



Staff Report

Report Title: Flood Hazard Identification and Mapping Program Collaboration

Prepared By: Mary Rose Walden, Chief Administrative Officer

Department: CAO

Date: May. 15, 2023

Report Number: CAO-2023-05-17

File Number: C11 CAO 23

Copy to: DO3-SVCA

Attachments: None

Recommendation:

THAT the Township of Huron-Kinloss Council hereby approves report CAO-2023-05-17 prepared by Mary Rose Walden, Chief Administrative Officer AND authorizes Saugeen Valley Conservation Authority to proceed with Flood Hazard Identification and Mapping Program of 6 Watercourses and provisionally Clark Creek and the entire Pine River at a cost of \$123,905.00 plus HST, AND further that the additional \$73,905.00 plus HST be funded from the Modernization of Municipal Services Reserve.

Background:

In August 2022, it was announced that the Ministry of Natural Resources and Forestry, in partnership with Natural Resources Canada, was accepting applications to participate in the Federal Flood Hazard and Identification Mapping Program (FHIMP). This funding program provided up to 50% matched funding for eligible flood mapping projects.

With Council support, Saugeen Valley Conservation Authority (SVCA) staff applied for FHIMP funding on behalf of the Township in September 2022. Staff received notice of the successful application in late November 2022 for matched funds.

Flood hazard maps will be produced for a minimum of four flood events, including the 1:25 year event, 1:100-year event, Hurricane Hazel Flood Event, and proxy scenario (equal to or higher than a 1:200-year event). Climate change scenarios will also be displayed on the 1:25 and 1:100-year event maps. Maps with varying magnitude will better inform flood risk assessment and management at the local level. All flood maps will identify hazard areas consistently with the Provincial Policy

Statement and the policies and performance standards outlined in the province's natural hazard technical guidelines. All maps created under this project will also be suitable for use for Section 28 Regulations, under the Conservation Authorities Act.

Value to Huron-Kinloss

There are no existing flood hazard maps for the Township of Huron-Kinloss. Given the increasing frequency and severity of extreme weather events, it is crucial to establish and maintain precise flood hazard maps to ensure public safety, minimize property damage, and reduce business disruptions. The hazard maps generated through this program will aid in future decision-making for both SVCA and the Township of Huron-Kinloss.

Administration of the project will be provided by SVCA with additional technical support and peer review services by Greenland International Consulting Engineers (Greenland). SVCA is funding all peer review services. Should future mapping projects be conducted outside of this program, peer review services would likely be incurred by the Township.

Additionally, two public open houses will be conducted under this program to review modelling and mapping results; these open houses are anticipated to occur in August and December 2023.

Discussion:

