

Regulated Area Map Updates and Transition Protocol

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Regulated Area Map Updates and Transition Protocol

Purpose and Objectives

Purpose

The Upper Thames River Conservation Authority (UTRCA) is required, under Ontario Regulation 41/24, to review mapping annually and determine if regulated area updates are necessary. There is currently no Provincial guidance for Conservation Authorities related to their regulatory responsibilities during the transition to, or implementation of, hazard or regulatory map updates. O. Reg. 41/24 states that conservation authorities may develop map update procedures as they deem advisable.

The UTRCA's Regulated Area Map Update and Transition Protocol establishes:

- Key stages in the UTRCA's regulated area map update process,
- What data will be used at each stage of the process,
- How the new data will be presented on UTRCA's publicly available mapping,
- When the new data will be used for administering Ontario Regulation 41/24, and
- When and how municipal, public, and interest-holder engagement will occur.

The UTRCA will rely on this protocol for all updates to the extent of the regulated area, including enlargements and reductions.

Objectives

- Help to ensure that UTRCA's use of new data resulting in updates to regulated area maps is transparent, consistent, and defensible, while ensuring compliance with legislative mapping requirements.
- Guide staff and support more efficient and effective use of new data, including when to rely upon such data to inform decisions on development applications.
- Help UTRCA's municipalities, interest-holders, and the public better understand the dynamic nature of regulated area mapping and make more informed decisions, based on potential risks and UTRCA's regulatory requirements.
- Support UTRCA decisions related to flood forecasting, and advisory and municipal decisions around natural hazard risk management or emergency response.

Background

The UTRCA works to protect people and property from natural hazards, including flooding and erosion hazards, as well as wetlands and the area surrounding them. The UTRCA regulates development in or near natural hazards and features pursuant to a regulation enacted under section 28 of the *Conservation Authorities Act*. The current regulation for all

Conservation Authorities is Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits.

Accurate natural hazard or feature information is the foundation of effective planning and helps ensure that decisions made regarding development keep people and property safe. To illustrate the approximate location of area it regulates, the UTRCA generates maps (“regulated area maps”) that depict properties that may be affected by Conservation Authority regulations. It is important that these maps are maintained and updated as new information becomes available, and that a process is in place to ensure municipalities, interest-holders, and the public are notified of significant updates.

Previous Regulation - O. Reg. 157/06 (“Regulation Limit” Maps)

The UTRCA originally prepared regulation limit maps in 2006 for the implementation of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 157/06), also known as the Generic Regulation. The process for developing the maps was documented in *Determination of Regulation Limits for the Upper Thames River Conservation Authority (2006)*.

The regulation required that a conservation authority map all areas within its jurisdiction described by the regulation and delineate those areas as the “regulation limit.” The regulation limit generally encompassed:

- River and stream valleys, including valleys with defined, stable or unstable slopes, plus an allowance of 15 metres,
- Flood plains and areas subject to stream-related erosion (meander belts) where valley slopes are not clearly defined, plus an allowance of 15 metres,
- Watercourses,
- Wetlands, plus areas defined in the regulation, and
- Hazardous lands.

Generating regulation limit maps for the 2006 regulation change involved manually digitizing paper maps from the 1980s and 1990s. This mapping was based on Ontario Base Maps with a scale of 1:2000 for some urban areas, such as the City of London, and 1:10,000 for the remainder of the watershed, at 5 metre contour intervals. This data was the best available information the UTRCA had at the time. The regulation limit maps were approved by the Minister of Natural Resources (2006).

Current Regulation - O. Reg. 41/24 (“Regulated Area” Maps)

In 2024, the Province of Ontario introduced changes to the *Conservation Authorities Act* (CAA) and a new regulation entitled Ontario Regulation 41/24: Prohibited Activities, Exemptions and Permits. O. Reg. 41/24 replaced the former UTRCA-specific Regulation 157/06 and applies to all Conservation Authorities in Ontario.

