

# **Significant Groundwater Recharge Areas**

## Chapter of the Trent River Assessment Report

### **Presented To:**

Trent Conservation Coalition Source Protection Committee


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## Significant Groundwater Recharge Areas (SGRA)

- Presentation from Steve Holysh (Minden, July 21<sup>st</sup>)
  - Groundwater recharge:
    - Process by which aquifers are replenished by downward movement of water
  - Significant groundwater recharge area:
    - Areas where this occurs at a significant level
-  **Technical Rules**
- Assessment report chapter is a summary of CAMC-YPDT report

## Technical Rules

44: Subject to rule 45, an area is an SGRA if:

Annual Recharge Rate for Area  $\geq$   
1.15 \* Annual Recharge Rate for Study Area

**OR**

Annual Recharge Volume for Area  $\geq$   
55% Annual Water Budget Surplus  
for Study Area

45: Area must have a hydrological connection to a surface water body or aquifer that is a source of drinking water for a drinking water system

## Technical Rules (Continued)

- 38(1) – 38(3): Delineate groundwater vulnerability
  - Being done by AECOM
- 80: Subdivide SGRAs by groundwater vulnerability
- 81: Assign vulnerability scores to SGRAs
  - (1) 6, high groundwater vulnerability
  - (2) 4, medium groundwater vulnerability
  - (3) 2, low groundwater vulnerability

## Chapter Outline

### 1.0 Methodology

#### 1.1 Recharge Rate

#### 1.2 Water Budget Surplus

### 2.0 Delineation of Significant Groundwater Recharge Areas

#### 2.1 Removal of Areas with Shallow Water Table

#### 2.2 Removal of Areas less than 0.01km<sup>2</sup>

### 3.0 Refinement of SGRA Delineation through Tier 2 Water Budget

### 4.0 Assignment of Vulnerability Scores