Request for Proposal (RFP) Results

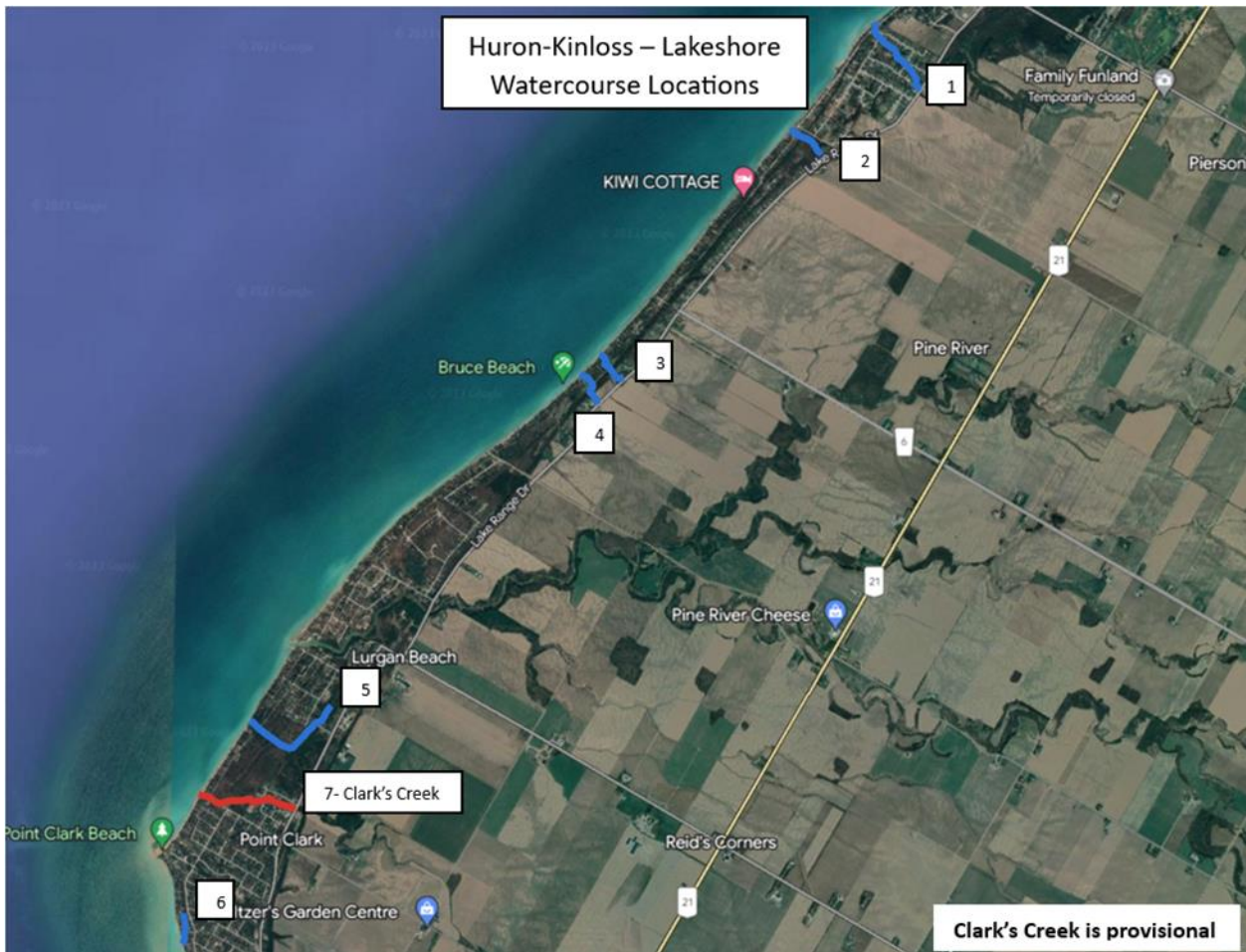
An RFP was issued by SVCA in April 2023 to retain a consultant to undertake flood hazard mapping in the Township of Huron-Kinloss. Two scenarios were provided for costing:

Scenario 1: Flood hazard mapping for six (6) small watercourses west of Lake Range Drive with provisional costing for Clark's Creek west of Lake Range Drive.

Scenario 2: Flood hazard mapping for the entire Pine River watershed, including all tributaries.

Scenario 1: 6 Watercourses and provisionally Clark's Creek

Scenario 1, SVCA staff would recommend Firm 1 with a total cost of \$49,700.00 plus HST. This would include topographic survey of 14 culverts and a minimum of 28 cross sections, immediately upstream and downstream of culvert crossings.



Watercourse 1 – Unnamed watercourse (appears to be a municipal drain); length of mapping 0.8km