Key changes to jurisdictional area and permitting within O. Reg. 41/24 include:

- **Terminology changes:**
 - “Regulation Limit” is now referred to as “Regulated Area.”
 - “Written Permission” has been replaced with the requirement for “Permits.”
 - “Development” and “alteration or interference” have been replaced with “development activities” and other “activities” that may change or interfere with a wetland or watercourse.
- **Reduced wetland buffers:** The regulated area around wetlands, regardless of size or provincial status, was reduced from 120 metres to 30 metres.
- **Narrowed “watercourse” definition:** A “watercourse” now requires a defined channel, including a bed and banks or sides, to be regulated.
- **Expanded “hazardous lands” definition:** The hazardous lands definition has been expanded to include unstable soil and bedrock.
- **Replaced decision factors:** Decision factors for issuing permits replaced “Pollution” and “Conservation of Land” with “Unstable soil and bedrock.”
- **New mapping processes:** Conservation Authorities are now required by the regulation to review and update regulated area maps annually and notify the public and stakeholders regarding any significant updates.

Legislative Requirements for Maps of Regulated Areas

Ontario Regulation 41/24: Maps of regulated areas

4. (1) An authority shall develop maps depicting the areas within the authority’s area of jurisdiction where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act which shall be filed at the head office of the authority and made available to the public on the authority’s website, and by any other means that the authority considers advisable.

(2) At least once annually, the authority shall,

(a) review the maps referred to in subsection (1) and determine if updates to the maps are required;

(b) make and file such updates to the maps at its head office if required; and

(c) make the updated maps available to the public on its website and by any other means it considers advisable.

(3) Where new information or analysis becomes available that may result in significant updates to the areas where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act, including enlargements or reductions to such areas, the authority shall ensure that stakeholders, municipalities and the public are notified of the proposed changes in any manner that the authority

considers advisable, including making any relevant information or studies available online at least 30 days prior to an authority meeting during which the proposed changes are on the agenda.

(4) Where significant changes to the areas where development activities are prohibited have been made in accordance with subsection (3), the authority shall promptly update the maps described in subsection (1).

(5) For greater certainty, in case of a conflict regarding the boundaries of the areas where development activities are prohibited under paragraph 2 of subsection 28 (1) of the Act, the description of those areas in that paragraph and in section 2 of this Regulation prevail over the depiction of the areas in the maps referred to in subsection (1) of this section.

Regulated Area Maps

UTRCA's regulated area maps can be accessed by the public online at maps.thamesriver.on.ca and in-person at the Watershed Conservation Centre in London, Ontario. The regulated area maps depict the areas of the UTRCA's regulatory jurisdiction and may include the approximate location of natural hazards and features, based on the best available information at the time of map production.

The UTRCA determines the location and boundaries of individual hazards, such as flooding hazards, through extensive data collection, statistical analysis, computer modelling, and various mapping techniques. Throughout this process, staff follow technical guidelines prepared by the Ministry of Natural Resources (MNR) and Conservation Ontario. The final map showing the overall regulated area is produced using a Geographic Information System (GIS) to overlay the completed map layers and add any allowances as described in O. Reg. 41/24. As maps are updated, users of the online mapping will be able to view the overall regulated area and toggle on/off individual hazard or feature layers to view the composition of the regulated area.

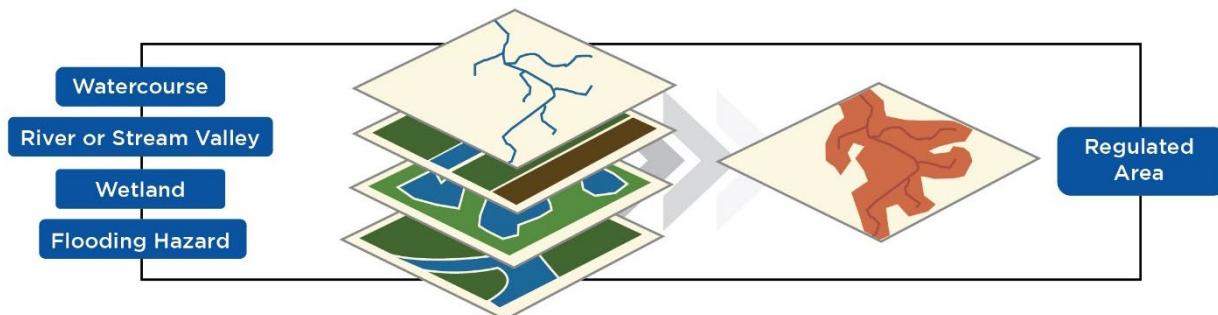


Figure 1. Map layers used to create regulated area.

