Section III – Items for the Information of the Board

TO: Chair and Members of the Board of Directors
Friday, October 25, 2024 Meeting

FROM: Sameer Dhalla, Director, Development and Engineering Services

RE: **UPDATE ON AVAILABLE OPTIONS FOR ENHANCED FLOOD FORECASTING AND WARNING NOTIFICATIONS AND COMMUNICATIONS STRATEGIES**

KEY ISSUE

To provide an update on Toronto and Region Conservation Authority's (TRCA) efforts to improve flood notification messaging.

RECOMMENDATION:

IT IS RECOMMENDED THAT Development and Engineering Services (DES) work with Communications, Marketing, and Events (CME) Staff and municipal partners and public officials, starting with areas affected by the 2024 floods, to undertake an enhanced public outreach campaign in order to increase awareness of, and subscription to TRCA's flood message notification;

AND THAT DES work with Information Technology and Records Management (ITRM) to expand TRCA's flood message notification system to include SMS Text Message capability;

AND THAT on behalf of the Board of Directors, staff reach out to TRCA municipal partners and request that TRCA flood messaging be included on Municipal websites by the end of 2024;

AND THAT in collaboration with the City of Mississauga, staff pursue the use of the national alerting system for local flood messaging;

AND THAT a Flood Risk Awareness Outreach Program be developed in collaboration with municipal partners for implementation in 2026 or sooner depending on available partner funding;

AND THAT staff report back in Q4 2025 with an update on the efforts identified in this report.

BACKGROUND

At Board of Directors Meeting held on September 27, 2024, Resolution #A 115/24 was approved as follows:

> **THAT staff, in consultation with municipal and agency partners, be directed to report back at the next available meeting on available options and associated funding estimates for enhanced and updated weather alert notification applications and communication strategies;**
>
> **AND THAT staff be directed to report back at the next available meeting with a report on what actions can be taken in the immediate term, short term and long term for Flood Vulnerable Areas impacted by the July 16, August 17, and August 18, 2024 storm events.**

TRCA's existing Flood Forecasting and Warning (FFW) program operates in accordance with Ontario Regulation 686/21: Mandatory Programs and Services and is guided by the Ministry of Natural Resources (MNR) Provincial Flood Forecasting and Warning Guideline. The FFW program also supports municipalities in meeting their obligations under the Emergency Management and Civil Protection Act (EMCPA).

More specifically, the TRCA Flood Forecasting and Warning (FFW) program:

- Monitors weather and watershed conditions daily;
- Maintains a local rainfall and watercourse flow and level data collection network;
- Identifies when weather and watershed conditions are likely to result in flooding conditions;
- Issues flood messages to municipalities, applicable agencies, media and the public, to advise of potential flooding;
- Operates TRCA dams and flood control structures to reduce the effects of flooding;
- Communicates directly with municipalities and the MNR during flood events;
- Supports the development of municipal emergency response plans during non-emergency times; and
- Undertakes public outreach activities to enhance flood risk awareness.

RATIONALE

Awareness is the best tool in minimizing flood impacts, including protection of life and property. The extreme storms of 2024 have identified the need to increase the number of people receiving flood messaging and to broaden the avenues through which communications can be received.

Public communication effectiveness can be increased by employing a variety of communication methods to reach the largest audience possible. TRCA's existing flood forecasting and warning communications exceeds provincial requirements and while communication methods with emergency services providers during the storms of 2024 were effective, messaging penetration amongst the public remains low. This report aims to achieve increased message penetration by both enhancing the messaging tools used by TRCA, and through more effective advertising and outreach involving municipal and senior government partners including elected officials.

The following sections review TRCA's flood messaging responsibilities and existing flood messaging approach. Following which, improvement options are presented and reviewed culminating in discussion of recommendations and next steps.

This report responds to the first part of the resolution on September 27, 2024 on available options and associated funding estimates for enhanced and updated weather alert notification applications and communication strategies. Some of the costs outlined in the report are being discussed with TRCA staff and municipal partners and may be refined in future reports. It is not intended to respond to the second part of the resolution from September 27, 2024.

