

Significant Groundwater Recharge Areas for Tier 2 Water Budget Studies

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January 14, 2011



Purpose of Technical Work

- Identify potential Significant Groundwater Recharge Areas (SGRAs) within the subwatersheds that were assessed with Tier 2 Water Budgets in accordance with Technical Rules.
 - Havelock (Crowe – 4)
 - Colborne (Lake Ontario – 3)
 - Brighton (Lake Ontario – 1)



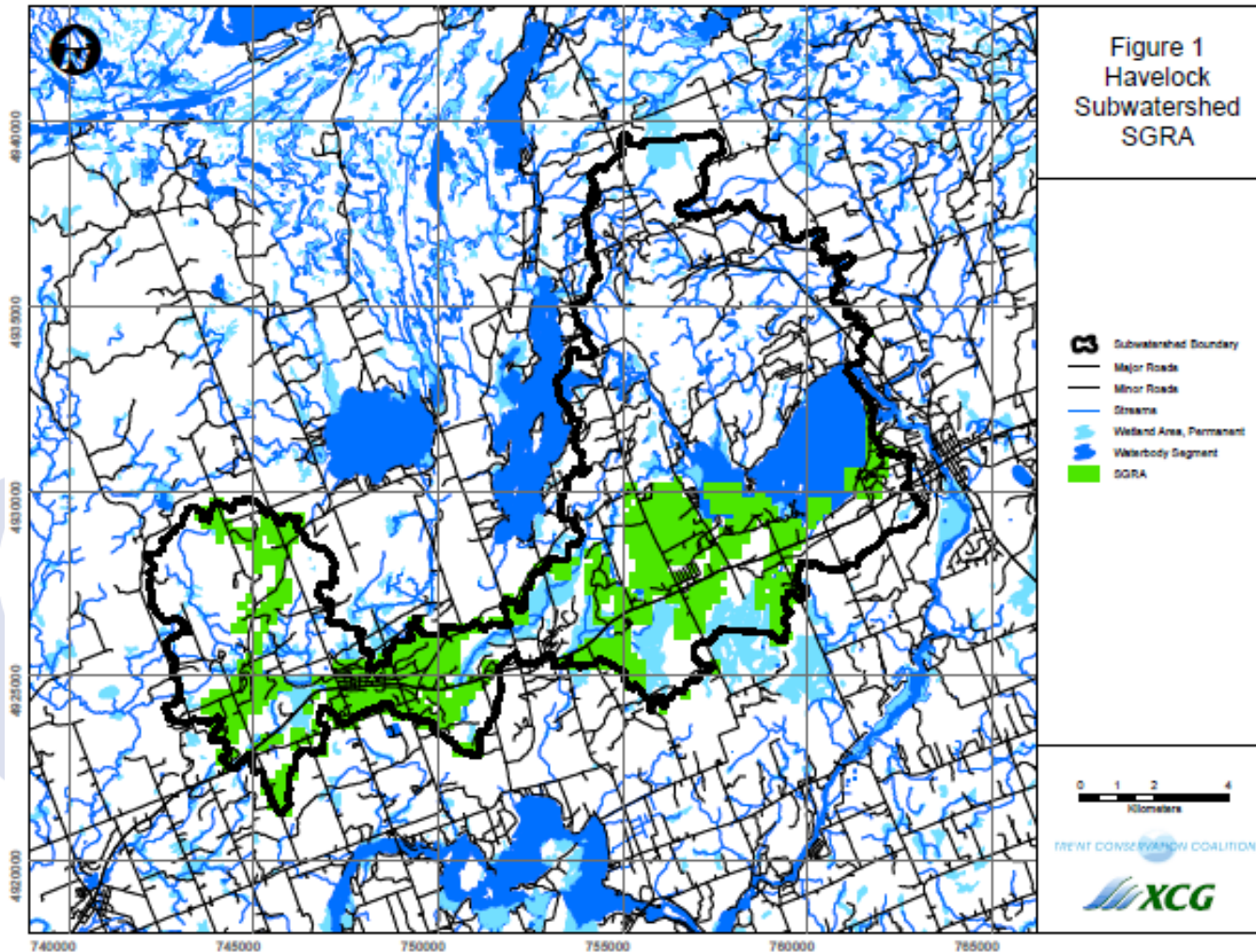
Methodology

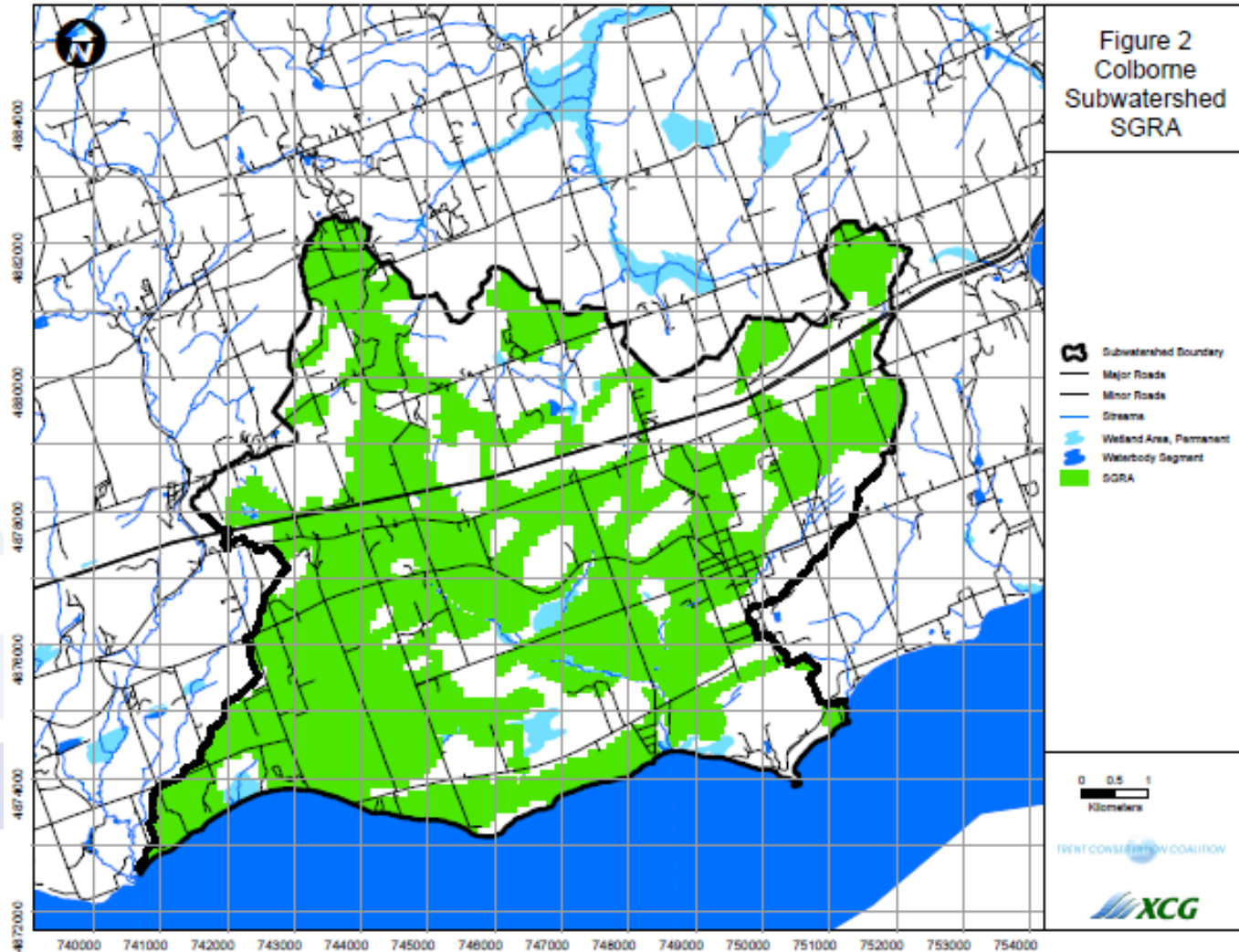
Step 1: Use the groundwater models developed in the Tier 2 water budget to determine the average annual recharge rate over the subwatershed.

