facilitate the flow of water towards Rennies River during storm events. As the water rises above the stormwater drainage piping on the Leary's Brook Side, the duckbill valves close and prevent water from flowing from the Long Pond side to the downstream side.
- Heavy machinery will not be permitted to enter Leary's Brook, Rennie's reviver or Long Pond.
- A cofferdam will be installed prior to the introduction of heavy machinery required to construct the flow control structure.
- All in-water works will be completed within periods of low flow to further reduce the risk to fish and fish habitat. Further information regarding the schedule is provided in **Error! Reference source not found.**.

- Adjacent to watercourses only clean rock fill materials (minimal fines) will be used to reduce the potential of release of sediments, or any other materials considered deleterious, to fish and fish habitat.
- Erosion and sediment control measures shall be implemented to reduce effects to fish and fish habitat. Such measures may include, but are not limited to, isolation measures (e.g., silt fences, and sand bags), minimizing the removal of vegetation and natural debris (e.g., rocks, logs, sand), and shoreline stabilization with appropriate materials (e.g., native vegetation, rip-rap or armour stone).
- Fish passage and flow should be maintained at all times, including with engineered solutions (installation of the flow control structure)
- All guidance and mitigation measures issued from DFO will be followed.
- The Project will be designed to minimize disruption to existing natural areas. Removal and disposal of trees, brush, stumps, surface litter, boulders and grubbing will follow applicable legislation, permits and BMPs. Vegetation, such as trees, and shrubs, should be retained when possible.
- All equipment must be devoid of soils, seeds, and residual debris prior to use on-site. Undercarriages, wheels, tracks and blades/buckets should be cleaned (i.e. pressure washed) prior to use on the site.
- The berms will be covered with topsoil, hydroseed and/or sod as well as revegetated with preference to native vegetation, trees and shrubs. A hydroseed mixture will be used in areas directly adjacent to watercourses. Sod will not be placed in locations directly adjacent to watercourse.
- Implementation of sediment and erosion control measures such as and installing erosion and sediment barriers (i.e., silt fence) as well as drainage control measures along the edge of the construction area to reduce the likelihood of contaminants entering the wetland (adjacent to the clinch crescent wall and the NRC building during construction by directing surface run-off into retention/sedimentation basins placed away from wetlands.
- Whenever possible, vegetation clearing will occur outside the breeding bird period (mid-April to mid-August). If this is not avoidable, and without implementation of mitigation measures, there could be a risk of impacting breeding birds and their nests. If vegetation clearing outside the breeding bird nesting period (mid-April to mid-August) is unavoidable, breeding bird /nest surveys will be completed prior to removal of vegetation or disturbance of potential habitat. A trained biologist should complete surveys to confirm the present of breeding birds and their nests. Nests and neighbouring vegetation will be left undisturbed until nesting is complete. If nests containing eggs, or young, of migratory birds are discovered during construction, disruptive activities in the nesting area should cease until nesting is completed. A buffer zone should be established at an appropriate set-back distance surrounding the nest. Appropriate set-back distances should be based on set-backs identified in the literature or in consultation with a provincial or federal wildlife biologist.

- The contractor shall develop a management plan encompassing measures to mitigate effects to migratory birds and incorporate this plan into the EPP. These measures shall include ways to avoid disturbing birds' nests or eggs.
- Mitigation measures to deter migratory birds from nesting in stockpiles during the breeding season shall also be implemented.
- Contractors should implement management practices to reduce the effects to migratory birds as a result of human induced light, such as reducing the number of site illuminating lights in the project area, where possible, and low intensity strobe lights at night.
- Best management practices for wildlife protection during construction will be incorporated into the EPP, such as proper waste management to deter wildlife from entering the Project area.
- Traffic control, where required, will be provided by certified traffic control personnel in accordance with the Traffic Control Manual issued by the NL Transportation and Infrastructure.
- Berm repairs will be completed, including regrading and planting and where applicable rip rap, to maintain berm conditions and aesthetic. The same will apply to the concrete all.
- Geotechnical inspection will be completed every 5 years including review of annual inspections.

APPENDIX H

Public Consultation Documents

OUR CITY. OUR FUTURE.

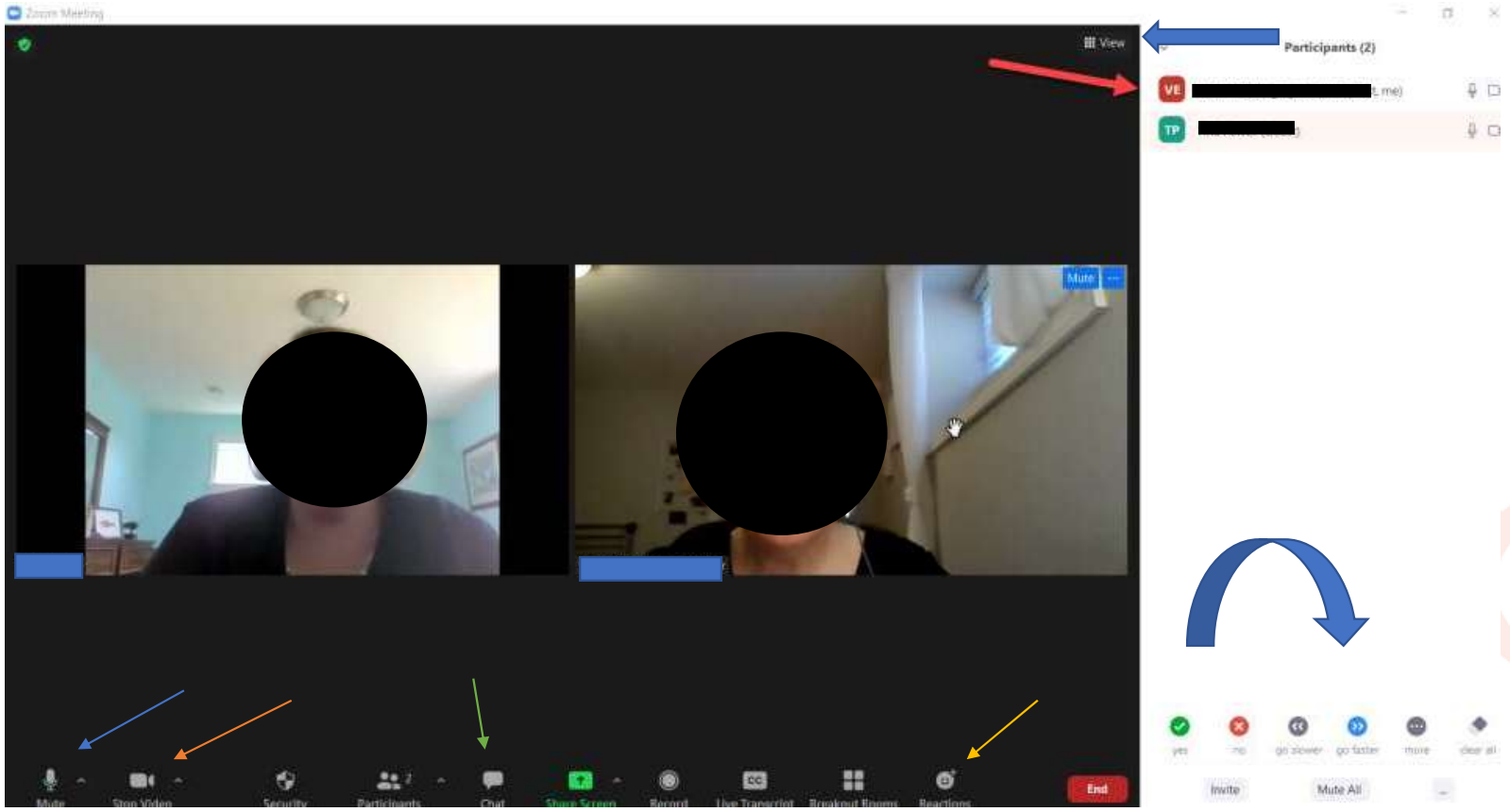
Long Pond Flow Control Structure and Flood Mitigation

Engagement Session

Facilitators: Laura Turner and CBCL
December 7th, 2021

ST. JOHN'S

Using Zoom


View
Participants (2)
Mute
Mute
Stop Video
Security
Participants
Chat
Share Screen
Record
Live Transcript
Breakout Rooms
Reactions
End
yes
no
go slower
go faster
more
clear all
Invite
Mute All