A subsequent staff report is under preparation to report for the next available Board of Directors meeting on the actions that can be taken in the immediate term, short term and long term for Flood Vulnerable Areas (FVA) impacted by the July 16, August 17, and August 18, 2024 storm events. This report has benefited from meetings with Councillors and municipal and agency staff, input received at recent public meetings on flooding in Mississauga FVA.

Roles and Responsibilities

The responsibility for flood contingency planning has been established by the province of Ontario and is shared by municipalities, Conservation Authorities (CAs), and MNR with each party playing a distinct role. Municipalities have the primary responsibility for the welfare of residents and are required to include flood emergency response into municipal emergency planning. CAs, such as TRCA, are responsible for operating a Flood Forecasting and Warning (FFW) Program. MNR provides FFW functions in areas where CAs don't exist, provides emergency services for municipalities in certain circumstances, and sets technical guidelines that CAs are required to follow.

Conservation Authority Flood Forecasting and Warning Responsibilities:

Under the Conservation Authorities Act, CAs are required to provide programs and services related to the risk of natural hazards that are prescribed in regulation (O. Reg. 686/21 'Mandatory Programs and Services'). This regulation is made under the Act and prescribes the programs and services that CAs are required to carry out in relation to FFW in their respective jurisdictions. The following details the specifics of conservation authority responsibilities regarding FFW functions.

As taken from the MNR's FFW technical guidance, CAs are expected to:

- Assist the MNR in the delivery of the FFW program in areas within their jurisdiction;
- Undertake Monitoring, including:
  - Monitoring weather forecast information, water levels and flows within their jurisdiction;
  - Maintaining a local monitoring network, data collection and flood warning systems; and
  - Monitoring, operating and maintaining water control structures such as dams, channels, dikes and erosion control structures;
- Analyzing and assessing, including:
  - Being able to forecast local watershed and river conditions and flood potential within their jurisdiction;
- Communicating, including:
  - Maintaining communication with the MNR Surface Water Monitoring Center (SWMC);

- Issuing flood messages to municipalities and media within their jurisdiction;
- Provide flooding response advice to their member municipalities.
- Maintaining awareness provincial activities during a flood emergency by consulting with the MNR District Emergency Response Coordinator; and
- Advising the MNR District Emergency Response Coordinator when a flood emergency ceases to exist.

While the focus in this guidance is on providing notifications, support, and advice to municipal emergency service providers, several CAs have expanded their notifications to also include direct messaging with the public. This approach is in accordance with Reg. 686/21 which permits a conservation authority to inform persons and bodies that the authority considers advisable of the potential or actual impact of flood events, which facilitates expanded risk awareness that can lead to reduced impacts through informed decision making. With storm events often crossing municipal boundaries, issuing flood notifications at a watershed scale also offers economies of scale and message consistency across political boundaries.

Municipal Responsibilities:

Ontario Regulation 380/04 identifies that municipalities have the primary responsibility and authority for response to flooding and flood emergencies, and for the welfare of residents and protection of property.

More specifically, municipalities are required to have a valid emergency response plan and procedures in place so that when a flood message is issued by CA, the affected municipalities can quickly relay the flood message to relevant stakeholders, initiate emergency services actions, and provide directions to residents and businesses (e.g. the closing of an inundated road). Municipalities can employ a variety of methods in communicating with their residents, including using media tools, public address/access systems, and/or door to door contact by emergency services personnel, municipal services staff and/or volunteers. Having updated and robust emergency plans and procedures in place ahead of emergencies works to ensure coordinated and consistent communication with the public during and leading up to an event.

TRCA Existing System for Flood Warning Message Notifications

Ontario employs standardized flood message notification terminology across the province, and this terminology is defined by the MNR Provincial FFW Guidelines. TRCA employs the same common flood message language as other CAs in accordance with provincial guidance. The following summarizes the available flood messaging notifications used by TRCA. These are also included in the format they appear on TRCA's website in **Attachment 1**.