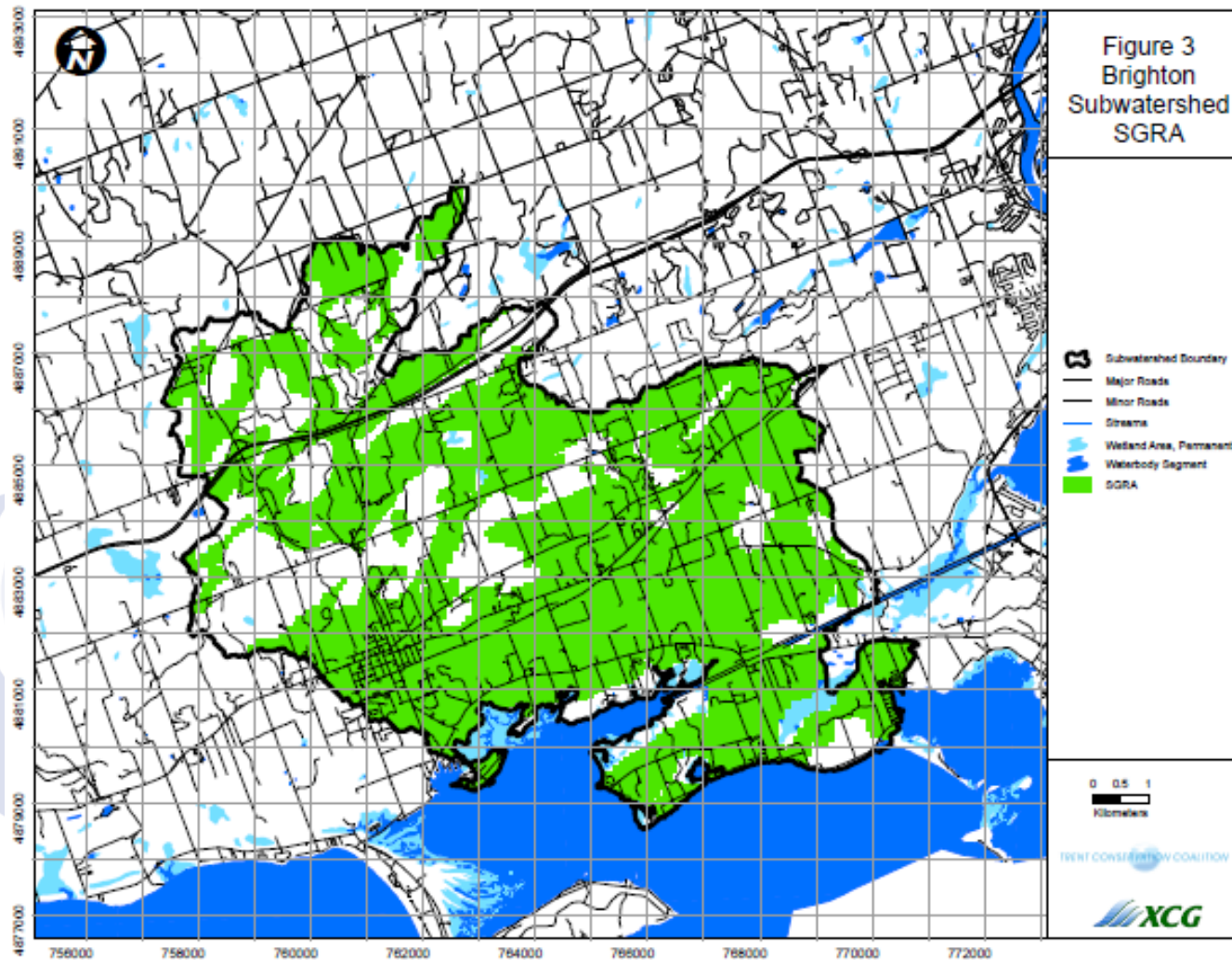
Step 2: Calculate the threshold value for identifying SGRAs.

Step 3: Identify any model cells within the subwatershed that have a recharge greater than or equal to the threshold determined in Step 2 and identify them as a SGRA.

Step 4: Map all cells within the subwatershed that were identified in Step 3.







Recommendation

That the results of the technical assessment completed by XCG Consultants Ltd. to revise the delineation of potentially Significant Groundwater Recharge Areas (SGRAs) within the Havelock, Brighton, and Colborne subwatersheds be accepted by the Source Protection Committee for inclusion in the updated Trent and Ganaraska Assessment Reports (for the Crowe and Ganaraska Source Protection Areas).

