

DECISION/DIRECTION NOTE

Title: Wetland Study Phase 2A

Date Prepared: November 14, 2023

Report To: Committee of the Whole

Councillor and Role: Councillor Carl Ridgeley, Development

Ward: N/A

Decision/Direction Required:

Adoption of Wetland Study Phase 2A and recommendations.

Discussion – Background and Current Status:

In 2021 the City commissioned the Phase 2A Wetland Study to field delineate, classify, and rank a select number of wetlands in areas under development pressure within the next 10-20 years. This is a follow-up to the Phase 1 Wetland Study which used high resolution imagery to remotely identify all the wetlands within the City Limits.

For each of the wetland areas listed below, the results of the Phase 2A study include the field-determined boundaries of each wetland areas (as a GIS shape file), the classification based on the Canadian Wetland Classification System (CWCS), and a functional assessment and scoring based on the Wetland Ecosystem Services Protocol for Atlantic Canada (WESP-AC). The areas include:

1. Barrow's Road Area
2. Airport Heights West Area
3. Bay Bulls Road South Area
4. Old Bay Bulls Road Area
5. Outer Ring Road – East White Hills Road Area
6. Torbay Road North – Clovelly Area
7. Southlands Area
8. Synod Wetlands Area
9. Viscount Street Area
10. Kenmount Road Area
11. Yellow Marsh Area
12. Raymond's Brook Area

The CWCS classification system classifies wetlands into 5 separate classes: Bog, Fen, Swamp, Marsh, or Shallow Open Water. The WESP-AC functional assessments considers multiple wetlands functions such as Hydrologic, Water Quality, Aquatic Support, Aquatic Habitat, and Transition Habitat. The Wetland is given a numeric score for each function and it is then weighted to assign a Total Score, essentially determining the wetland's 'importance'; with one being the least 'important', ten being the most 'important'.

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One of the main goals of this study is for the City to balance the protection of wetlands with Development, as both are important to the City's Strategic Plan. As such, Council will need to decide the minimum score which will be protected.

The Consultant also presented recommended buffers along each wetland where Development is to be restricted as per the Envision St. John's Development Regulations. A minimum 15m buffer is required along all wetlands, however they've recommended increasing it in sensitive areas (such as water supply watersheds), in undeveloped areas where a greater buffer can be preserved, and in areas where there is high public interest.

The following table is a summary of the Phase 2A Wetland Study, sketches showing this information are also attached to this decision note (All wetland with ranking greater than 5 are highlighted in yellow; those wetlands with floodplains associated with them are in red):

Study Area	Field Site	Wetland Class	Overall Wetland Score
Barrow's Road (BR)	BR1	Marsh	3.55
	BR2	Marsh	3.73
	BR3	Fen	4.47
	BR4	Fen	3.41
Airport Heights West (AHW)	AHW1	Bog	7.21
	AHW2	Bog	7.12
Bay Bulls Road South (BBR)	BBR1	Swamp/Marsh	3.83
	BBR2	Fen/ Swamp	3.83
	BBR6	Marsh	3.82
Old Bay Bulls Road (OBBR)	OBBR1	Marsh	3.55
ORR-East White Hills Road (EWHR)	EWH1	Swamp/ Marsh	3.68
	EWH2	Swamp/ Marsh	3.86
	EWH3	Swamp/ Marsh	3.18
	EWH4 *	Swamp/ Marsh	4.15
	EWH5	Bog	7.29
	EWH6	Bog	4.25
	EWH7	Bog	3.85
	EWH9	Fen	4.07
Torbay Road North – Clovelly (TRN)	TRN2	Swamp	4.39
	TRN4	Swamp/Marsh	4.39
	TRN5	Swamp	4.47
	TRN6	Swamp	4.33
	TRN7	Fen	4.50
	TRN9	Fen	3.52
	TRN11	Fen	3.36
	TRN12	Fen	3.20
	TRN13	Fen	3.21
	TRN14	Fen	3.21
	TRN15	Fen/Swamp	3.21
	TRN16	Fen/Swamp	3.59
	TRN17	Fen	3.43
Southlands (SL)	SL1	Bog	7.20
	SL2	Fen	4.99