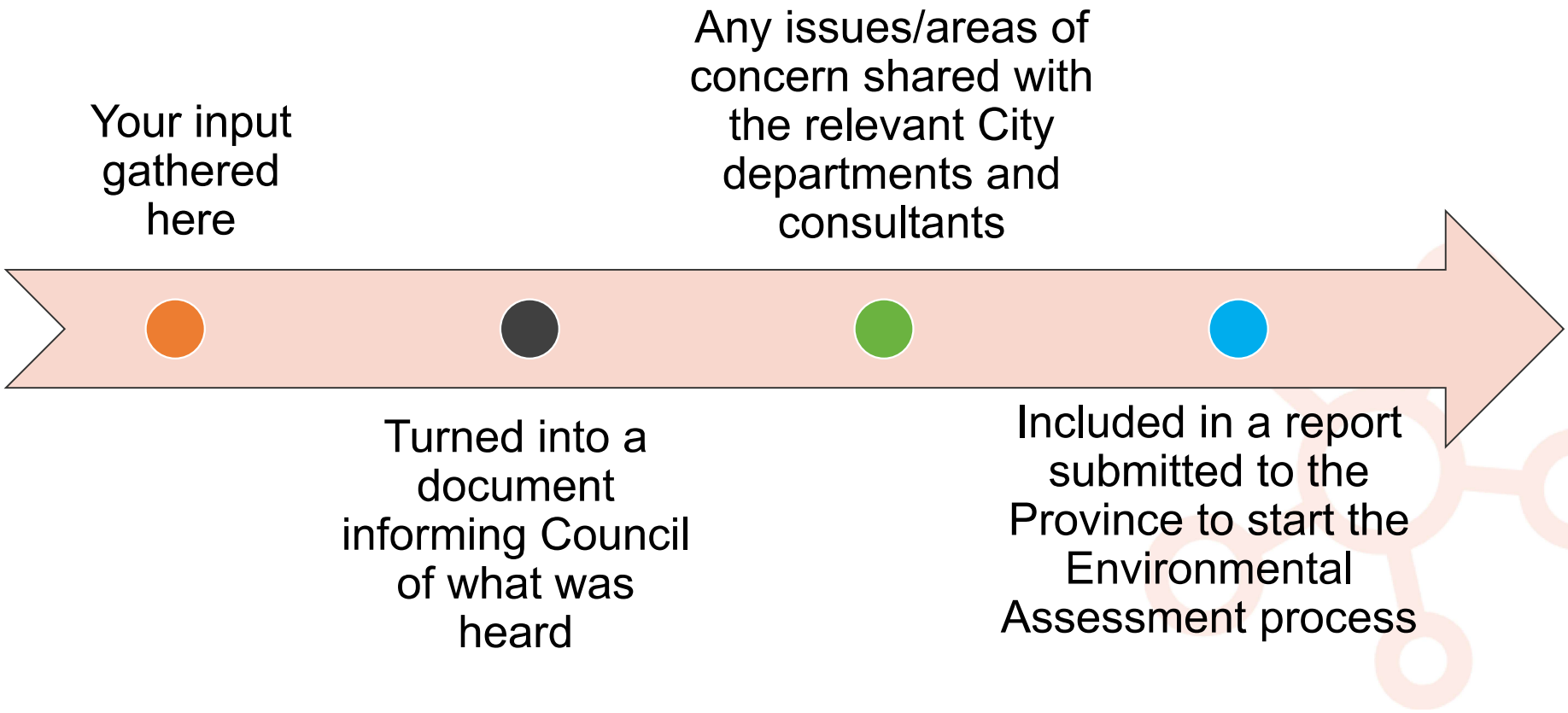
Purpose

- To inform the public of this proposed project and address any questions or concerns they may have
- To work with the public to ensure their concerns are reflected in the report to the province

Rules of Engagement

- We are here to share information with you and gather your views about the **Long Pond Flow Control Structure and Flood Mitigation** project
- You are here because you care about this topic and we value your perspective; we are listening
- We will facilitate to keep the session purposeful, on time, and on task
- We will capture the conversation and share back what we heard with you
- We would like open, honest, and respectful communication
- One person talks at a time
- Respect my role as facilitator
- What else do you need to make the meeting effective?

Engagement Process



Quick Poll Question

What is your interest in this project (select all that apply)?

- I live nearby
- I work nearby
- I use the area for recreational purposes
- I use the area as part of my commute
- Other (please specify)

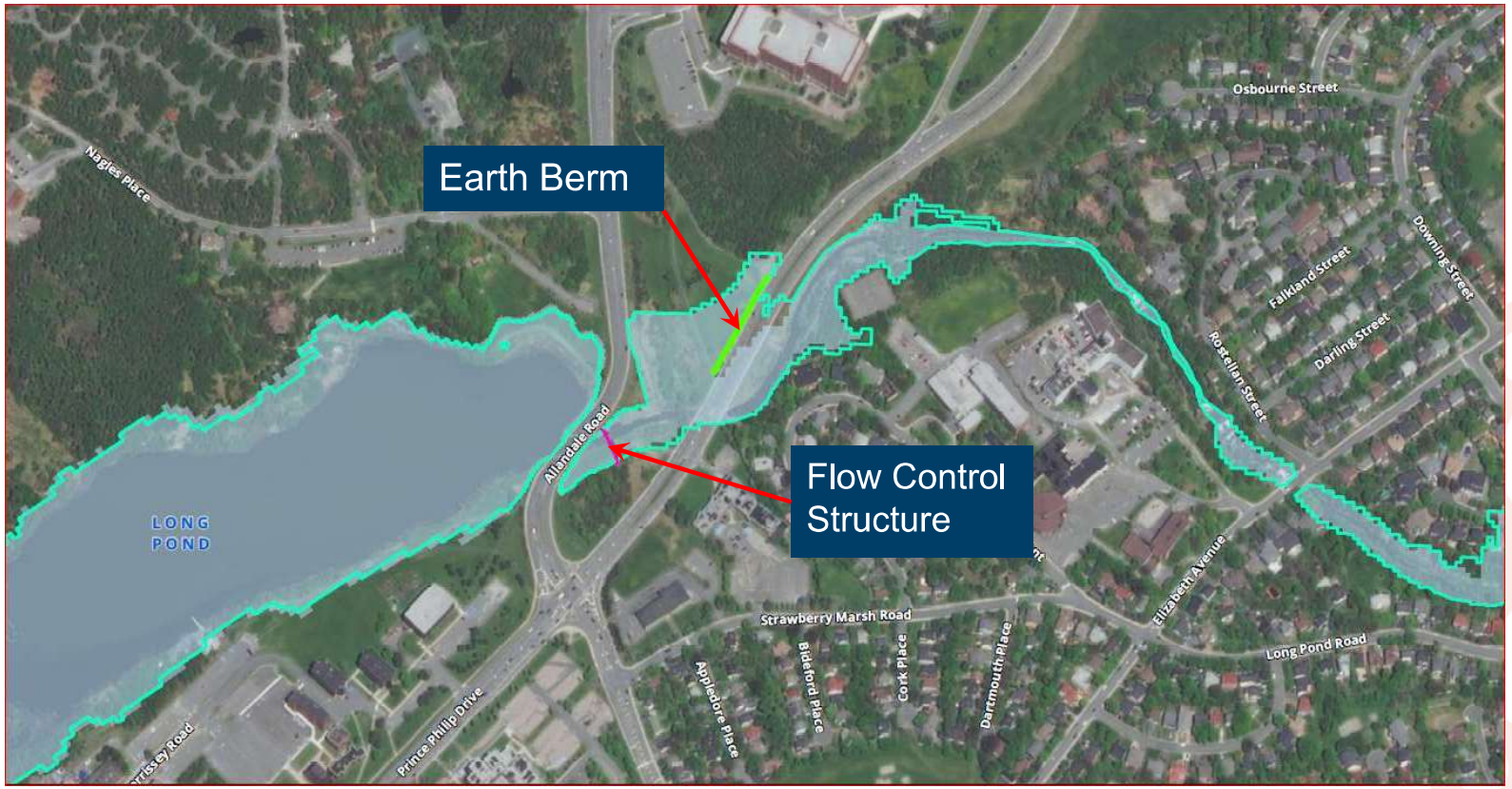
Background

Priority	Description of Location
1	Location 3: Weir at outlet of Long Pond
2	Location 1, Option A: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – Berms & walls only (Recommended Option)
	Location 1, Option B: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – New channel and bridge
	Location 1, Option C: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – Raised parking lot
2	Location 2: Upstream of Carpasian Road Bridge
3	Location 4: Clinch Crescent East to Clinch Crescent West
4	Location 5: Wicklow Street to Thorburn Road
5	Location 7: O'Leary Avenue Bridge
6	Location 8: Downstream of Mews Place

Rennie's River Catchment Stormwater Management Plan (RRCSMP) completed April 2014.

