

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

> Item No. 15.1.2 Halifax Regional Council March 1, 2022

TO: Mayor Savage and Members of Halifax Regional Council

Original Signed by SUBMITTED BY:

Jacques Dubé, Chief Administrative Officer

**DATE:** January 7, 2022

SUBJECT: HRM – Halifax Port Authority Fish Passage Project, Dartmouth

### **ORIGIN**

On April 14, 2020, the following motion of Regional Council regarding Item 8.2.3 was put and passed:

"That Halifax Regional Council request that the Chief Administrative Officer (CAO) and staff engage with the Halifax Port Authority on the potential use of offsetting funds to enable fish passage from Sullivan's Pond to Lake Banook and that the CAO report back to Council with results of that engagement to identify the potential for a joint project."

### **LEGISLATIVE AUTHORITY**

Halifax Regional Municipality Charter, R.S.N.S. 2008, c. 39:

Part VIII, Planning & Development

Municipal expenditures

**79A** (1)... the Municipality may only spend money for municipal purposes if (a) the expenditure is included in the Municipality's operating budget or capital budget or is otherwise authorized by the Municipality;

## **RECOMMENDATION**

It is recommended that Halifax Regional Council direct the Chief Administrative Officer to:

- 1. Include work to the Hawthorne Street culvert in the Capital Budget for 2024/25; and
- 2. Facilitate the Halifax Port Authority's project to construct fish passage around the Banook Lock at no net cost to the Municipality.

# **BACKGROUND**

There are multiple projects involved in providing fish passage from the Halifax Harbour at Dartmouth Cove, up to Sullivan's Pond and through to Lake Banook. These are:

- Phase 2 of the Sullivan's Pond Storm Sewer Replacement and daylighting of Sawmill Creek;
- · Replacement of the Hawthorne Street culvert; and
- Fish Passage around the Lock at Findlay Park.

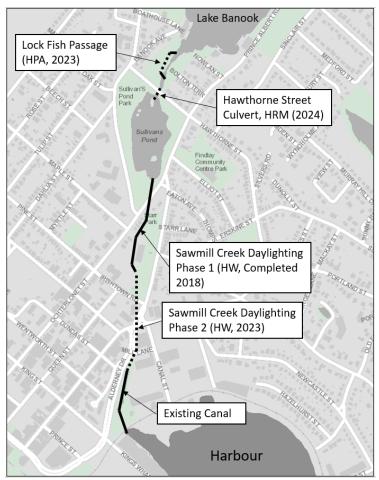


Figure 1 - Locations of fish passage projects between Dartmouth Cove and Lake Banook

Halifax Water owns and maintains the Sullivan's Pond storm sewer; a culvert that undergrounds Sawmill Creek. This culvert is aged and requires replacement. As part of this, the Department of Fisheries and Oceans (DFO) requires daylighted fish passage to be installed as part of the culvert replacement. In 2018, Halifax Water completed phase 1 of this project, referred to as the Sullivan's Pond Storm Sewer Replacement Project, from Sullivan's Pond to Starr Park. Phase 2, from Starr Park to Martin's Park, is scheduled to be constructed in 2023, and will be constructed along with the Municipality's project to update the Prince Albert / Portland / Alderney Intersection. The Municipality and Halifax Water are working together to provide as much daylighting of the creek as is feasible. Planning and design work is also underway for upgrades to Starr Park.

When Phase 2 of the Sullivan's Pond Storm Sewer Replacement Project and the daylighting of Sawmill Creek is complete, fish passage will be enabled from the Harbour to Sullivan's Pond. Without a project to connect Sullivan's Pond to Lake Banook, the Sawmill Creek fish ladder will only provide a portion of the

environmental benefits that it was designed for as fish won't be able to travel any farther inland than Sullivan's Pond.

The culvert connecting Lake Banook to Sullivan's Pond under Hawthorne Street, which acts as a bridge, is owned and maintained by the Municipality. This culvert is due for replacement and is currently scheduled in the 5-year capital budget for 2024. As required by DFO, when this culvert is replaced, it will require upgrades to provide fish passage, consistent with the remainder of the waterway.

As part of the Halifax Port Authority's (HPA) expansion in Fairview Cove, HPA is required by the *Fisheries Act* to compensate for infilling the aquatic environment by improving and/or creating new habitat elsewhere. HPA and DFO have been investigating fulfilling HPA's compensation requirement by constructing a fish ladder around the Canal Lock at Henry Findlay Park and upgrading the Hawthorne Street culvert, which would allow fish passage between Lake Banook and Sullivan's Pond.

The Municipality owns the culvert that crosses Hawthorne Street and the land in Henry Findlay Park that would be required to provide fish passage. Partnering with HPA provides the Municipality with the opportunity to share the cost of providing fish passage through these municipal assets; costs that would otherwise fall to the Municipality alone.

## **DISCUSSION**

HPA engaged Stantec Consulting to conduct a detailed design providing fish passage through the existing Hawthorne street culvert, and through a naturalized passage around the Lock through Henry Findlay Park, and on to Lake Banook. The design included the addition of fish baffles through the existing culvert. Stantec completed this design in 2019 and then engaged the Municipality and Halifax Water for comments and permissions.