Watershed Conditions Statements (Yellow Category):

- Watershed Conditions Statements provide a general notice that potential conditions exist that pose a risk to personal safety, or which have the early potential to lead to flooding. Such statements are intended to encourage public awareness of increased risks near riverine systems.

- Two variations of this flood message exist, and they are listed as follows:
    - Watershed Conditions Statement – Water Safety
        - This notification can be issued when high flows, unsafe banks, melting ice or other factors could be dangerous for recreational users such as anglers, canoeists, hikers, children, pets, etc.; and
        - When such a notice is issued, flooding is not expected.
    - Watershed Conditions Statement – Flood Outlook
        - This notification can be issued as an early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions, that could lead to high runoff, cause ice jams, shoreline flooding or erosion.

Flood Watch (Orange Category)

- A Flood Watch identifies that flooding is possible within specific watercourses or municipalities and is meant to engage municipalities, emergency services and individual landowners in flood-prone areas to prepare and be ready to respond to flooding conditions; and
- A Flood Watch may be updated depending upon weather and runoff conditions and will be followed by a notice of cancellation once the potential for flooding has passed.

Flood Warning (Red Category)

- A Flood Warning identifies that flooding is imminent or already occurring in specific watercourses or municipalities. Once such a notification is issued municipalities and individuals should take action to deal with flood conditions; and
- Flood Warnings may be updated depending on weather and runoff conditions and will be followed by a notice of cancellation once the potential for flooding has passed.

Lake Ontario Shoreline

- Shoreline flood messages are similar in category to river flood messages but are only applicable to shoreline areas. These types of messages also have the three colour categories (yellow, orange and red) and are issued when critical high-water levels and waves on Lake Ontario, are either possible or occurring, which could result in shoreline flooding and/or erosion.

Regarding TRCA flood messaging, the following additional key points are provided.

- CA Public Messaging Approaches Vary: While not all CA's issue flood message notifications directly to individuals, the majority that do provide such a service, use a system that requires subscription for messaging through one or more forms (e.g. corporate website or digital newsletters, third party software applications, and social media applications). TRCA's flood message notification system for specific members of the public was introduced in 2016. TRCA was the first conservation authority to offer a self-subscription notification system, and messages can be received via email. TRCA was also the first to use social media platforms, such as X in 2013, to post flood messages for public followers. The flood message self-subscribe option can be accessed via TRCA's corporate website (*trca.ca/floodmessages)*, social media (https://x.com/TRCA_Flood), and newsletter platforms.

- Jurisdiction wide messaging: TRCA issues flood messages for its entire jurisdiction, which includes nine different watersheds, six upper-tier and 15 lower-tier municipalities, with some of those municipalities overlapping with adjacent conservation authorities, as shown in the map in **Attachment 2**. Localizing flooding risks to specific watersheds may or not be possible depending on weather forecasting accuracy and lead times. When localization of risks is

possible, messages are still issued jurisdiction wide but will contain descriptions within the messaging to identify higher risk areas.

- Flood Message Criteria: TRCA staff follow a prescribed protocol to determine when to issue flood messaging. Key factors include the expected amount and intensity of rainfall, the reliability of weather forecasting, rates of change in weather and river conditions that are observed within TRCA's and external hydrometric monitoring networks, and consultations with municipal emergency services providers. Watershed conditions, and correspondingly, flood risk determinations, can change quickly and considerable staff training is required to minimize response times during weather events.

- Short Lead Times: Thunderstorms, which present the most common flood risk within TRCA's jurisdiction, can form and result in flooding very quickly. Even with staff continuously available to monitor changing weather, the lead time between the formation of a thunderstorm and flooding occurring can be less than 1 hour. This short lead time further emphasizes the importance of staff training and of having a notification process and tools that can enable staff to issue notifications as quickly as possible. The fewer the number of parties and the fewer software systems that are involved in issuing a message, the faster a message can be issued.