	SL3	Marsh	3.54
	SL4	Fen	3.75
	SL5	Fen	3.40
	SL6	Marsh	4.46
	SL7	Bog	6.90
	SL8	Swamp	7.27
	SL9	Bog/Swamp	4.44
	SL10	Bog	6.90
	SL16	Fen/Swamp	4.83
	SL17	Bog	6.77
	SL18	Fen	4.44
	SL19	Fen	3.26
	SL20	Fen	4.44
Synod Wetlands (SYN)	SYN1	Swamp	3.82
	SYN1A	Swamp	3.82
	SYN2A	Swamp	3.54
	SYN2B	Swamp	3.54
	SYN3	Swamp	6.05
Viscount Street (VIS)	VIS1	Fen	7.22
Kenmount Road (KMT)	KMT1	Bog	7.46
	KMT2	Fen	6.85
	KMT4	Swamp	2.35
	KMT5	Fen	4.24
	KMT11	Swamp/Marsh	4.04
Yellow Marsh (YM)	YM1	Fen/Bog	3.07
	YM5	Fen/Bog	2.65
	YM6A	Fen/Bog	3.69
	YM6B	Fen/Bog	3.69
	YM6C	Fen/Bog	3.69
	YM6D	Fen/Bog	3.69
	YM7A	Fen/Bog	3.69
	YM7B	Fen/Bog	3.69
Raymonds Brook (RB)	RB1A	Swamp/Marsh	3.59
	RB1B	Swamp/Marsh	3.59
	RB1C	Swamp/Marsh	3.59

*Note: EWH4 is Lundrigan's Marsh, which is an identified Conservation Area under the Municipal Habitat Stewardship Program. This is City owned land and the wetland will be maintained and protected as such.

City Staff have reviewed the study and recommend that wetlands with a score of 5 or greater to be protected and fall under the development restrictions listed in Section 4.10 of the Envision St. John's Development Regulations. The number of wetlands with a score at or exceeding 5 is 13 out of a total of 68. It should be noted that a further 47 of the wetlands noted above contain or are part of stream systems, meaning that there will be floodplains associated with them. These floodplains will be protected as per the limitations in the Development Regulations. Pertaining to the buffers, City Staff recommend no changes from the Envision St. John's Development Regulations. A consistent 15m buffer will be maintained on all wetlands,

with a few exceptions already noted in the regulations (Synod Lands West Wetland, Long Pond Marsh, and George's Pond).

Key Considerations/Implications:

1. Budget/Financial Implications: N/A
2. Partners or Other Stakeholders: Private Property Owners, Developers.
3. Alignment with Strategic Directions:

A Sustainable City: Plan for land use and preserve and enhance the natural and built environment where we live.

Choose an item.

4. Alignment with Adopted Plans: Envision St. John's Development Regulations, Our City Our Future St. John's Strategic Plan.
5. Accessibility and Inclusion: N/A
6. Legal or Policy Implications: N/A
7. Privacy Implications: N/A
8. Engagement and Communications Considerations: Development Staff will work with Communications team on how best to engage with stakeholders listed above.
9. Human Resource Implications: N/A
10. Procurement Implications: N/A
11. Information Technology Implications: N/A
12. Other Implications:

Recommendation:

That Council: Adopt the Phase 2A Wetland Study; Protect Lundrigan's Marsh and all Wetlands within this study and future studies with a WESP-AC score of 5 or greater in accordance with Envision St. John's Development Regulations Section 4.10; and Maintain the existing Wetland Buffers as outlined in Envision St. John's Development Regulations Section 4.10(1) as 15m, with the exception of Synod Lands West Wetland, Long Pond Marsh, and George's Pond.

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Approved by: Jason Sinyard, P.Eng., Deputy City Manager, Planning, Engineering, Regulatory Services

Report Approval Details

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Attachments:	- COSJ 162-006 Wetland Study Report_Oct 11 2023.pdf - Phase 2A Wetland Study.pptx
Final Approval Date:	Nov 16, 2023

This report and all of its attachments were approved and signed as outlined below:

Jason Sinyard - Nov 16, 2023 - 12:01 PM