Project Location

Project Location

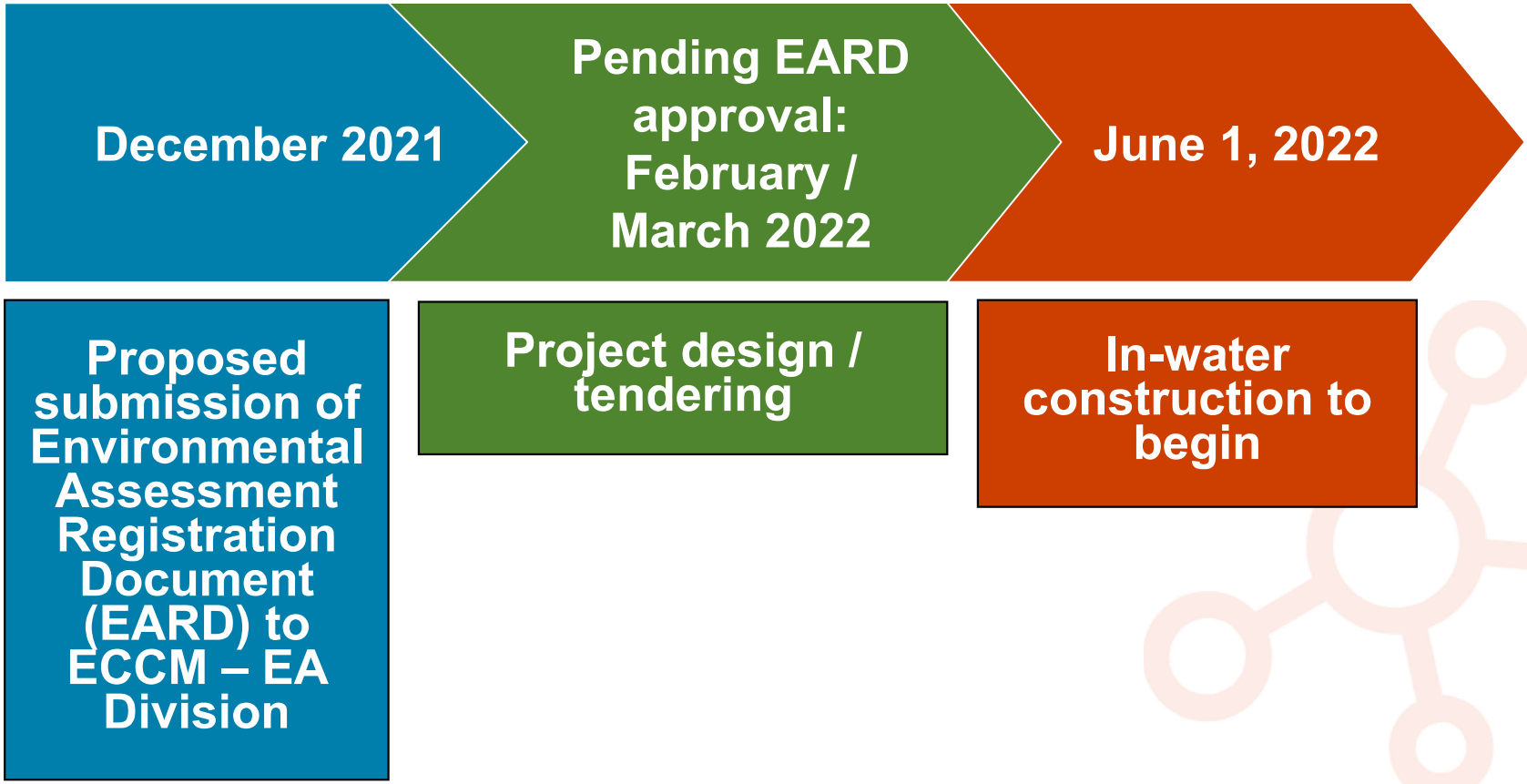


Project Location

Water Levels

Flow event	Water level under existing conditions (geodetic, m)	Water level with flood protection infrastructure (geodetic, m)	Difference (m)
Normal	53.2		
1:100 AEP CLC + 30%	55.4	56.0	**+0.6**

Schedule


December 2021
Pending EARD approval: February / March 2022
June 1, 2022
Proposed submission of Environmental Assessment Registration Document (EARD) to ECCM – EA Division
Project design / tendering
In-water construction to begin

Environmental Assessment Process

Minister of Environment, Climate Change, and Municipalities

- 7 days to post the receipt of the EADR document following submission
- 45 days to review the EADR
- 10 days to post the decision after 45-day review period

Public

- 35 days following posting of EADR to provide comments to Minister
- EADR will be available on the ECCM Environmental Assessment webpage
- https://www.gov.nl.ca/eccm/env-assessment/projects-list/
- Notices will be posted here: https://www.gov.nl.ca/eccm/env-assessment/public-notices/

Approvals, Authorizations, and Permits

Permit, Approval, or Authorization	Applicable Legalisation	Issuing Body
Approval for the Undertaking	Environmental Protection Act / Environmental Assessment Regulation	Minister of Environment, Climate Change and Municipalities
Development, Building, and Occupancy Permits	City of St. John's Act, RSNL 1990	St. John's City Council
Permit to Alter a Body of Water Schedule J - Miscellaneous Works in a Freshwater Body i.e. Other works not specific to above schedules	Water Resources Act, SNL 2002 and MAE Policy for Development in Wetlands	Department of Environment and Climate Change. Water Resources Management Division
Request for Review	Fisheries Act	Fisheries and Oceans Canada (DFO)

Your Input

- What questions do you have about the impact of this project or about the process?
- Do you have any comments you would like to be recorded?
- Everyone will be asked to limit their time to 2 minutes so that everyone who wishes to speak has an opportunity.

Your Input

Do you have any other comments, ideas or questions?

Quick Poll Question

How would you rate your understanding of the impact and process for this project?

- High
- Medium
- Low
- Please comment

Next Steps

- You can submit other thoughts and ideas:
  - Visit EngageStJohns.ca/long-pond
  - Email engage@stjohns.ca
  - Call 311
- Staff review of submissions
- Develop a report for Council, which will be shared
- Submit the report to the Province

OUR CITY. OUR FUTURE.

Long Pond Flow Control Structure and Flood Mitigation

Public Engagement

What We Heard
December 2021

ST. JOHN'S

Disclaimer

- This document provides a summary of what was heard from participants during this engagement process. It is not meant to reflect the specific details of each submission word-for-word, although attempts have been made to do so when possible.
- The City produces a What we Heard document for every city-led public engagement project. This collected commentary is shared with the community to ensure we heard you correctly.
- The City protects the privacy of those who provide feedback as per Access to Information and Privacy Legislation.
- The full scope of commentary is used by city staff and Council to help inform recommendations and decisions.

Context

- The Rennies River watershed has been subjected to major flood events caused by river flooding. One of the earlier major flood events recorded was in 1986 when 110 mm of rainfall caused flooding along Leary's Brook and Rennies River. Increasing urbanization in the Rennies River watershed, more frequent and intense precipitation events, and anticipated increase in precipitation frequency and intensity due to climate change are expected to result in an increase in risk of flood damage along Rennies River.
- The Rennies River Catchment Stormwater Management Plan (RRCSMP) was completed in 2014. On May 26, 2014, Council Directive CD# R2014-05-26/5 recommended the implementation of the study's recommendations (see next slide) to address flooding in the area.
- To reduce flood risk and take action to safeguard residential dwellings and community infrastructure, the City is proposing to construct a flow control structure across the outlet of Long Pond to help protect areas downstream of Long Pond from flooding as well as associated flood mitigation infrastructure. The additional infrastructure (cast-in-place wall and two earth berms) are intended to mitigate flood damage to nearby infrastructure.
- The proposed structure will be located on the downstream side of the Allandale Rd bridge and will allow for pedestrians to cross over the structure via a 3.0m wide walkway.