- Flood Messaging may not be issued sequentially: Flood messages are not required to be issued in any specific order. Some weather systems allow considerable advance warning (e.g. hurricanes), while other weather systems can change rapidly and offer very little warning (e.g. thunderstorms). During quickly changing conditions, messaging with emergency service providers becomes the primary responsibility of staff. As a result, TRCA messaging with the public can appear to lag real world conditions.

- Flood Message Uptake: Of the existing modes of communication with the public, social media appears to be the most utilized format with an estimated 2,300 followers of TRCA flood messaging on X, 11,200 followers of TRCA's primary account on X, versus approximately 1,000 members of the public who have subscribed to receive flood messaging via email.

- Weather Alerts: TRCA encourages the public who are at increased risk of flooding to subscribe for both weather and flood notifications. For weather notifications, TRCA recommends Environment Canada's weather alert "EC Alert Me" program, which is a self-subscription service for receiving severe weather alert notifications for specific locations via email. These notifications are also available on many mobile weather applications, such as Environment Canada's WeatherCAN app, the Weather Network and The Weather Channel, to name a few. While the TRCA encourages the public to subscribe for weather notifications, it is important to note that many weather notifications don't result in flooding events. It is therefore also important to receive flood message notifications, which are based upon scenario modelling tools and experienced interpretation of weather alerts.

- Board Members: Board Members are automatically subscribed to receive flood notifications as part of the onboarding process that follows their appointment involving TRCA's Clerk and the Government and Community Relations team.

- Flood Message Format (API): TRCA flood messages are published and available in web-based Application Programming Interface (API) which is a computer language that can be used to integrate flood message information on other websites, such as municipal websites.

- Flood Message Formats (CAP): TRCA flood messages are also available in the Common Alerting Protocol (CAP) format, which is the international standard format for emergency alerting and public warning systems that uses XML-based data format for exchanging public warning and emergencies between alerting technologies. These computer language formats can be captured automatically by existing public alerting services, such as Google Alerts and similar platforms.

- Awareness of risk matters more than notification of risk: Phone notifications are easy to turn off regardless of the system employed by a CA. If several summers have passed without a significant flooding event, flood message notification penetration would be expected to decline. Investment in flood risk awareness, where homeowners make different choices during home renovations, or even where they choose to store irreplaceable belongings due to

their awareness of an increased potential for loss, may yield greater flood risk results than an improved notification system can achieve.

Reducing Impacts through Improved Public Communication and Outreach

Ontario's Flooding Strategy recognizes the role of property owners in mitigating the impacts of flooding and that this can be achieved when the public understands flood risks so they can both make informed decisions regarding their properties and so they can respond appropriately during flooding events.

Ontario's Flooding Strategy also recognizes the role of CAs in flood risk management. TRCA has been fulfilling its role in flood risk management in a variety of ways, including the identification and publication of natural hazard flood risks (e.g. publicly accessible floodplain mapping), advocating for infrastructure improvements to convey flood flows more effectively, regulating land development within flood prone areas, public outreach activities, and providing a variety of services during flood events (e.g. flood monitoring and flood message notifications).

While many improvements have been implemented since the July 8, 2013, storm to municipal and TRCA systems and practices, the significant storm events of 2024 revealed both a low awareness of floodplain knowledge and of flood message notification systems. This awareness points to the recommendation to increase advertising and outreach efforts to achieve Ontario's Flooding Strategy goal of making sure property owners are as informed as they can be.

As described in more detail later in the report, TRCA is recommending a multi-phased jurisdiction-wide marketing campaign to increase awareness of local flood risks and to encourage residents to subscribe to and utilize flood message notifications. While marketing could be primarily targeted at those people living in floodplain and spill areas, many people who did not reside in flood vulnerable areas were also impacted in 2024 (e.g. cars being flooded as they drove into flooded areas). A multi-phased approach indicates that the marketing campaign will need to be repeated more in future years, and that more than one specific avenue of marketing will be needed to broaden the audiences receiving the marketing.

