

Report To: Halton-Hamilton Source Protection Committee
Report No.: SPC-22-09-0
From: Martin Keller, Senior Manager, Watershed Planning and Source Protection, mkeller@hrca.on.ca
Date: September 13, 2022
Subject: Update – 2021 Technical Rules Implications

Recommendation

THAT the Halton-Hamilton Source Protection Committee receives for information the staff report SPC-22-09-01 Update – 2021 Technical Rules Implications.

Executive Summary

Staff are continuing to analyze the implications of the updated technical framework and revised 2021 Technical Rules under the *Clean Water Act, 2006*, on the Halton-Hamilton Source Protection Region (HSPR). Further updates on the analysis carried out thus far are provided in this report.

Report

Background

In December 2021, the Ministry of the Environment, Conservation and Parks (MECP) revised the Technical Rules under the *Clean Water Act, 2006*. The rules are available at: <https://www.ontario.ca/page/2021-technical-rules-under-clean-water-act>

Note that the recently submitted comprehensive HSPR updates under Section 36 of the *Clean Water Act, 2006* were undertaken following the 2017/2018 Technical Rules. The 2021 Technical Rules will apply to subsequent Assessment Report and Source Protection Plan updates at HSPR.

Update – Impervious Surfaces

Staff further investigated options and approaches to calculate the percent impervious surface areas, given the changes in the 2021 Technical Rules. The method presented at the June 7th committee meeting, in which the present impervious surface was calculated using the WHPA zone areas, was found to lack accuracy and refinement. Currently, staff are exploring a method similar to the 1km x 1km grid approach. Rather than center the grid on the Source Protection Area as a whole, a 100m x 100m grid is considered and centered on each individual WHPA. By reducing the grid size and utilizing the land cover layer (developed by CH staff), in which the imperviousness is pre-determined based on land cover type, the percent impervious area is calculated for each grid square. This method results in a more accurate representation of impervious areas on the land scape. For a detailed example of the calculation used, refer to **Attachment 1**. Research is on-going to explore other options including different grid sizes and smoothing processes.

Livestock Density Estimations

Staff are continuing to explore options to address the concerns raised by the HHSPC. Given the staff change over, further context may be needed. Below is staff's understanding to date:

- Concern relates to property owners with livestock in areas close to urban areas that may be burdened with policy implementation as a result of the livestock density calculation overestimating actual livestock on these farms
- Most Source Protection Regions (SPR) in the province use the conversion table given in the 2009 MECP guidance document, with the exception of Saugeen Grey Sauble Northern Bruce Peninsula (SGSNBP) and Trent Conservation Coalition (TCC). See report SPC 22-06-02 for details.
- Policy implementation process:
 1. HH SPP policy framework and livestock density maps form the basis for implementing policies by OMAFRA and municipalities/RMO. The livestock density calculation is a desktop exercise and acts as a flag for policy implementers
 2. Policy implementers inspect properties with livestock flagged through desktop exercise and confirm livestock density based on on-site property level assessment
 3. Policy is implemented if activity is significant drinking water threat

Other Topics

Other items (see Attachment 1 in Report SPC 22-06-02 for details) are continuing to be considered by staff, in collaboration with municipal staff. These include:

- climate considerations for water quality, including the use of the climate change vulnerability assessment tool
- policy revisions for revised threat circumstances (e.g., handling and storage of road salt)

Next Steps

Staff will bring further updates to future HHSPC meetings. Source Protection Plan updates that are made under S.34 of the *Clean Water Act, 2006* will need to follow the 2021 rules as required by the legislation.

Signed & respectfully submitted:



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