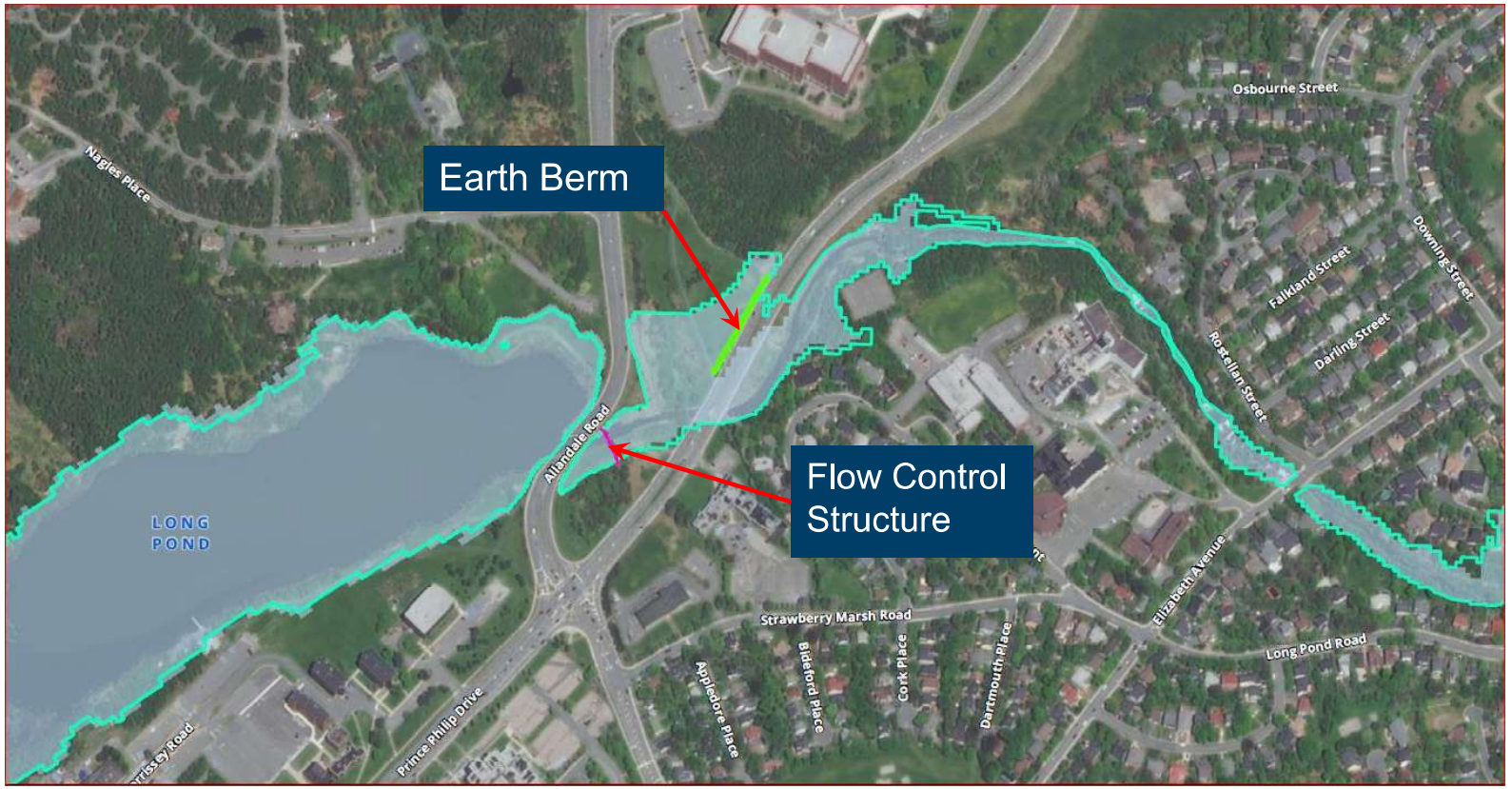
Background

Priority	Description of Location
1	Location 3: Weir at outlet of Long Pond
2	Location 1, Option A: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – Berms & walls only (Recommended Option)
	Location 1, Option B: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – New channel and bridge
	Location 1, Option C: Kings Bridge Road to Portugal Cove Road & upstream of Portugal Cove Road – Raised parking lot
2	Location 2: Upstream of Carpasian Road Bridge
3	Location 4: Clinch Crescent East to Clinch Crescent West
4	Location 5: Wicklow Street to Thorburn Road
5	Location 7: O'Leary Avenue Bridge
6	Location 8: Downstream of Mews Place

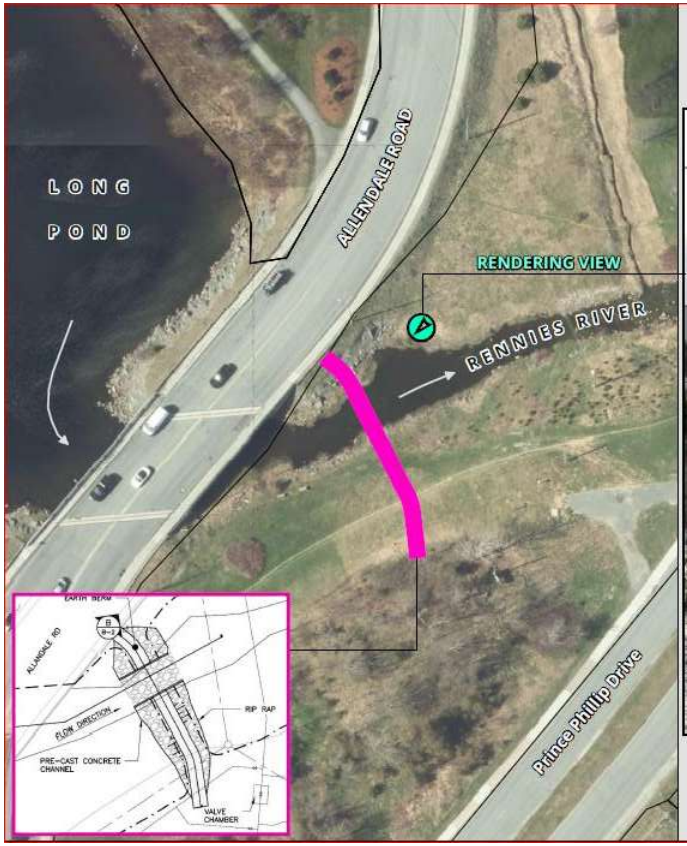
Rennie's River Catchment Stormwater Management Plan (RRCSMP) completed April 2014.

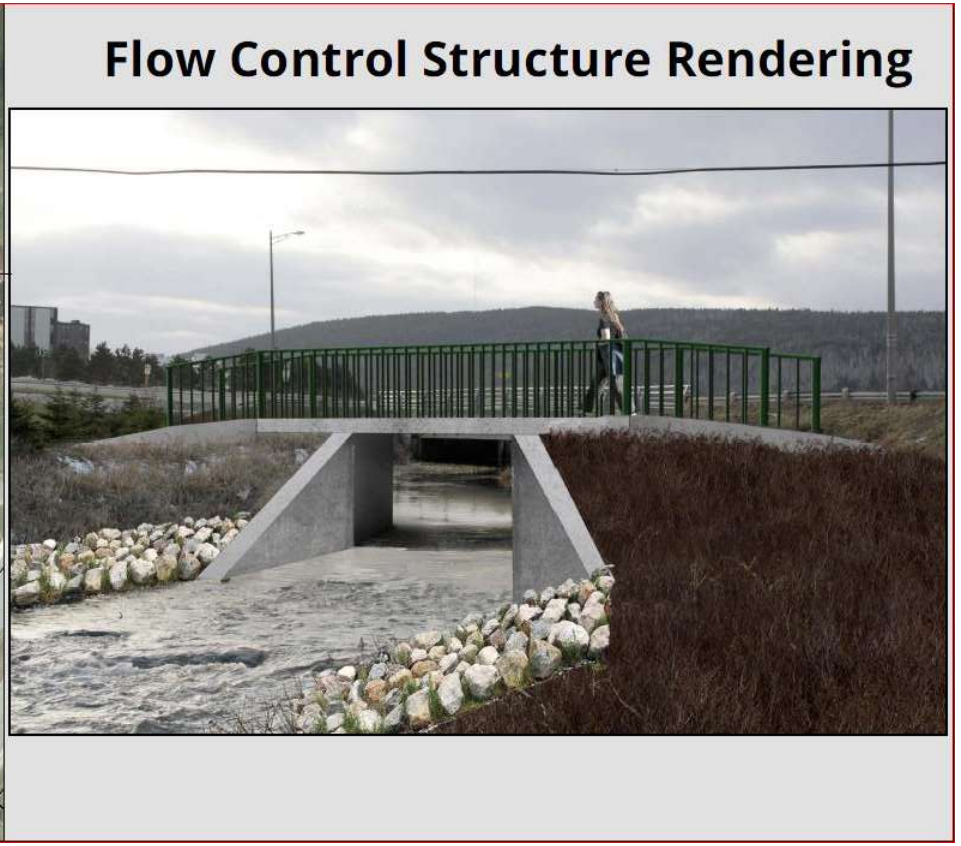
Project Location

Project Location



Project Location





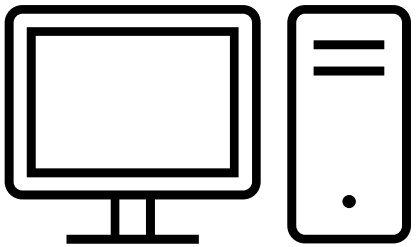
Public Engagement Plan

Purpose

- To inform the public of this proposed project and address any questions or concerns they may have.
- Feedback gathered through this engagement will be included in the City's submission to the Government of NL.

Approach

- Provide a variety of ways for the public to participate in engagement and keep all stakeholders informed regarding the environmental assessment and engagement processes.