After clarifying that the Municipality and Halifax Water are required to provide fish passage as part of the Hawthorne Street culvert replacement, HPA and DFO agreed to direct that portion of the compensation funding elsewhere. As of September 2021, the portion of compensation funding for the culvert fish baffles has been redirected into another project, to provide fish habitat through reef balls in the Halifax Harbour.

HPA and DFO have agreed to work with the Municipality to advance the detailed design and construction to provide fish passage and other park enhancements along the channel interface. Figure 2 shows the concept for the naturalized channel alignment. If approved by Regional Council, this work will be funded by HPA as part of the compensation funding and designed and tendered by Stantec Consulting for HPA. Staff will work with HPA to integrate the plans and assess any impacts on Findlay Park, as well as to confirm any construction scheduling conflicts. Staff will also work to facilitate HPA with any required HRM permits, reviews and permissions. HPA and Stantec will be required to obtain permissions and approvals from Nova Scotia Environment, and the Department of Fisheries and Oceans as necessary.

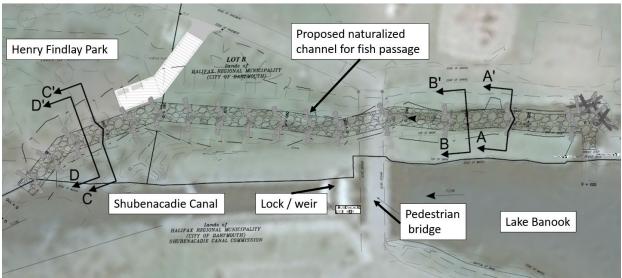


Figure 2 - Conceptual alignment of the restored naturalized channel for fish passage around the lock at Henry Findlay Park (Source: Stantec Consulting, 2019, sic)

The following is a schedule of critical events surrounding this work:

- Park upgrades by the Municipality for the World Canoe Championships in Henry Findlay Park are scheduled for the spring of 2022
- The World Canoe Championships will be held on Lake Banook in August 2022
- The North American Indigenous Games (NAIG) will be held on Lake Banook in July 2023
- Fish passage around the lock around Findlay Park, by HPA August 2023
- Phase 2 of the Sawmill Creek Daylighting by Halifax Water to be constructed in 2023/2024
- Replacement of the Hawthorne Street culvert by the Municipality is scheduled for 2024
- Replacement of the Sullivan's Pond retaining walls by the Municipality is scheduled for 2024/2025

Due to the canoe championships and NAIG events on the lakes, there can be no construction that may affect the lake levels during these in August 2022 or July 2023.

HPA / Stantec have asked if construction of the fish passage could be started immediately after NAIG in July 2023. Staff have agreed to consider this, depending on the construction timeline.

HPA / Stantec will be required to work with HRM and Halifax Water to ensure any changes to water levels required for construction work will be coordinated for the construction of the various projects.

### FINANCIAL IMPLICATIONS

The costs associated with facilitation HPA's construction of the fish passage around the Lock at Findlay Park would only require staff resources for reviews and permitting. These costs can be accommodated within the proposed 2022/23 approved operating budget.

Funding for the replacement of the Hawthorne Street culvert is identified in the five-year Capital Plan for construction in 2024. The cost of construction for replacing the Hawthorne Street culvert is estimated at \$3 M.

There are risks associated with the financial implications. These are listed in the Risk Consideration section of this report.

## **RISK CONSIDERATION**

There is a financial risk associated with the Municipality not facilitating the work of HPA. If the Municipality does not move forward with timely reviews, coordination, and approval of permits, these delays could cause HPA to redirect their compensation funding elsewhere. The Municipality would then have to choose how or when to fund fish passage through Henry Findlay Park at a later date.

### **COMMUNITY ENGAGEMENT**

The Municipality has consulted with the Halifax Port Authority, Halifax Water, and the Department of Fisheries and Oceans, regarding this project.

The Municipality has confirmed the dates of the World Canoe Championships, and the North American Indigenous Games. To ensure there are no impacts to these events, there is no ability for construction to take place within the waterways during the timeframes stated earlier in this report.

As further details unfold regarding the proposed design of the fish passage around the lock at Findlay Park, staff may choose to hold public engagement, if impacts to the park appear significant.

## **ENVIRONMENTAL IMPLICATIONS**

There are positive environmental benefits associated with providing fish passage from the Harbour through to Lake Banook. However, the fish passage will be required and constructed, regardless of the source of the project funding. Therefore, there are no environmental implications associated with the recommendations of this report.

#### **ALTERNATIVES**

Halifax Regional Council may choose to not approve the recommendations of this report.

### **ATTACHMENTS**

No attachments.

A copy of this report can be obtained online at <a href="https://halifax.ca">halifax.ca</a> or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Shannon O'Connell, Senior Program Engineer, Infrastructure Planning, Planning &

Development, 902.476.2917