

# DECISION/DIRECTION NOTE

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**Title:** 2019 Wetlands Delineation Study

**Date Prepared:** May 6, 2020

**Report To:** Regular Meeting of Council

**Councillor and Role:** Councillor Maggie Burton, Planning & Development

**Ward:** N/A

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**Decision/Direction Required:** Adopt the 2019 Wetlands Delineation Study by C-CORE along with staff recommendations for a further field study of the specific wetlands noted within this Decision Note.

**Discussion – Background and Current Status:** The City's last review of wetlands was the Significant Waterways and Wetlands Study in 1993. In 2019 the City tendered the first phase of a City-wide wetland study that would delineate all wetlands within the City's municipal boundary that were greater than 100 square meters in area. The study was to be done by remote sensing using satellite mapping and classify each wetland according to the Canadian Wetland Classification system. Once completed and adopted by Council it was planned in 2020 to tender for phase two of the study to conduct a field study of each wetland performing a functional assessment which classified the function of each wetland as low, medium or high. Each wetland was to be scored between one to ten which would allow Council to make some decisions as to which wetlands would be protected from development.

C-Core was awarded phase one of the study in 2019 and the final report was submitted in February 2020. The final report entitled "2019 Wetlands Delineation Study" created the first City-wide wetlands delineation and classification using satellite imagery, see attached report. The study identified 3,564 individual areas of contiguous wetlands with surface areas greater than 100 square meters. Within these areas the study determined that there were 1,790 bogs, 4,803 fens, 4,819 swamps, 1,341 marshes and 1,004 areas of open water which were contained within the contiguous wetlands.

With over 10,000 wetland components throughout the City it would not be practical from either a schedule or cost perspective to conduct a field assessment of all components. For that reason we may need to change our initial approach. Staff propose three options for Council to consider: (1) continue with the initial approach and conduct the phase 2 study of all wetlands noted in the report over several years and at substantial cost; (2) protect all wetlands in the report and do not conduct a phase 2 study; or (3) protect all wetlands identified in the report within watersheds, the Goulds EVA (Environmentally Valuable Area), floodplains and areas remote to development, and conduct the phase 2 field assessment analysis on the remaining 17 areas (as noted in Figures 1 through 17) that would be under pressure from development over the next 10-20 years. In addition, require developers to conduct a phase 2 field

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assessment on the wetlands remote to development at such time as development applications are received in those areas. The field study shall be based on the Wetlands Ecosystem Services Protocol (WESP) for Newfoundland and Labrador and shall provide a detailed field-based delineation and functional assessment of each wetland.

1. Autumn Drive area (Figure 1 – 1 bog, 1 fen);
2. Barrows Road (Figure 2 - 1 marsh);
3. Bishops Line Area (Figure 3 – 3 marshes);
4. Castlebridge Drive area (Figure 4 – 2 marshes, 6 swamps);
5. Empire Avenue West (Figure 5 – 2 fens, 2 marshes, 2 swamps);
6. Galway (Figure 6 – 1 bog, 26 fens, 8 marshes, 13 swamps);
7. Harbourview Avenue (Figure 7 – 1 fen);
8. Kilbride South (Figure 8 – 2 bogs, 8 fen, 10 marshes, 18 swamps);
9. Lundrigan's Marsh (Figure 9 - 2 marshes, 15 swamps);
10. Outer Cove Brook area (Figure 10 - 3 fens, 3 marshes, 6 swamps);
11. Pearltown Road area (Figure 11 – 3 marshes, 1 swamp);
12. Southlands area (Figure 12 – 2 bogs, 22 fens, 24 marshes);
13. Synod Wetlands (Figure 13 - 1 marsh, 1 swamp);
14. Viscount Street area (Figure 14 – 3 fen, 5 swamps);
15. Kenmount Road area (Figure 15 – 1 fen, 6 marshes, 18 swamps);
16. Yellow Marsh area (Figure 16 – 12 fens, 7 marshes, 33 swamps);
17. Kilbride East Study area (Figure 17 – 29 fens, 27 marshes, 43 swamps)

**Key Considerations/Implications:**

1. Budget/Financial Implications: The 2020 Capital Works has budgeted \$350,000 for the detailed field survey study.
2. Partners or Other Stakeholders: N/A
3. Alignment with Strategic Directions/Adopted Plans: This study aligns with the Strategic Plan, the Municipal Plan and the Development Regulations which strive to protect wetlands and their associated buffers.
4. Legal or Policy Implications: Protection of wetlands aligns with the City's Stormwater Management Policy.
5. Privacy Implications: Some field surveys may be required on private property.
6. Engagement and Communications Considerations: N/A
7. Human Resource Implications: N/A
8. Procurement Implications: An RFP will be required to solicit professional services for the followup wetland field surveys.
9. Information Technology Implications: N/A

#### 10. Other Implications: N/A

**Recommendation:**

That Council adopt the 2019 Wetlands Delineation Study by C-CORE along with the recommendation of option (3) to protect all wetlands identified in the report within watersheds, the Goulds EVA (Environmentally Valuable Area), floodplains and areas remote to development, and to conduct the phase 2 field assessment analysis on the remaining 17 areas (as noted in Figures 1 through 17) that would be under pressure from development over the next 10-20 years. In addition, require developers to conduct a phase 2 field assessment on the wetlands remote to development at such time as development applications are received in those areas. The field study shall be based on the Wetlands Ecosystem Services Protocol (WESP) for Newfoundland and Labrador and shall provide a detailed field-based delineation and functional assessment of each wetland.

**Report Approval Details**

Document Title:	City Wetland Study.docx
Attachments:	<ul style="list-style-type: none"><li>- Figure 1 AutumnDriveArea.pdf</li><li>- Figure 2 BarrowsRoadArea.pdf</li><li>- Figure 3 BishopsLineArea.pdf</li><li>- Figure 4 CastlebridgeDriveArea.pdf</li><li>- Figure 5 EmpireAvenueWestArea.pdf</li><li>- Figure 6 GalwayArea.pdf</li><li>- Figure 7 HarbourviewAvenueArea.pdf</li><li>- Figure 8 KilbrideSouthArea.pdf</li><li>- Figure 9 LundrigansMarsh.pdf</li><li>- Figure 10 OuterCoveBrookArea.pdf</li><li>- Figure 11 PearltownRoadArea.pdf</li><li>- Figure 13 SynodWetlandArea.pdf</li><li>- Figure 14 ViscountStreetArea.pdf</li><li>- Figure 15 KenmountRoadArea.pdf</li><li>- Figure 16 YellowMarshArea.pdf</li><li>- Figure 17 KilbrideEastStudyArea.pdf</li><li>- Figure 12 SouthlandsArea.pdf</li></ul>
Final Approval Date:	May 6, 2020

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

**Jason Sinyard - May 6, 2020 - 4:32 PM**