Annual Review of Regulated Area Maps

Section 4(2) of O. Reg. 41/24 specifies that regulated area maps must be reviewed on an annual basis, at minimum, to determine if updates are required. UTRCA's annual review of its regulated areas will take place prior to April 1st of each year. A report to the UTRCA Board of Directors will summarize any proposed updates recommended from the preceding year. Upon Board approval, GIS staff will upload the information to maps.thamesriver.on.ca and share the updated layers with member municipalities in accordance with this protocol.

An unscheduled report on updates to the regulated area map may be presented to the Board of Directors for approval outside of the annual (April 1st) map review and update process. This provides a more efficient timeline for updates to the regulated area map as stated in s. 4(4) of O. Reg. 41/24.

Updates of Regulated Area Maps

Updating regulated area maps is an important ongoing process that enables the conservation authority and its municipal partners to use the most current and best available information to identify potential hazards, assess risk, and guide land use decisions.

Mapping is a dynamic, iterative process that evolves. New data has greatly increased the accuracy of hazard identification. Advances in computer technology and software have also improved the Authority's ability to model and map hazard areas, especially flooding and erosion hazards. As a result, changes and refinements to regulated areas may occur and are expected, with significant updates including enlargements or reductions to current regulated areas.

UTRCA staff consistently applies "best available information" for:

- understanding the magnitude and extent of the hazard or feature,
- assessing potential risk to life and property or interference with a wetland or watercourse, and
- decision making and administering Ontario Regulation 41/24, when works or activities are contemplated within UTRCA regulated areas.

Guidelines for Developing Schedules of Regulated Areas (MNR and Conservation Ontario, October 2005) defines best available information as the most current, reliable, and accurate information for the hazard being identified. It is the most up-to-date scientific information to define and illustrate the natural hazard or feature.

In 2018, the UTRCA Board of Directors approved a transition policy memo for development proposal reviews using the best available information. Substantial amounts of improved information were being generated to inform hazard limits (e.g., flood modeling,

digital elevation models, etc.) to fulfill Target #3 of the UTRCA's *Environmental Targets: Strategic Plan* (June 2016), which focused on updates to hazard mapping. Guidance was needed as formal updates to the mapping had not yet been completed but the UTRCA had much better information to inform decisions.

In accordance with the 2018 transition policy memo, new and improved information should be relied upon when informing decisions on planning and development applications. However, where the new information or analysis results in "significant updates" to regulated areas, there are regulatory requirements such as public notification and prior approval of the Board of Directors that must be met before the expanded or reduced area can have force of law under the regulation. As a result, UTRCA cannot prohibit any activity or require a permit to be obtained within an expanded regulated area until the updates have been approved by the Board of Directors.

Process for Regulated Area Map Updates

To comply with O. Reg. 41/24, the UTRCA will use the process outlined in the following sections to update its regulated area maps. For public engagement related to map updates, the UTRCA will follow the engagement process as outlined in the *UTRCA Regulated Area Maps Engagement Plan (2025)*.

Significant Updates

In accordance with s.4(3) of O. Reg. 41/24, for any new information or analysis that results in "significant updates", including enlargements or reductions, the Authority shall ensure interest-holders (stakeholders), municipalities, and the public are notified of the proposed changes in any manner that the Authority considers advisable. At a minimum, the Authority shall make relevant information or studies available online at least 30 days prior to an Authority meeting during which the proposed changes are on the agenda.

Definitions for Significant Updates

"Significant updates" include:

- Large-scale technical studies initiated by the UTRCA to update hazardous lands, such as flooding and erosion hazards, that result in updates to regulated areas.
- Large-scale updates resulting from new aerial photography acquisition and UTRCA's interpretation of landscape changes to areas of jurisdiction, leading to updates to regulated areas.
- New information or analysis that results in any potential expansion to UTRCA regulated areas through regional or comprehensive planning and development applications approved under other municipal, provincial, or federal legislation, such as the *Planning Act* or *Environmental Assessment Act*.

- Any enlargement of regulated areas that extends regulatory jurisdiction, partially or wholly, onto new properties or public infrastructure lands that were not previously affected by the prohibitions and regulation under the *Conservation Authorities Act*.
- Any reduction of regulated areas that removes regulatory jurisdiction entirely from existing properties or public infrastructure lands that were previously affected by the prohibitions under the *Conservation Authorities Act*.
- Jurisdictional changes resulting from legislation or regulatory amendments.