Reducing Impacts through Enhanced Flood Message Distribution

Increasing flood message notification penetration can lead to quicker and more informed decision making, which should lead to lower risk of death and injury, and a lower risk of financial damages during storm events. While it isn't a tool that can offer risk elimination, better messaging can increase the odds of the public moving out of harm's way. The low subscription rate for TRCA's flood message notification system is an important opportunity for improvement. As directed, TRCA staff have identified the following enhancement options.

1. Expand TRCA's current notification system to include SMS Text Message capability;
2. Procure a third-party application to add an additional channel (e.g. in addition to TRCA's current system) for flood notification messaging (e.g. Alertable);
3. Post TRCA's notifications on municipal websites; and
4. Pursue the use of a non-subscription push notification system (e.g. the national alerting system known Alert Ready).

Each option presents opportunities, timelines, and costs that are important to consider. Please note that costs are preliminary and will be further refined in discussions with partners and potential service providers. The following table provides a comparison of the options (i.e. Table 1: TRCA Flood Message Enhancement Options).

Option and description	**Estimated Budget**	**Timeline**
1) Expand TRCA's existing subscription system. This includes adding SMS Text Message functionality so members of the public who subscribe can receive either or both email and text message-based flood notifications. This requires an update to TRCA's website.	$20,000 – One-time cost to update systems including staff time. $6,000 – Annual estimated cost for issuance of text messages at an estimated cost of 1 cent per subscriber based on average	Website Update – 2 months (initiate by January 2025). System testing and verification – April 2025.

	number of flood messages per year.	
2) Procure a new third-party notification subscription system (e.g. Alertable). Switching subscriptions systems would only be beneficial if increased message penetration can be achieved at a reasonable cost. Both TRCA's system and third-party systems can allow messages to be received on cellphones. Third party providers offer a potential benefit of reaching users who are subscribing to notifications for reasons other than flooding. Without research it is difficult to speculate on how much more effective this approach would be. Regardless of the tool chosen, it is believed that marketing and advertising are key in increasing the number of users accessing messaging. The procurement of external services would require additional lead time, so TRCA procurement policies can be followed. TRCA existing approach offers access to user contact information which can allow for future message targeting. Using a third-party service would limit TRCA access to subscriber specifics.	Annual subscription fee - $15,000/yr. First year start-up costs - $20,000 (includes website changes, and staff time for non-FFW TRCA staff for system testing).	A third-party system could be procured starting in Q4 2024 and be completed in Q1 2025. System testing would be through Q2 & Q3 of 2025. System could be fully operational Q4 2025.

3) Display TRCA flood message notifications on municipal websites Use existing TRCA flood message API technology to integrate with municipal or agency websites and display active TRCA flood messages for municipal website visitors. Would involve formal requests to municipalities to adjust municipal websites. Each municipality will have their own preferences for messaging and this task would likely result in municipality specific messaging. It may also result in message distribution on social media platforms that are not directly used by the TRCA.	No additional TRCA cost. Additional cost for municipal partners to be determined.	Requests to municipalities to be issued Q4 2024.
4) Pursue flood message notifications on the national alerting system, Alert Ready. Of the options available, this is the only true push notification system (i.e. a message can be sent to a resident without them first asking/agreeing to receive a notification). This option involves engaging with municipalities, the Province of Ontario, and Environment and Climate Change Canada as they are the only existing bodies who can broadcast a message using Alert	$15,000 - TRCA staff time for the consultations with other levels of government. Additional municipal budget for this may not be required but other floodplain mapping/ floodplain outreach activities would be nominally slowed to pursue this effort as	0-2 years dependent upon response of senior levels of government to this request.

Ready. It is not expected that CAs will be able to obtain direct publishing permission on this system. Research is needed to determine if a message can be reviewed and published using Alert Ready quickly enough during Thunderstorms to still provide advance warning for flooding in FVA.	it will involve the same personnel.	