Watercourse 2 – Unnamed watercourse; length of mapping 0.5km

Watercourse 3 – Unnamed watercourse; length of mapping 0.4km

Watercourse 4 – Unnamed watercourse; length of mapping 0.4km

Watercourse 5 – Unnamed watercourse; length of mapping 1.1km

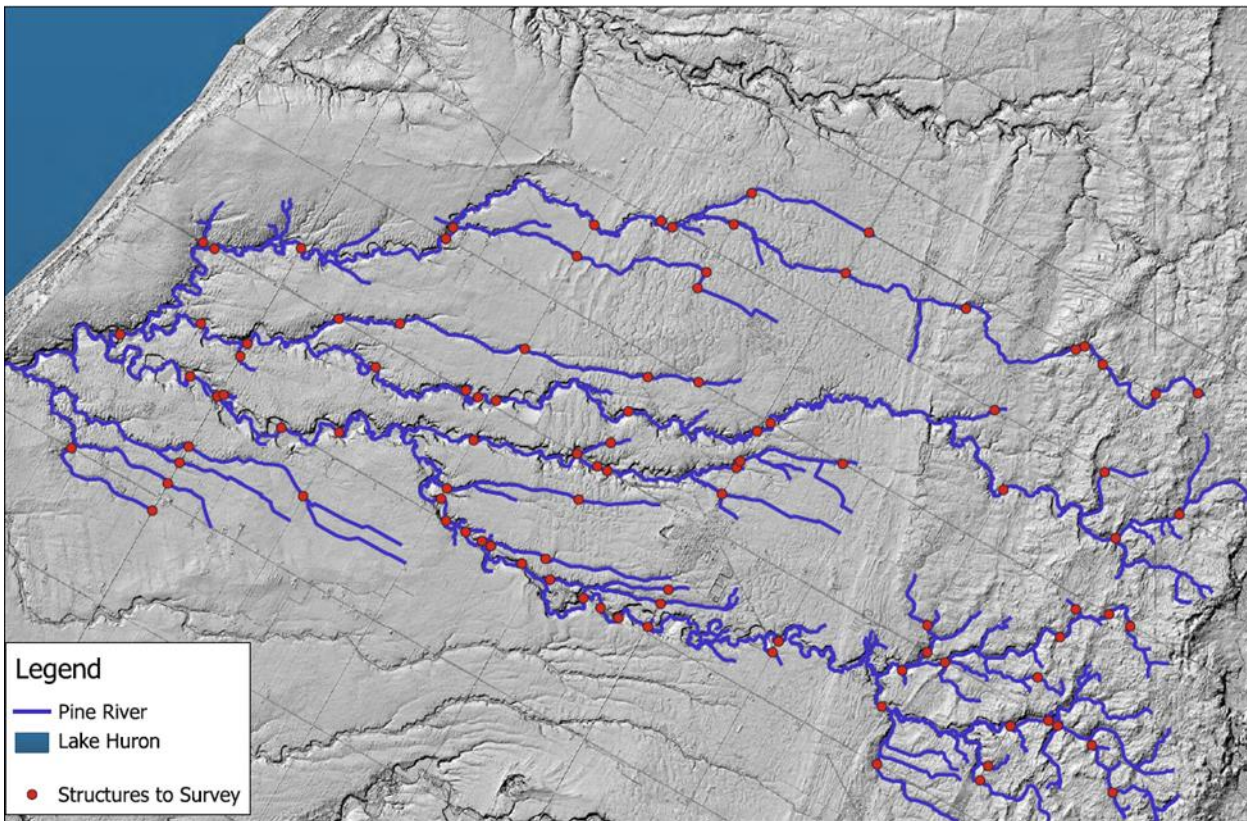
Watercourse 6 – Jardine's Creek; length of mapping 0.3km

Watercourse 7 – Clark's Creek; length of mapping 1.1km

Scenario 2: The entire Pine River

If the Township of Huron-Kinloss is interested in completing Scenario 2, SVCA staff would recommend Firm 2 with a total cost of \$65,186.25 plus HST. This would include topographic survey of over 100 watercourse crossings.

Total length of mapping for the Pine River is approximately 120km, as shown below:



Scenario 1 and Scenario 2 Combined

Firm 1 total cost – \$140,740.00 plus HST

Firm 2 total cost - \$123,905.00 plus HST

Should the Township of Huron-Kinloss wish to undertake both projects, SVCA staff would recommend award to Firm 2 at a total cost of \$123,905.00 plus HST. Please note however, that the FHIMP budget for is \$50,000. SVCA staff have confirmed with FHIMP coordinators that additional funding will not be provided under the program; therefore any expense above \$50,000 is considered additional and will be 100% funded by the Township of Huron-Kinloss.

We are recommending that we direct SVCA to proceed with Scenario 1 and 2 combined. The additional cost to the Township is \$73,905.00 plus HST to be funded from the Modernization of Municipal Services Reserve.

Financial Impacts:

The Modernization of Municipal Services Reserve was established from funding provided by the Province of Ontario to improve local service delivery and support modernization efforts for small and rural municipalities. The funds have been earmarked for a variety of different projects to realize efficiencies that may achieve savings. This project meets the goals and objectives set out in the criteria and there are sufficient funds available in the reserve as a result of successful grant applications.

Strategic Alignment / Link:

We are an environmentally conscious community that are good stewards of our natural environment by protecting our natural assets, by using our resources wisely and by being aware and taking responsibility.

Respectfully Submitted By:

Mary Rose Walden, Chief Administrative Officer

Report Approved By:

Mary Rose Walden, Chief Administrative Officer