Study Area

A study area delineates where a proposed regulated area update is in progress due to new information or data that may result in changes to the regulated area. The UTRCA will identify study areas by showing the limits of the study area on the publicly available regulated area map.

Details of the proposed regulated area changes will be provided on a separate webpage for interest-holders and the public to access. As part of a transparent process with updated information, the UTRCA will illustrate current and draft layers on mapping (if applicable). A disclaimer will be added to the UTRCA's website to explain the difference between the current and draft hazard layers to prevent misinterpretation.

Through the study process and/or technical review, numerous iterations of the new data or draft map layers may be produced. The draft map will not be used to determine permit decisions until the draft map updates have been finalized, and legislative requirements for significant updates have been met, including public engagement. Once map updates are approved by the UTRCA Board of Directors, the new regulated area will be used for administration and compliance with O. Reg. 41/24.

Transition Process for Significant Updates

The UTRCA's transition process for significant updates to regulated areas is outlined below and in Figure 2.

Stage 1 – Study Initiated

- Depending on the scope and scale of the draft updates, a Technical Advisory Committee (TAC) with representation from affected municipalities and the development community may be established.
- Current data and online regulated area maps considered “best available information” for decision making and is the only data that can be shared with third parties.
- Permits are required from UTRCA to develop in current identified regulated areas.

Stage 2 – Draft Study and Draft Maps

- Production of preliminary, draft mapping and study results.
- Draft map posted on UTRCA's map website for information purposes only.

- Public engagement will be initiated as per *UTRCA Regulated Area Maps Engagement Plan*.
- Current data and online regulated area maps considered “best available information” for decision making and is the only data that can be shared with third parties.
- Permits are required from UTRCA to develop in current identified regulated areas.

Note: The timing of Stage 2 to Stage 3 may differ depending on the regulated feature, scale and scope of the technical review and study, and/or level of risk.

Stage 3 – Final Study and Final Draft Map

- UTRCA is satisfied that new data is technically sound and acceptable in collaboration with the Technical Advisory Committee, if applicable.
- UTRCA has reviewed comments received from affected municipalities, interest-holders, and the public and has made changes to the draft map where applicable.
- Further public engagement may occur resulting from changes to draft mapping, if applicable.
- The revised map will be posted for a minimum of 30 days prior to the UTRCA Board of Directors meeting where the proposed changes will be considered for approval.
- Current data and online regulated area maps considered “best available information” for decision making. As part of pre-submission consultation, UTRCA staff will advise of the new information pending approval for any proposed development activity that may be affected by the map update.
- Permits are required from UTRCA to develop in current identified regulated areas.

Stage 4 – UTRCA Board of Directors’ Approval

- UTRCA Board of Directors’ approval of final study and final draft map.
- The regulated area updated based on the approved new data.
- New data and updated regulated area map considered “best available information” for decision making and can be shared with third parties.
- Permits are required from UTRCA to develop in current and updated identified regulated areas.

