

**Report To:** Municipality of Arran-Elderslie

**From:** Don Moss, Manager of Water Resources, Kyle Hope, Capital Water Infrastructure Coordinator

**Date:** June 9th<sup>th</sup>, 2025

**Subject:** Paisley Dyke Improvement Project; maintenance through Category 2 Agreement

**Purpose:** To inform the Municipality of Arran-Elderslie Council of the status of the Paisley Dyke Improvement Project Phase 1 and summarize the associated costs requiring municipal contribution.

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## Background

The following section outlines the billing structures and funding mechanisms used by conservation authorities, which differ significantly from those used by municipalities. These frameworks were most recently clarified and formalized through Ontario Regulation 687/21 under the Conservation Authorities Act, which came into effect as part of the province's broader legislative updates.

The regulation distinguishes between three categories of programs and services: Category 1 (mandatory), Category 2 (municipally requested), and Category 3 (other permitted services), each with its own cost recovery rules and funding expectations. Additionally, this section explains Special Benefitting projects, where the cost of work is assigned directly to the municipality that derives the specific benefit, and provides context on the Water and Erosion Control Infrastructure (WECI) program, which supports capital projects through cost-sharing with the province.

This background is intended to provide Council with a clear understanding of how these categories and funding streams apply to infrastructure work, including projects like the Paisley Dyke Improvement, and the rationale behind associated cost-sharing expectations.

### **Conservation Authorities Act R.S.O. 1990, c. C.27**

Objective of authorities is to provide, 20.1:

- (a) mandatory programs and services (Category 1)
- (b) municipal programs and services (Category 2)
- (c) any other programs and services that may be provided under the Act (Category 3)

Powers of authorities, 21.1(h):

- For the purposes of accomplishing its objectives, an authority has the power to:
  - To determine the proportion of the total benefit afforded to all the participating municipalities that is afforded to each of them

Conservation authorities carry out programs and services that serve provincial and municipal interests. Each conservation authority was established so that municipalities in a common watershed could work together on local resource management.

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## **Types of Billing Through O. Reg. 402/22: Budget and Apportionment**

General Levy, now to be called Cost Apportionment

- Cost apportionment calculation divided over all 15 watershed municipalities through the Modified Current Value (MVCA) method. (This means a method of apportioning an authority's operating expenses and capital costs that is based on the modified current value assessment of the properties within the authority's area of jurisdiction)

Special Benefitting – Maintenance

- For projects owned by a Conservation Authority that directly benefit a municipality
- 60/40 split between the benefitting municipality and general levy (cost apportioning) for maintenance projects only

Special Benefitting – Capital Projects

- For projects owned by a Conservation Authority that directly benefit a municipality
- At 100% to the municipality
- Should grant funding be available, funding is split between grant and the municipality (i.e., WECl funding at 50/50 between the municipality and the Province of Ontario)

MOUs, Category 2 & 3 Agreements

- Category 2 – for projects owned by municipalities that SVCA assists in maintaining; billed 100% to the participating municipality (these are optional, 5-year transitional agreements)
- Category 3 – for programs or services run by SVCA, paid for through the cost apportionment process, via 5-year agreements

## **Water and Erosion Control Infrastructure Funding Program Background**

The Water and Erosion Control Infrastructure (WECl) funding program is administered by the Ontario Ministry of Natural Resources and Forestry (MNRF) to assist conservation authorities with capital maintenance and study projects related to aging flood and erosion control infrastructure. The WECl program is application-based and evaluates projects annually, funding those with the highest priority. If approved, the program covers 50 percent of eligible project costs, with the remaining 50 percent paid by the benefitting municipality.

WECl supports infrastructure that mitigates natural hazards such as flooding, erosion, and unstable slopes. Projects typically involve studies, safety assessments, or capital repairs on structures owned or managed by conservation authorities. The WECl Committee, which includes conservation authority and MNRF staff, reviews and prioritizes applications from across the province.

At SVCA, WECl funding plays a central role in facilitating capital improvements and safety-related work on conservation-owned infrastructure and easements that benefit specific municipalities. These are referred to as special benefitting projects—projects undertaken for the direct benefit of a municipality, such as flood infrastructure protecting a particular town or community.