Engagement and Communications

- Nearly 2600 postcards mailed to households in the area with information about the project
- Newsletter to 3100 registered users and followers of EngageStJohns.ca
- Posts to regular City communications channels including social media, listservs, website
- PSA issued on November 23, 2021

Who Engaged

On EngageStJohns.ca

Virtual Public session

- December 7
- 41 people – many of whom live and/or work in the immediate area

E-mail

- 3 submissions

14 questions posted on EngageStJohns.ca, most people attended the virtual meeting

What We Heard Highlights

- A list of ALL questions/comments captured throughout the engagement process can be found in the following slides. Answers to online questions are in the document library on EngageStJohns.ca
- Key concerns/issues from all feedback were as follows:
  - That the sidewalk on Allandale Rd bridge be suitable for pedestrians and other active transportation modes.
  - Water levels in Long Pond following a major flooding event, after the structure is in place, and how the increase would impact the natural environment.
  - Effectiveness of solution at preventing catastrophic damage.
  - General sense that the proposal is a tradeoff between additional flooding at Long Pond, to benefit a small number of homeowners, or to allow flooding downstream.
  - Concerns over unanticipated impacts in the future.

Questions From EngageStJohns.ca

- Q. Why Why Why are you still not considering cyclists in our infrastructure? WHY?
- A. The walkway over top the flow control structure infrastructure (3m width) is sized to accommodate a future active transportation connection.

- Q. Can you show the flood mapping as it is today with no flood control infrastructure in place?
- A. This info is in the document library.

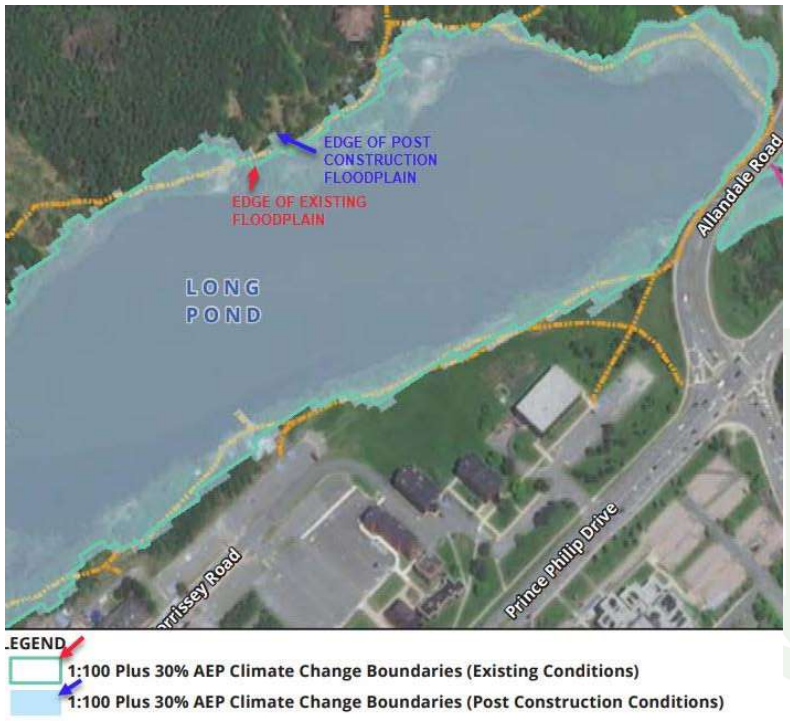
- Q. Since it is more likely that some trail structures will be temporarily covered by water during storms (than currently), how will the impacts on these important recreation assets be mitigated? (i.e. water tends to wash gravel from trails, creates drainage grooves, etc.).
- A. The floodplain mapping in the Document Library show the trails around Long Pond. The proposed changes to the Long Pond water level will have a marginal impact on the extent of new trail locations that flood. Erosion occurs due to fast moving water. With Long Pond water levels slowing increasing and slowly receding, the proposed water level change should have little impact on the erosion of trail surfaces around Long Pond.

- Q. Looks like a nicer way for pedestrians and bikers to cross the water... other than the existing very narrow sidewalk on the very busy bridge!
- A. Thank you for the feedback.

- Q. What steps are being taken to design - or re-design - upstream development to limit the pressure of future flooding? Is consideration being given to retaining existing wet lands and native tree cover, or to replanting areas already damaged by development?
- A. The proposed flood mitigation works are designed given consideration to the upstream development limits and zoning. The existing wetlands are protected by zoning and wetland overlays. The City requires new development to incorporate stormwater management measures as per its Stormwater Detention Policy. The policy states that the post-development runoff rates cannot exceed the pre-development runoff rates; this negates the downstream impact of a development. Developers can achieve this by storage or by retention methods such as bioswales, rain gardens, etc.

Questions From EngageStJohns.ca

- Q. I see the mapping in the document library ,as you stated. The colors used in the mapping make it difficult to see clearly between the existing conditions and the post construction conditions. Can these differences be made more clear for the reader??
- A. There is very little difference in the existing vs. post construction floodplains. The existing floodplain only has an edge line. The post construction floodplain is shaded. The picture below shows the difference: [to the right]



Questions From EngageStJohns.ca

- Q. This appears to be a minimalist approach to flood control in the watershed. A major problem, flood control structure or not, is development in the headwaters of the watershed. The most practical and functional way to mitigate future flooding would be to severely restrict further development in the headwater of the watershed. Additionally development should be planned to help mitigate the effects related to loss of vegetation and infiltration capacity. Continued development in the watershed will likely result in the capacity of any structure being exceeded, given the limited storage available. Such planning needs to be completed in concert with the development of a control structure. The city of St John's needs to adopt a more holistic approach to watershed protection and protect the vegetated uplands of the watersheds of the city.
- A. Your comments are duly noted. After completion of the Rennies River Catchment Stormwater Management Plan (RRCSMP) in 2014, Council directed staff to proceed with the implementation of the recommended flood mitigation projects. Regarding upstream development, the City requires new development to incorporate stormwater management measures as per its Stormwater Detention Policy. The policy states that the post-development runoff rates cannot exceed the pre-development runoff rates; this negates the downstream impact of a development. Developers can achieve this by storage or by retention methods such as bioswales, rain gardens, etc.

- Q. Will the structure affect fish migration? If so, how will it be mitigated.
- A. The structure will not affect fish migration as the natural channel will not be altered.

- Q. I'm wondering why not have the structure on the Upstream side, as it is part of the Long pond trail. The existing sidewalk there is too narrow for the active traffic there now. My experience is that I commonly meet people walking, biking, with strollers and with dogs and often you have to wait on one side for the people to pass the bridge section before proceeding yourself. In keeping with the active transport promise, shouldn't this structure be able to hold bicycle traffic as well?)Or should the bicycle traffic compete on the 4 lane 50kms hour highway at that bridge.)
- A. Construction of the flow control structure downstream of Allandale Road is less challenging, and less intrusive to aquatic life in Long Pond, than if the structure was to be built upstream of Allandale Road bridge. A walkway over top of the flow control structure (3m width) is sized to accommodate an active transportation connection if needed in the future.

Questions from EngageStJohns.ca

- Q. Sorry, but the maps are very difficult to read. Please, work with colors and the design. Also, you say, "The proposed changes to the Long Pond water level will have a marginal impact on the extent of new trail locations that flood." Could you please make a map with the "new trail locations"? Could you please make an assessment of what exact areas of the trail will be affected? How much are they affected now, and how much will be affected after construction? Honestly said, the difference between existing and post-construction conditions is very little. Then, what is the point of doing it if almost nothing is changing? Could you provide some cost analysis? Thanks! P.S.: Please, make the orientation of .pdf pages horizontal next time if you have horizontally oriented maps.
- A. The orientation has been changed. There are no new trails to be constructed as a part of this project. There will however be new areas that will flood due to the higher water elevation. [see picture to right]
- The length of the trail around Long Pond is approximately 2,905m. The table below summaries the existing trail length and new trail length to be inundated during the three design storms. [see table to right]
- The flow control structure at Long Pond does not eliminate the need for flood protection measures along Rennies River downstream of Long Pond. The major benefit of the flow control structure is that the peak flows downstream of Long Pond will be reduced, resulting in reduced costs associated with the implementation of flood control options at locations downstream.

Flow Event	Length of Long Pond Trail Flooding (m)	
	Existing Conditions	Post Flow Control Structure Construction
1:20 AEP CC	670	760
1:100 AEP CC	935	1,030
1:100 AEP CC + 30%	1,110	1,395

Questions from EngageStJohns.ca

- Q. Looking again at the improved flood plain map and trying to understand the difference in what level the lake will be during flood mitigation, it appears that flood level water could advance as high as MUN's Splash facility. Is this correct or have I read the mapping incorrectly? It appears that the shading there goes beyond the current flood plain to through the middle of the building (unless that's not shading-rather the building in satellite view. Can you confirm that the new lake level with flood control in place won't flood that building?
- A. The finished floor of the upper level of the MUN splash facility is at elevation 56.3 m. The anticipated flood level during the 1:100 AEP climate change + 30% event is 56.0 m. Therefore, the upper level of the splash facility will not be flooded. However, the boat storage area of the splash facility is at a lower elevation and therefore will experience flooding during the design event. The flooding at this lower level is pre-existing and will occur without addition of the flow control structure at Long Pond during a 1:100 AEP climate change + 30% event. Please see the following photos for reference. [note – only one photo to right, corrected image on the next slide to replace photo in this response]

Questions from EngageStJohns.ca

- Q. Thanks for the reply. I appreciate it. Thanks as well for the photos. Looking at the photos, I just wanted to seek further clarification. You said the finished upper floor is at 56.3 m but in the picture, you labelled the lower door/floor of the facility at 56.3 metres. The upper part is about 2 metres higher than that. So I wanted you to confirm which part of the building is truly at 56.3 m since that's critical to my/our understanding of the current flooding risk and potential effects of this project. When you answered, "The anticipated flood level during the 1:100 AEP climate change + 30% event is 56.0 m" is that with or without the flood control structure in place? If it is without the flood control structure in place, can you please give an estimate with it in place? Thank you.