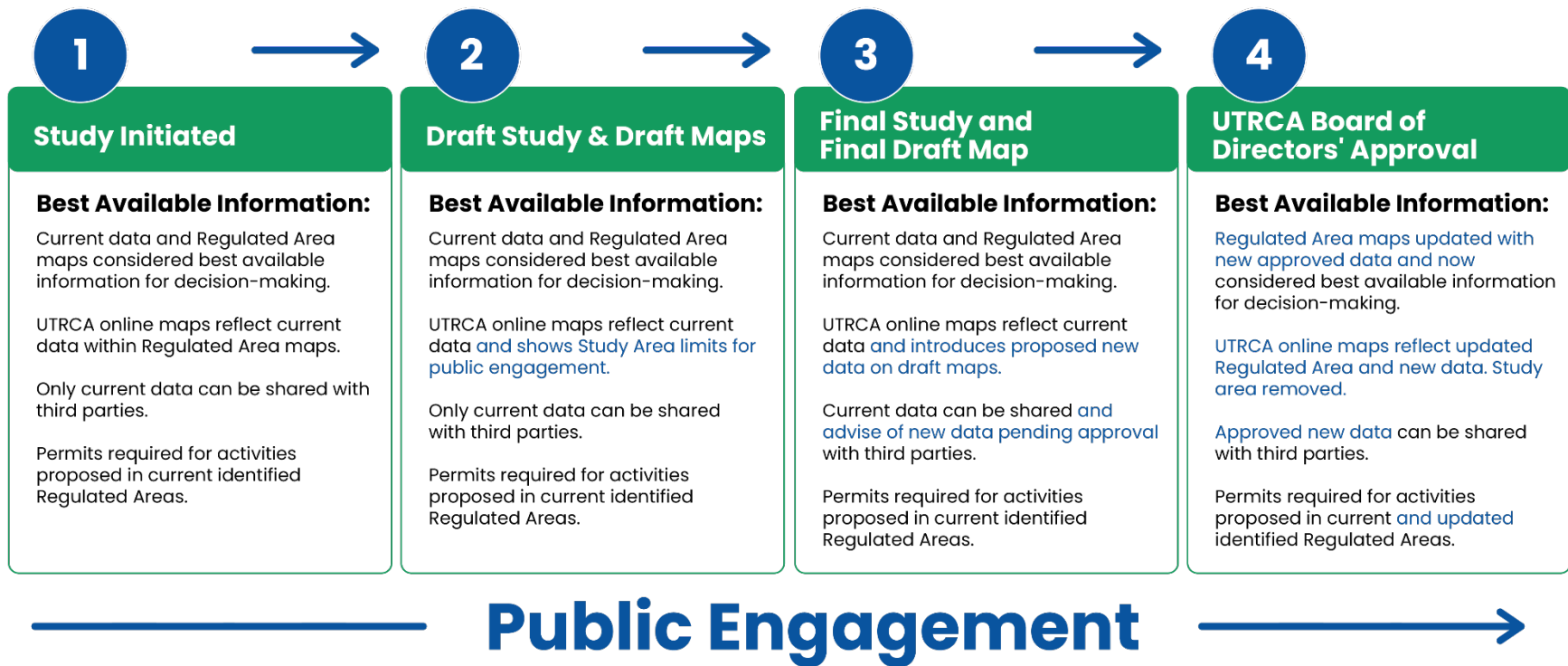


Figure 2. Transition Process for Significant Updates to Regulated Areas

Public Engagement for Significant Updates

Public engagement is an opportunity to:

- Gather input from third parties on new data and draft map updates considering local hazard knowledge that could enhance map accuracy,
- Educate the functions of a watershed with respect to hydrology, hydraulics, erosion, and wetlands,
- Improve understanding of natural hazard risks and mitigation,
- Educate about the importance of natural hazard maps and their role in reducing risk in land use planning,
- Educate and provide awareness of the *Conservation Authorities Act* regulation, its prohibitions, and the processes associated with obtaining required permits for activities within regulated areas,
- Improve trust and transparency with the watershed community, and
- Work with member municipalities to update associated zoning by-laws and official plans with best available information for natural hazards.
- Detail and inform about the stages of transition for Regulated Area updates.

The following communication and engagement efforts are tailored based on the scope, scale, and potential impact of the draft significant updates. It is important to include municipal partners, interest-holders, and the public in the mapping process as it can lead to increased awareness about natural hazards and the associated risks and ensure compliance with the regulation.

Public Notification

- Publish notice and post draft map layer on UTRCA's map website a minimum of 30 days prior to the authority meeting during which the proposed changes are on the agenda.
- Draft map presented to UTRCA Board of Directors for final approval.

Scoped Public Engagement

- Notify affected landowners of proposed changes.
- Receive comments for 60 days. UTRCA staff are available for landowner meetings or site visits as requested. A Landowner Information Session may be held if the number of landowners involved is large enough.
- Post draft map layer on UTRCA's map website 30 days prior to a UTRCA Board of Directors meeting that has proposed changes on the agenda.

Comprehensive Public Engagement

- Notify affected landowners of proposed changes.
- Post draft map layer on UTRCA's online mapping website during the public comment period.

- Receive comments for 60 days via phone, email, or UTRCA's website.
- Host a Public Information Centre(s) to answer questions about the proposed changes and review draft maps with the public.
- After the 60-day comment period, draft map is presented to UTRCA Board of Directors for final approval.

Further details regarding the above engagements can be found in the *UTRCA Regulated Area Maps Engagement Plan (2025)*.