SVCA collaborates with municipalities to identify appropriate projects, prepare applications for funding, manage the delivery of the works, and fulfill reporting obligations. While capital work is billed 100 percent to the benefitting municipality, grant programs like WECl and the federal Flood Hazard Identification and Mapping Program (FHIMP) can significantly offset municipal costs.

## **Analysis**

### **Phase 1, Paisley Dyke Improvement Project**

The Paisley Dyke Improvement Project (Phase 1) was initiated to address ongoing toe erosion along the north bank of the Paisley Dyke, west of the Queen Street bridge. Design drawings were finalized in 2023 in preparation for anticipated WECl funding to support both Phase 1 and Phase 2 of the project.

In 2023, the WECl program transitioned to a new two-year application cycle. SVCA received confirmation of funding for Phase 1 in early September, significantly later than the typical release in May. This delay compressed the project's planning timeline and pushed critical preparatory work into the end of the construction season.

To move the project forward, SVCA coordinated permitting for in-water works and issued a comprehensive Request for Proposal (RFP), which included engineered drawings, a geotechnical study, and related documentation. D.M. Wills Engineering was retained to support technical inquiries and contract administration.

By late December, seven contractor bids were received. Six of these exceeded the project's estimated budget by \$80,000 to \$150,000. The only feasible bid came from Bomar Contracting at \$210,000. Due diligence was conducted, including reference checks and confirmation of similar project experience, leading to a planned construction start on February 17 and a completion date of March 21.

The project schedule was constrained by two critical deadlines: the Department of Fisheries and Oceans' (DFO) in-water work window closing March 15, and the WECl funding deadline of March 31.

Preliminary activities began, including soil testing, material sorting, equipment mobilization, snow clearing, and development of a dewatering plan. The final step before construction was a geotechnical engineer's sign-off on the excavation plan, scheduled for February 15.

However, concerns arose over two unknown-depth force mains beneath the dyke. Bomar's geotechnical engineer expressed uncertainty regarding dyke stability and declined to approve the excavation plan without further investigation. SVCA staff, the managing consultant, and the contractor also raised concerns about proceeding with modifications to the dyke given the impending spring freshet. The near-record water content in the existing snowpack and the anticipated rapid melt posed a significant risk to both the success of the project and the structural integrity of the dyke during a critical period. Proceeding under these conditions could have jeopardized the dyke's ability to protect the community of Paisley from floodwaters. This combination of factors caused delays that pushed the project beyond the Department of Fisheries and Oceans (DFO) in-water work window and the WECl funding deadline, making it ineligible to proceed under current funding conditions. Consequently, the project was cancelled.

While the project did not proceed to construction, the preparatory work completed provided SVCA with important insight into site conditions, permitting requirements, and cost expectations. This information will improve the likelihood of future project success under more suitable conditions.

## **Next Steps**

- Determining the depth of two force mains running through the Paisley Dyke in the work area.
- CCTV inspection of the pipe infrastructure to determine condition and create a subsequent work schedule.
- Once CCTV inspection and potential remediation is complete, along with Phase One, SVCA staff can move forward with pursuing Phase Two of the Paisley Dyke Improvement Project in partnership with the Municipality of Arran-Elderslie and WECl funding.
- 90% of the bids received for the Paisley Dyke Improvement project were above the estimated cost; this provides valuable information for project management moving forward.

- Investigate alternative avenues for project installation that may bring cost savings. It should be noted that reducing costs upfront can contribute to increased maintenance costs long term.

## **Financial Implications**

### **Phase 1, Paisley Dyke Improvement Project Financial Implications**

Although the project was halted before construction began, SVCA incurred expenses during the mobilization and preparation phase. Bomar Contracting has submitted an invoice totaling \$36,000 for the following items:

- Soil chemical analysis
- Sorting and staging of rock materials
- Equipment mobilization and demobilization
- Dewatering plan preparation
- Site preparation and preliminary coordination

WECI has confirmed it will cover 50 percent of these costs. As per the terms of the Category 2 agreement between SVCA and the Municipality of Arran-Elderslie, the remaining 50 percent is to be covered by the municipality, at a total cost of \$18,000.

In recognition of these unforeseen costs and the municipality's ongoing partnership, SVCA will assume the full cost of contract administration for both the engineering firm and SVCA, estimated at \$13,400.

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