- A. *"Looking at the photos, I just wanted to seek further clarification. You said the finished upper floor is at 56.3 m but in the picture, you labelled the lower door/floor of the facility at 56.3 metres."*

It is in fact the upper level of the facility that has a finished floor elevation of 56.3 m. The incorrect photo was labeled. Please see photo below. [to right]

"...is that with or without the flood control structure in place? If it is without the flood control structure in place, can you please give an estimate with it in place?"

The anticipated flood level during the 1:100 AEP climate change + 30% event is 56.0 m with the flow control structure in place.

Questions From EngageStJohns.ca

- Q. At normal level your data shows Long Pond is at 53.2m. During and, I assume immediately following, a 1:100 AEP +30 % rainfall event , this level will rise to a maximum of56.0m. How long will it take the level to return to normal (53.2m)assuming no rain during the period between the achievement of the maximum height (56.0.) and the normal water level? What is that time today with no type flood mitigation structure in place?
- A. This will require further analysis to extract the information from the hydrology models. CBCL will include the existing and post construction durations to lower the pond level back to the 53.2m normal water elevation in the Environmental Registration documents to be submitted to the Province.
- Q. This newly proposed flood control “weir” and associated downstream berms and walls, is just not justifiable, monetarily, or environmentally. It is taking a hammer to squash a fly. Individual solutions for the small handful of homes at risk of flooding should be investigated instead, and assistance provided to the homeowners. This current plan will do nothing to mitigate groundwater flooding of their basements and ponding of water behind the berms; in fact, it’s likely to create and exacerbate those problems. Homeowners have options – landscaping and flood-proofing mitigations can help keep water out. The river and its fish, bird and mammal populations have no such options. I’m not aware of a single environmental group in favour of this project. All of the hard work and money that the QVRRDF and others have invested in our river ecosystem over the decades will have been for nought if this project goes ahead. We have lived adjacent the river for 25-odd years and notice that even ordinary rainfall now causes the river to rise quicker and higher (flash) than it ever did before during such rains. This has happened just since new housing and business developments in marsh land off Kenmount Road went in, and since the former marsh at the bottom of Winter Avenue was covered in new housing and pavement. It is the city’s own misuse of water-permeable land and floodplain that is the far greater cause of any increased local flooding we see on Rennie’s River. Naturally climate change effects will be piled on top of that. We can’t berm our way out of that dilemma. Berms can and do fail, and in any event, merely push the flood problem further downstream and across the river. You say the concrete and earth structure adjacent to Allandale Road is designed to reduce the height of planned downstream berms on Rennie’s River (from a previously proposed 2.2m height at one location!). Even at half that height it is still a ridiculous and destructive proposal, and the citizens won’t stand for it. You read the room tonight in the public meeting as well as I did. In a similar project in Cape Breton, some previously flooded homeowners opted to accept the continuing risk rather than lose their beloved natural areas to berms. Last I heard, the municipality shelved the project. St. John’s should do so as well.
- A. Thank you for your comments. They are duly noted.

Questions from the public meeting

- Q. Why did the City in approving the housing developments on Kenmount Road not have the developers install settling ponds to address the flow of water into Long Pond.....what is the capacity now of the new storm drains recently installed on Kenmount Road??
  A. The City has in place a requirement for new developments to consider runoff and restrict that runoff to predevelopment conditions in the Stormwater Management Policy. In that development, the City took a proactive, conservation approach. In the most recent project, the goal was to address the issue with drainage and is not related to this project, which aims to protect properties downstream.

- Q. no.....that is the problem too much water coming into Long Pond too quickly from land that is now paved with city street and drains.....where are the " settling ponds" in Kenmount terrace???
  A. Developments that were approved after the policy came into effect (2013) would have required the conditions above.

- Q. Does the new structure provide more or less flood mitigation to residents below Long Pond in comparison to the originally planned weir dam?
  A. No they are the same thing.

- Q. In your previous slide you showed people walking across the new weir, however most of the pedestrian traffic is on the west side of the Allandale Road. Is there a plan to upgrade the sidewalk on the west side of Allandale Road?
  A. At the present time this is not in scope of the project. Widening the sidewalk on the upstream side of the Allandale Rd bridge could happen as part of a future capital works project, when the bridge requires a major rehabilitation, but that is not a part of this project.

- Q. What is the current flood plan and has it been adjusted to reflect current atmospheric rivers?
  A. We have looked at flood mapping and the 100-year flow with and without climate change and the impact on the floodplains.

- Q. Can you ensure there will be a maximum rise of 0.6m, regardless of the storm event?
  A. No we cannot guarantee, it is a projection by engineers and scientists.

- Q. In floods we are looking at 100 m3 per second. Is this tiny structure able to slow that flow by any significant amount. Is it able to withstand fluid pressure?
  A. 1 in 100-year storm is much less than 100 m3 per second and yes it can withstand the pressure.

Questions from the public meeting

- Q. Following the 1:100 AEP +30% rainfall, how long will it take for the water to return to normal levels?
  A. We will pull this from our model and include in the submission to the Province.

- Q. Water leaving the control structure will be very high at the discharge point during storms. Won't that wash away all the spawning gravels immediately below it? and cause depositional issues below?
  A. We will show in our document that there is a difference in the velocity. Areas further downstream would have decreased velocity, but closer to the structure, there is an increase. We plan to handle this with hydraulics in the design. Gravel may move during a storm, but the increase is only in a small area.

- Q. How has sensitive fish and bird habitat been protected?
  A. During the migratory seasons, we are not likely to see high flows. We consulted a fisheries expert early in the process who did not see adverse effects. We can comment on any impact to the area birds if needed.

- Q. What is the impact of that increase in water in Long Pond on the walking Trails around Long Pond? Storing water on Long Pond has prevents users from walking the Long Pond Trail?
  A. We are working on maps to show the difference in the increased water levels. Storing water does not prevent users from walking because in a significant event there would be flooding on the trails even without this structure. It may be more during a significant event, but we do not anticipate users on the trail during these events.

- Q. I'd like to know about the habitats as well. Rennie's River is well known for its brown trout populations, and the work that SAEN has been doing to reintroduce salmon back into the river. I see that there is a fish passage but not much information provided on it. As well, a 0.6 m raise in water level will likely disturb the riparian area, potentially ruining waterfowl nesting areas.
  A. We will comment on this in the document, and it has been discussed already.

Questions from the public meeting

- Q. Are there other engineering solutions that could be implemented to reduce the flood impact downstream?
  A. We looked at this extensively when we did the stormwater management plan. There are limited options to address flooding in an urban area without removing houses. We also considered berms and augmenting the natural attenuation effect that Long Pond has on the river system.

- Q. Have, or will, the City and/or consultants during the process have preliminary meetings with CA Pippy Park ,QVRRDF and the like to obtain any sort of consensus prior to the final submission to the Dept. of Environment.
  A. We met with Pippy Park already and this engagement is an opportunity for other groups to express input.

- Q. Also berms are known to increase water velocity and cause downstream erosion if the river is too small - how can we be sure these berms will be successful? If these berms were to fail there could be damage to the riverbanks etc and any downstream properties.
  A. There is no guarantee the berms will be successful, and flooding occurs at times. We use our engineering tools to make estimates. If we do nothing, there are properties that would flood. That is another option.

- Q. Rather than tamper with an entire section of river, trail and pond, has the city investigated local solutions for those few properties at risk.
  A. This has been discussed already.

- Q. A new building is now being developed within the floodplain next to the hospital which has taken valuable area. River habitat protection is not a priority with the City. All the river groups QVRRDF, FLOW, and VRCS in the past few decades have always tried to promote environmental stewardship to protect our rare wild river resources. How can we take an engineering solution, which is the direct cause of all the issues, seriously?

  A. The City attempts to consider habitat and propose solutions.

Questions from the public meeting

- Q. Just how many residential homes downstream are now affected by the City's current use of Long Pond as a mode of stormwater management?
  A. The existing bridge acts as a "choke" now, but that was not the intent. The number of homes that are likely to be protected by this project are 10-12.