Consideration of the above options reveals that the quickest and most cost-effective enhancement option is to proceed with **Option 1: Expand TRCA's existing subscription system.** It is quicker as it leverages an existing notification system. This approach further supports an operational need to ensure flood messages are distributed as quickly as possible, and as it does not rely on a 3rd party to distribute the messages to the intended audience.

It is also TRCA's recommendation to proceed with the implementation of **Option 3: Display TRCA flood message notifications on municipal websites** and **Option 4: Pursue flood message notifications on the national alerting system, Alert Ready** as doing so would add to TRCA's multi-layered notification strategy at a minimal cost.

Relationship to TRCA's 2023-2034 Strategic Plan

This report supports the following Pillars and Outcomes set forth in TRCA's 2023-2034 Strategic Plan:

Pillar 1 Environmental Protection and Hazard Management:

1.1 Deliver provincially mandated services pertaining to flood and erosion hazards

Pillar 4 Service Excellence:

4.3 Responsive relationships and a trusted brand with a reputation for excellence

FINANCIAL DETAILS

Funds for updates to TRCA's current flood notification system to include SMS Text messages for the public is available in capital account 107-02

(Flood Protection and Remedial Capital Works). Funds for the initial phase of Communications and Public Outreach are also available in capital account 107-02 (Flood Protection and Remedial Capital Works) with supporting funds from operating account 115-62 (Flood Risk Management and Communications). Additional funding, if required, will be requested as part of the municipal budget process.

DETAILS OF WORK TO BE DONE

Communications and Public Outreach

Immediate Strategic Rollout

Encouraging residents to sign up for flood messages and increasing their awareness and receptiveness to TRCA's flood communications will be the focus of a digital-first campaign utilizing social media and targeted online advertisements. This approach aims to reach a broad audience in flood-vulnerable areas by engaging them where they are already active online.

The strategy will be supplemented through stakeholder communications with elected officials. By sharing campaign content through elected officials' newsletters and social media platforms, TRCA aims to further increase the campaign's visibility and engagement, especially within communities at higher risk of flooding. This collaborative approach will help extend the reach and impact of the campaign in flood-prone neighbourhoods.

Digital Media Campaign to promote sign-up

A paid digital media campaign consisting of two key tactics aimed at increasing resident sign-ups for TRCA flood messages:

1. **Search Advertising (Google Ads):**
   - Launch a targeted search advertising campaign on Google to capture residents actively searching for information related to flood preparedness and emergency notifications.
2. **Social Media Advertising (Facebook, Instagram, Twitter/X):**
   - The social media strategy will utilize paid ads across popular platforms to increase visibility and engagement with residents in flood-prone areas.
   - TRCA will use geotargeting to reach specific flood-prone regions and refine the audience based on postal codes to properties in the affected area.

Elected Official Partnerships and Outreach

TRCA will focus on expanding visibility through strategic partnerships with MPs, MPPS, local councilors and community leaders, using their communication channels to increase sign-ups for TRCA flood messages.

1. **Partnerships with elected officials to promote and increase subscription to TRCA's flood messages:**
   - TRCA will collaborate with Elected Officials representing flood-prone neighbourhoods to help share campaign messaging. By leveraging their established communication networks, TRCA can amplify the campaign's reach and credibility.
   - TRCA will provide pre-written social media posts and newsletter content that Elected Officials and partners can easily share to promote flood message sign-ups. These posts will be adaptable for different platforms and will include direct sign-up links.

Publish Flood Messages on Municipal Websites

TRCA's Flood Risk Management team is working to enhance flood risk communication by incorporating TRCA Flood Messages directly into municipal websites. This initiative seeks to expand the reach of critical flood information, thereby improving community safety and preparedness.

1. **Collaborating with Municipalities for Website Integration**
   - Partner with municipal marketing and web development teams to embed the TRCA flood message API (https://trca.ca/wp-json/trca/v1/flood-messaging) on their websites.
   - The integration will provide real-time updates on flood risks and messaging, ensuring this important information is prominently displayed for residents.