Other Updates

O. Reg. 41/24 provides a conflict resolution provision for conflicts that may occur with the regulated area maps. Section 4(5) states that where there is a conflict between the regulated area maps and the descriptions within the regulation, the description of those areas prevails. The process of regularly updating regulated area maps based on new or more accurate information will aim to reduce potential conflicts with the mapping. This section of the regulation will be relied upon for updates to regulated area maps that do not meet the definition of “significant updates”.

Definitions for Other Updates

Other updates to the regulated area maps are based on the findings of technical studies, planning and permit applications, environmental assessments, and field verification. These updates are completed with the knowledge of the affected landowner(s) and do not require a formal public engagement process.

Other updates include:

- All other updates that do meet the definition of “significant updates” and are completed with the knowledge of the affected landowner(s), and
- Minor revisions to the:
 - Watercourse layer based on site-specific field assessments,
 - Flooding hazard layer based on modelling from technical studies associated with site-specific environmental assessments or planning and permit applications,
 - Wetland limits based on site-specific field assessments as part of planning or permit applications or technical studies or, in the case of a Provincially Significant Wetland (PSW), by the Ministry of Natural Resources (MNR),
 - Erosion hazard limits based on field assessments or technical studies associated with a planning or permit application, and/or
 - Limits of “Other areas” associated with a technical study, planning approvals issued, and/or development is substantially completed.

Timelines for Regulated Area Updates

Regulated area map updates will occur promptly and as soon as technically feasible, once all requirements of the regulation and this protocol have been satisfied.

The following provides a general guide to updating the publicly available regulated area map based on consideration of the specific update:

- “Significant Updates” will occur no later than 30 days from Board of Directors approval.
- Updates resulting from technical studies or analysis based on existing conditions and as part of a planning and development application for a large-scale area or watercourse reach, will be updated once all applicable approvals or UTRCA section 28 permit (if applicable) have been issued.
- Updates resulting from technical studies or analyses based on future conditions (i.e., flood mitigation or erosion control works and complete corridor concepts) and as part of a planning and development application, will be updated once UTRCA is satisfied that the proposed works have been completed in accordance with approved plans, including receipt and approval of “as-built” constructed drawings, if applicable.
- Updates resulting from technical studies or analyses on a small-scale area or lot-by-lot basis will not be updated. Instead, another layer depicting the results of the technical study or analysis will be included on internal mapping available to UTRCA staff for information.
- In the absence of technical studies or analyses, any updates resulting from interpretation of regulatory jurisdiction resulting from review of aerial photographs or onsite observations (i.e., watercourses, wetlands, or meander belt allowances), will be verified by both the UTRCA’s Regulations Coordinator and GIS Specialist prior to the update occurring to ensure consistency with the interpretation and application of jurisdiction.
- General updates made in accordance with this protocol will be shared with the affected municipality through a standardized process, in consultation with the relevant municipality or municipalities.

Caution Statement

The following caution statement should be placed on all Regulated Area maps and used in any UTRCA communications when providing or referring to Regulated Area maps.

“Regulated Areas shown on the maps are subject to the text-based descriptions set out in s.4(5) of Ontario Regulation 41/24. Upon review, the hazard limits may be somewhat different from those shown on the maps. If there is a conflict between the text-based description of areas affected by the regulation and the areas as shown

on the map, then the description of areas in subsection 2(1) of the regulation prevails.”

Protocol Review and Updates

The Regulated Area Map Update and Transition Protocol shall be reviewed on an annual basis to determine if updates are required.

Housekeeping and minor amendments can be approved by the UTRCA Administrative Review Officer(s) appointed by the Board of Directors:

- **Housekeeping amendments** include changes that have no effect on the written protocol such as, but not limited to, typographical errors, renumbering, graphical and layout changes, non-protocol clarifications, external reference updates, or changes in UTRCA staff titles.
- **Minor amendments** include changes that reflect minor changes such as, but not limited to, wording changes that result in a protocol-based clarification or implementation, modifying a protocol subsection, or updating technical guidelines or appendices.

Major amendments must be approved by the UTRCA Board of Directors:

- **Major amendments** include changes that will result in adding new protocols, removing existing protocols, or changing the intent or effect of a protocol.

Major amendments may require engagement that is appropriate to the scope and nature of the proposed change. Where public engagement is required, the UTRCA will include a posting on its website for no less than 30 days for public review and comment prior to approval by the UTRCA Board of Directors.