- Q. Is there a diagram that shows what +0.6m high water levels would look like in terms of impact on structures around the pond and trails? Are there any anticipated upstream effects of this change such as in the area of HSC or the river leading into Long Pond?
  - A. We are creating this diagram. No, there are no upstream affects anticipated.

- Q. How many owners of those supposed dozen homes that are at risk are calling for berms and weirs? I have heard none.
  A. We do not know of any such requests.

- Q. How far upstream may flooding impacts extend during heavy weather events?
  A. There are no upstream affects anticipated.

- Q. Are there any additional structures to be built downstream (near bridge on Rennie's Mill Road) or further down near King's Bridge rd.?
  A. Yes, we are in the process of doing an environmental assessment and will have another public meeting soon.

- Q. The cattail marsh at the head of Long Pond is a rare Red Winged Blackbird nesting site (rare for eastern Newfoundland). This will be vulnerable to floodwaters. Was there any investigation by the environmental scientist with regard to this?
  A. We will investigate the effect of the additional 2 feet of flooding if necessary.

- Q. For the structures planned for downstream, is the water table being taken into consideration ?
  A. Yes, we are addressing that in the current work being done.

- Q. Many generalities on the structure and little information on how a significant volume of focussed water through a 2x2 m concrete culvert will impact upon the river bed. I expect this will be able to toss boulders about.
  A. The opening is 6m wide, not 2. The velocities do increase through that area but ultimately the water is released at a slower flow rate so between Prince Phillip Drive and Quidi Vidi Lake, the velocity is less.

Questions from the public meeting

- Q. How far upstream may flooding impacts extend during heavy weather events?
  A. For the headwaters, in the development area near Kenmount Terrace, the measures proposed extend through the industrial park (e.g. O'Leary Ave bridge, Pippy Place flood protection walls), we analyzed the structures, and they are still good with this proposal. There is one area to be addressed upstream, but no others expected.

- Q. Can the study by this environmental scientist be available for review? Asking as an environmental scientist myself.
  A. Any work that we do will be included in the environmental registration document which goes to the Province, and is publicly available, including any work that is necessary by an environmental scientist.

- Q. It does not make sense to me to allow flooding of one area to possibly avoid it in another. The flow control system suggested here does not make sense to me.
  A. We are flooding the area around Long Pond to lessen flooding downstream. The reason is that there are no houses around Long Pond. It is still important, and although it floods now in major storm events, it will flood more. It is a trade-off we are discussing.

- Q. Have you studied potential increase in sedimentation this flood control may generate in Long Pond?
  A. We don't anticipate this happening.

- Q. What makes residential properties more important that habitat areas?
  A. We don't know that they are. The question is whether additional water can be stored in the pond, which will increase existing flooding by 2 feet. This is an environmental assessment on the impact of the structure.

- Q. What about the flooding to the properties at the top of Smithville Cres? They too flood
  A. We will check to see if this is in the area of the report.

- Q. Wondering if this will increase flooding risk to the Memorial Science Building (new one) and to the new power substation behind the Memorial parks garage, which is back up power to the HSC?
  A. We do not see these areas being flooding based on our maps.

Questions from the public meeting

- Q. How far up onto the south side shore of the pond will water be expected to rise on a regular basis? Is it expected that the trail, gazebos, and dock on the south shore of the pond will be impacted, and if yes, by how much?
  A. That area floods now, and we will show on the map the difference in the new level (up to 55.4m) vs now.

- Q. And I have seen flood maps that sees CBC underwater- does this further impact the flooding to the area across from the HSC?
  A. No, this is too far upstream.

- Q. Do the City's development regulations apply to developments in Pippy Park
  A. The City's development regulations do apply, and the Park may also have additional development requirements.

- Q. The water control structures just constructed upstream of Long Pond will now allow all this excess water to scour the river entering Long Pond, exasperating the sedimentation. Has any study been done on expected streambed migration potential in this area?
  A. No, this is not expected to be an issue.

- Q. Do you have any details about the concrete wall at the west end of the pond?
  A. There is a sidewalk, and the line would be at the back of the sidewalk, between it and the river. It would be about a half a meter high.

- Q. This map shows what areas will be regularly underwater? Or just underwater during the 100-year storm?
  A. The latter, the 100-year storm.

- Q. When will the map showing what will regularly be underwater become available?
  A. The map shows this now.

- Q. Are these diagrams pre- new adult mental health facility or considering that full flood impact as well?
  A. We have taken that facility into consideration.

Questions from the public meeting

- Q. The stream running through the wetland in that flood map is there due to velocities maintaining the channel. Flooding may allow deposition within it and possibly turn it into a braided stream with loss of rearing habitats for fish. Has anyone looked at this possibility?... the cattail marsh at the inlet of the pond. Infrequent occurrences will be frequent with the control structure allowing more material to settle in this area from the upstream scouring.
  A. We do not anticipate this impact. We don't intend to downplay environmental concerns, but it floods now infrequently, and any major flooding would be infrequent. Igor matches the 55.4m. If additional study is needed, we will assess it.

- Q. Would there be a way to engineer protection for the 12 homes at risk, instead of this plan?
  A.This flow control structure results in protection of those homes since the berms are not as high. It also attenuates the flow. These work together as a solution.

- Q. Do we have any information as to whether this project will help residents downstream be able to secure home insurance coverage? For those who are currently unable to secure coverage due to flood risk.
  A. Neither CBCL nor the City have this information – we suggest homeowners discuss this with their insurance providers.

- Q. Downstream berms not as high? So many areas downstream will be bermed anyway? If so, the rivers are reverting to storm water ditches again and this is part of the larger plan.
  A. The question in this project is whether to implement this solution or allow the flood to occur in the major event.

- Q. Please elaborate how this new plan relates to the plan currently in environmental review with the province. Has that first one been rejected by the province?
  A. The history is that an environmental assessment was done on the project and that elevated to the next stage, an environmental preview report, and that was reviewed. We had to make design changes to satisfy some conditions. Those 2 stages are completed and filed. We are now doing another assessment given the significant changes made, relocating the structure and adding to the top of the pond.

- Q. Would berms restrict the water flow from the water table into the River?
  A. We will address the water table in the registration document, and the short answer is no.

What We Heard - Summary

- Residents and stakeholders were interested in the technical aspects of the project and requested many details which the consultants provided.
- Stakeholders were interested in the Environmental Assessment process and approval levels.
- Pedestrian and active transportation safety concerns were raised and addressed.
- Potential environmental impacts, both short-term and long-term, were a major theme of concern, as well as potential damage from floods if not mitigated effectively.