Timelines

This section of the report provides additional detail on the work that needs to be done in relation to the TRCA recommendations presented earlier in the report. Specifically, details on the expanded outreach plan and details on the enhanced flood message notification systems are provided as follows.

Expanded Outreach Activities

This method of outreach is proposed to rely on three primary methods, including that of digital advertising, in person outreach, and leveraging existing communication channels. While digital advertising will be targeted for the entire TRCA jurisdiction, other methods are expected to be geographic specific, with a focus on reaching out to flood vulnerable communities. The two primary objectives of an expanded outreach program are to increase property owner flood risk awareness and public utilization of flood message notifications. Additional details are provided as follows.

<u>Digital Advertising:</u>

- Create and publish google and social media ads to reach residents, with costs dependent on ad frequency, platform choice, and audience size.
    - Additional estimated annual costs range from $10,000 to $30,000, depending on the scope of the campaigns.

- Regular production of new content (e.g., videos, infographics, social media posts) to keep messaging current and engaging.
    - This would involve procurement of external contractors for design and video production, with costs estimated at $5,000 to $15,000 per year.

- The initial campaign would involve an advertising campaign at an estimated cost of $10,000 with advertising to be published by the end of 2024. The frequency of advertising could increase these costs significantly. The creation of new content would not be included within this campaign and existing 2024 budgets would be utilized for this effort.

- Sustained annual budgeting for advertising would require additional future years funding. The extent of this funding is dependent on the success rate of the initial advertising, which would be determined through increased subscriptions for flood notifications. A relationship

exists between the level of advertising investment and public response that requires additional research to quantify. A sustained annual increase in advertising would be required to achieve a sustained increase in public awareness.

- Scheduling of activities and timelines are identified below:
    - November 2024: Set initial goals, prepare content, engage with the communications consultant;
    - December 2024: Launch search and social media ads and begin tracking performance; and
    - January 2025: Optimize targeting and content based on early results by conducting a mid-campaign review and continue refining strategies for higher conversions.

<u>In-Person Outreach:</u>

In-person outreach will involve a combination of attendance at public meetings planned by others and flood specific public information meetings. As flood risk specific public information meetings often have low attendance, the primary objective will be to attend suitable meetings that achieve more than one purpose to capitalize on larger audiences. TRCA staff will monitor planned public meetings across the TRCA jurisdiction and request an opportunity to participate, targeting attendance at an additional 2-4 meetings each year, as this is achievable with existing staffing resourcing. Content at these meetings would include floodplain mapping awareness and flood notification system awareness, but also could be tailored to present on other TRCA initiatives as requested.

This effort would entail a number of costs including staff time for attending events, the printing of materials, and related disbursements that would result in increased budget needs in future budget years, estimated at an additional 5-10 k per year depending on requests, and volume of effort per year.

<u>Leveraged Outreach:</u>

Leveraged outreach involves identifying existing communication avenues and utilizing them to expand flood risk awareness. These activities could include partnering with elected officials (e.g. information in newsletters or ward specific town hall meetings etc.). This activity would also include formally requesting municipalities to host flood messaging on their websites. Scheduling of activities is as follows:

- **Elected Official Outreach**
  - November 2024: Begin preparing content;
  - January 2025: Distribute content packages to Elected Officials;
  - February 2025: Gather feedback and adjust tactics as needed;
  - March 2025: Wrap up the campaign, evaluate impact; and create an updated strategy document and plan for use in subsequent years.

- **Flood Messages on Municipal Websites**
  - November 2024: Informal outreach and planning;
  - January 2025: Formal request for message hosting; and
  - April 2025: Follow-up, review, and internal TRCA reporting on results.

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Attachments: 2

Attachment 1: TRCA Flood Message Category Types
Attachment 2: Conservation Authorities Map of the Greater Toronto Area