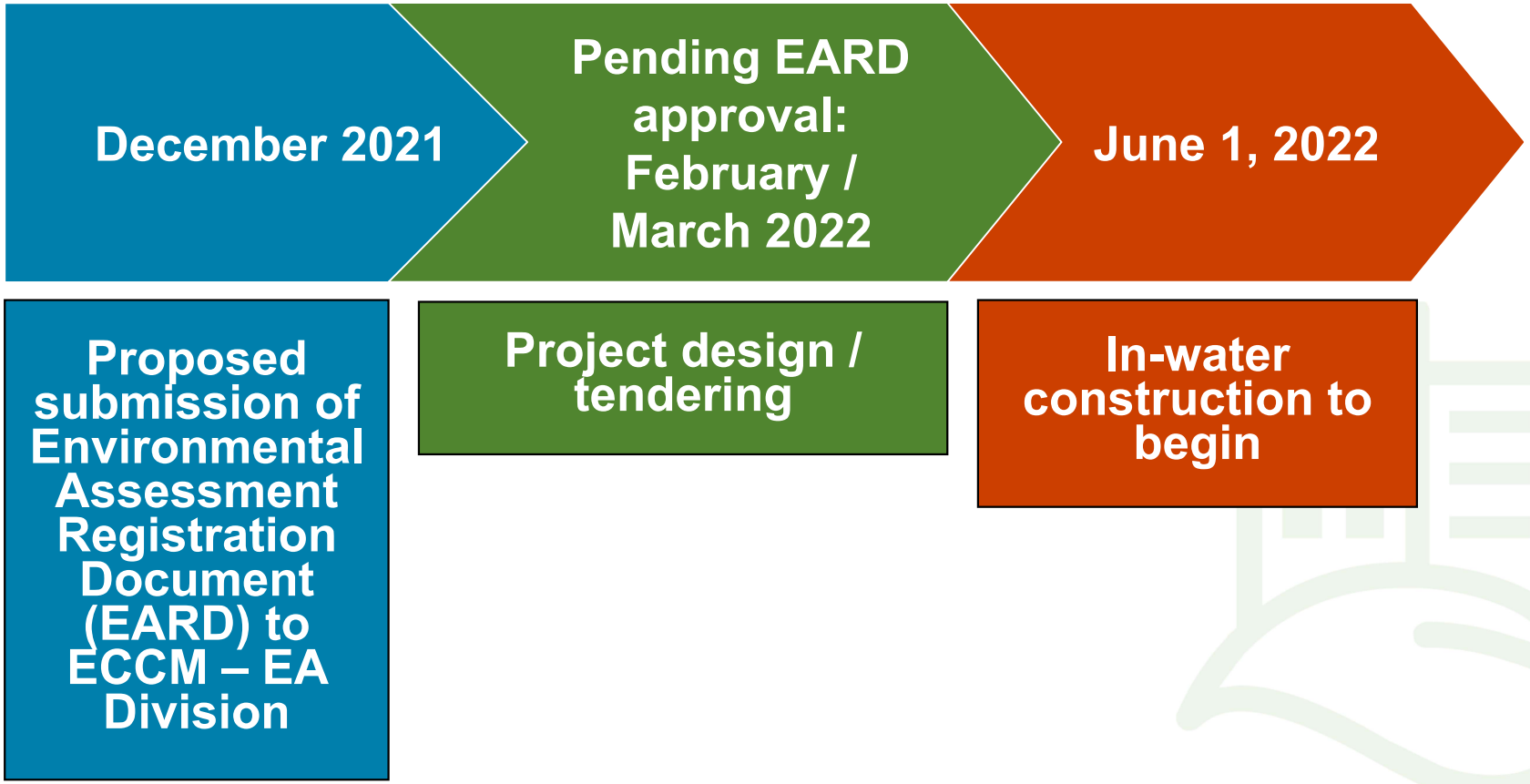
Next Steps

Release What We Heard

Council to review information note

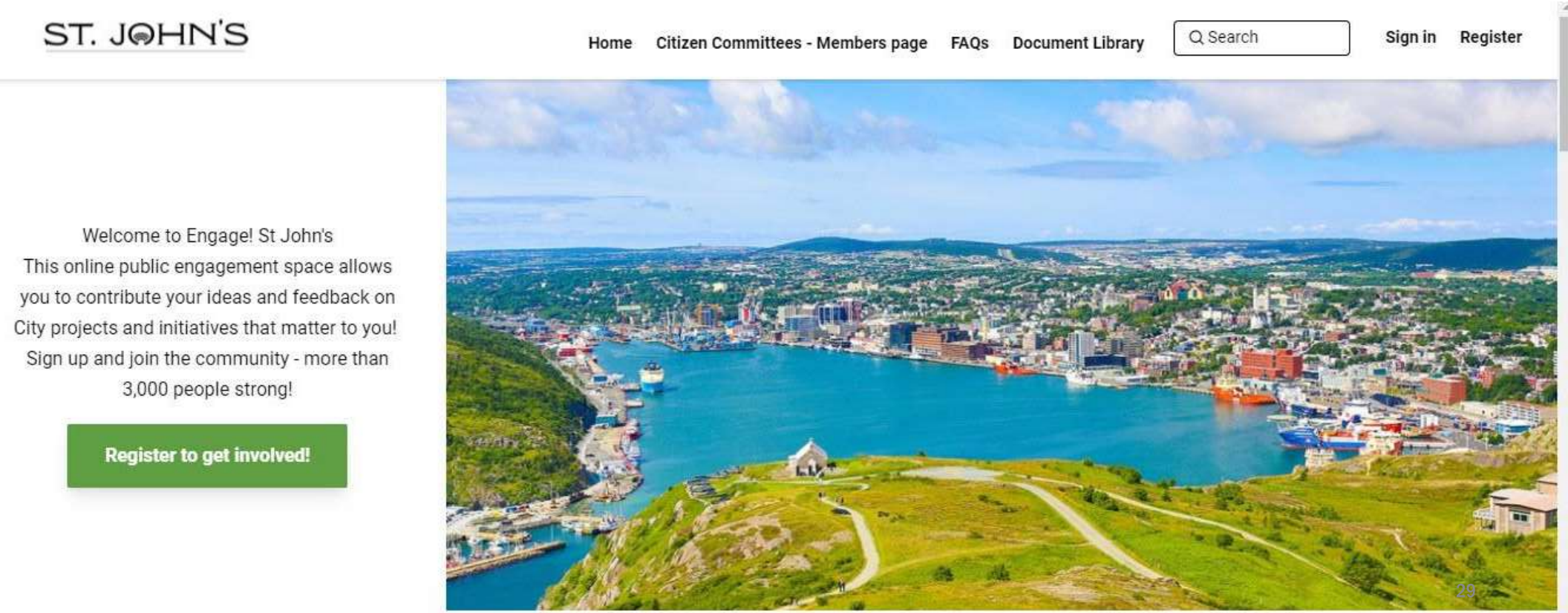
Submit to Province to start Environmental Assessment (EA) process

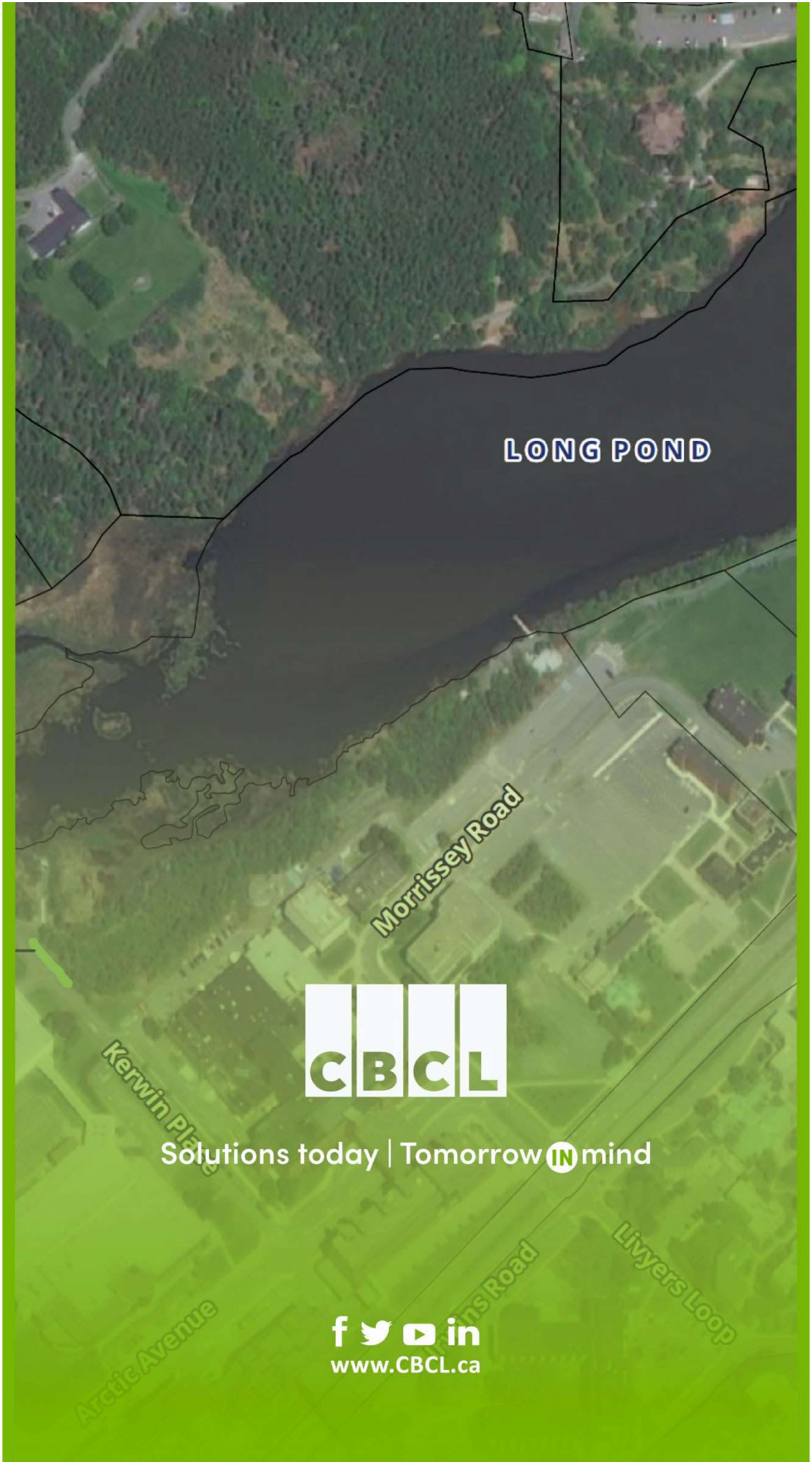
Schedule


December 2021
Pending EARD approval: February / March 2022
June 1, 2022
Proposed submission of Environmental Assessment Registration Document (EARD) to ECCM – EA Division
Project design / tendering
In-water construction to begin

To stay informed

Follow the project page or sign up to receive notifications at EngageStJohns.ca





CBCL

Solutions today | Tomorrow IN mind

www.CBCL.ca