

## Update to Source Protection Plan

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Type:	Presentations
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Recommended by:	General Manager of Community Infrastructure

## Report Summary

This report and presentation provides a recommendation regarding municipal endorsement to update the Greater Sudbury Source Protection Plan with amendments from the 2021 technical rules under the Clean Water Act.

## Resolution

THAT the City of Greater Sudbury endorses the Greater Sudbury Source Protection Plan amendments, as outlined in the report entitled "Update to Source Protection Plan", from the General Manager of Community Infrastructure, presented at the Operations Committee meeting on October 15, 2025.

## Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

The Greater Sudbury Source Protection Plan addresses a number of objectives within the strategic plan, including:

- 3.1 "Support Ecological Sustainability" through the reduction of salt contamination in our drinking water source
- 3.3 "Build Climate Resiliency into Existing Programs" by managing potential sources of drinking water contamination with risk management plans

The proposed amendments also address the Community Climate Change Action 1.3 by updating the source protection actions towards achieving Objective 1. *Infrastructure and buildings are more resilient to future climate conditions and extreme events.*

## Financial Implications

There are no financial implications associated with this report.

## Background

The *Clean Water Act, 2006 (CWA)* was created by the Government of Ontario to protect drinking water sources. The report “Protecting Greater Sudbury’s Drinking Water: A Source Protection Overview” presented to the Operations Committee on October 15, 2025, provides an overview of the work completed to date with respect to the *CWA*.

The Greater Sudbury Source Protection Committee (Committee) chaired by Conservation Sudbury provided written notice to the Environmental Compliance group within Water Wastewater Treatment & Compliance that they are currently amending the approved Sudbury Source Protection Plan under Section 34 of the *CWA* to comply with the latest Technical Rules set by the Ministry of the Environment, Conservation and Parks (MECP) in 2021.

Per the procedures set out in the *CWA*, the Committee requires municipal endorsement through a Council resolution before proceeding to public consultation and final submission to the MECP.

## **Analysis**

The Source Water Protection Plan requires six (6) updates due to new information and the requirement to comply with the MECP’s “2021 Technical Rules”, which are updates to the Director’s Technical Rules made under Section 107 of the *CWA*. These rules are used by Source Protection Authorities and Municipalities to help assess and manage risks to drinking water sources. The amendments intend to make changes to the Valley East Water Quantity Maps and Policies, the Ramsey Lake Intake Protection Zone 3 Delineation, the Salt and Snow Policies, the Dense Non-Aqueous Phase Liquids Policies, the Fuel Policies, and the Transition Provision Policy.

All Source Water Protection policies are contained in the Greater Sudbury Source Protection Plan, available on the City of Greater Sudbury’s website and linked below in References Cited.

### Valley East Water Quantity Maps and Policies

The Tier 3 Water Budget and Water Quantity Risk Assessment was recently updated to incorporate new information. The new study, which was completed in 2023, demonstrated that there is “low risk” of the municipal wells running out of water. Multiple factors lead to this reduction of risk, such as the addition of Wells Q (Chenier) and R, well rehabilitation, and new data available from water quantity monitoring programs. Due to the low risk, three policies that targeted the threat of “Water Quantity” will be removed from the updated Source Protection Plan. Based on the results of the study, the following maps will be updated:

- 1) WHPA-Q1 (Figure 1) shows combined area, known as the cone of influence, from which the municipal wells pull water from;
- 2) WHPA-Q2 (Figure 2) includes WHPA-Q1 area and additional area where a reduction in recharge would have an impact on municipal water wells;
- 3) Significant Groundwater Recharge Area (Figure 3) areas that water flows in the ground to refill the supply in the aquifer.

Note: WHPA is the Wellhead Protection Area

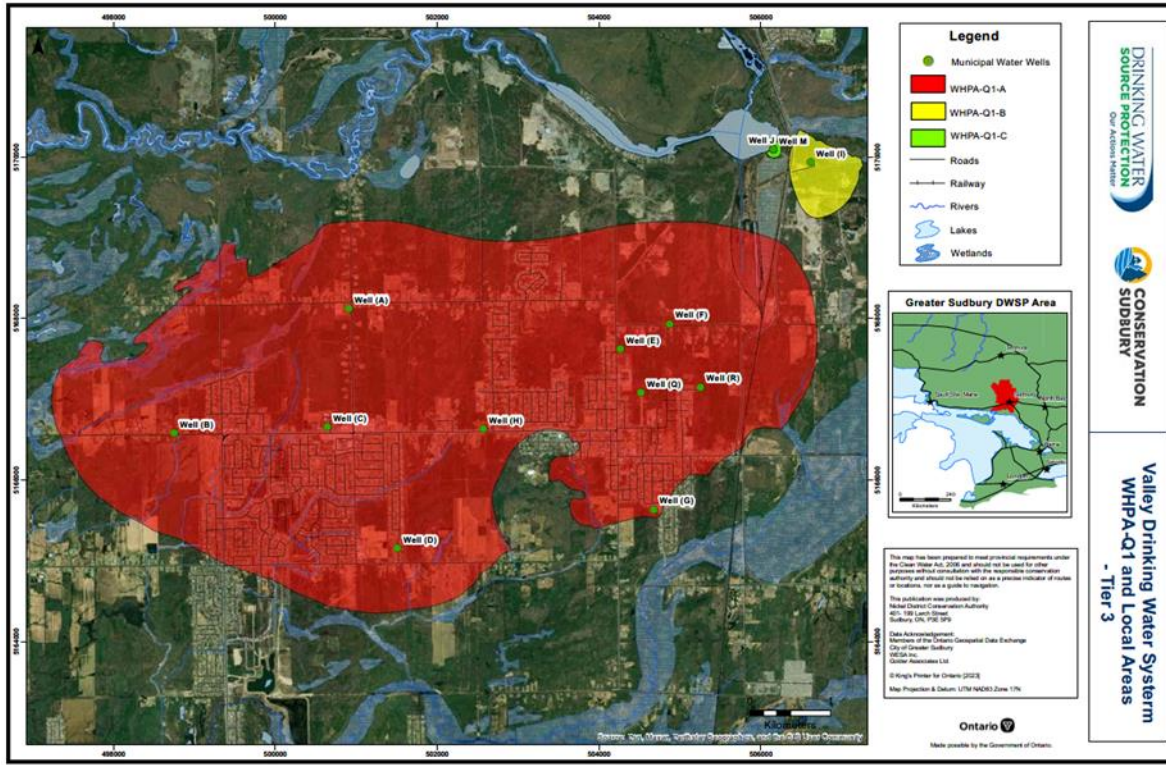


Figure 1: Updated map for WHPA-Q1

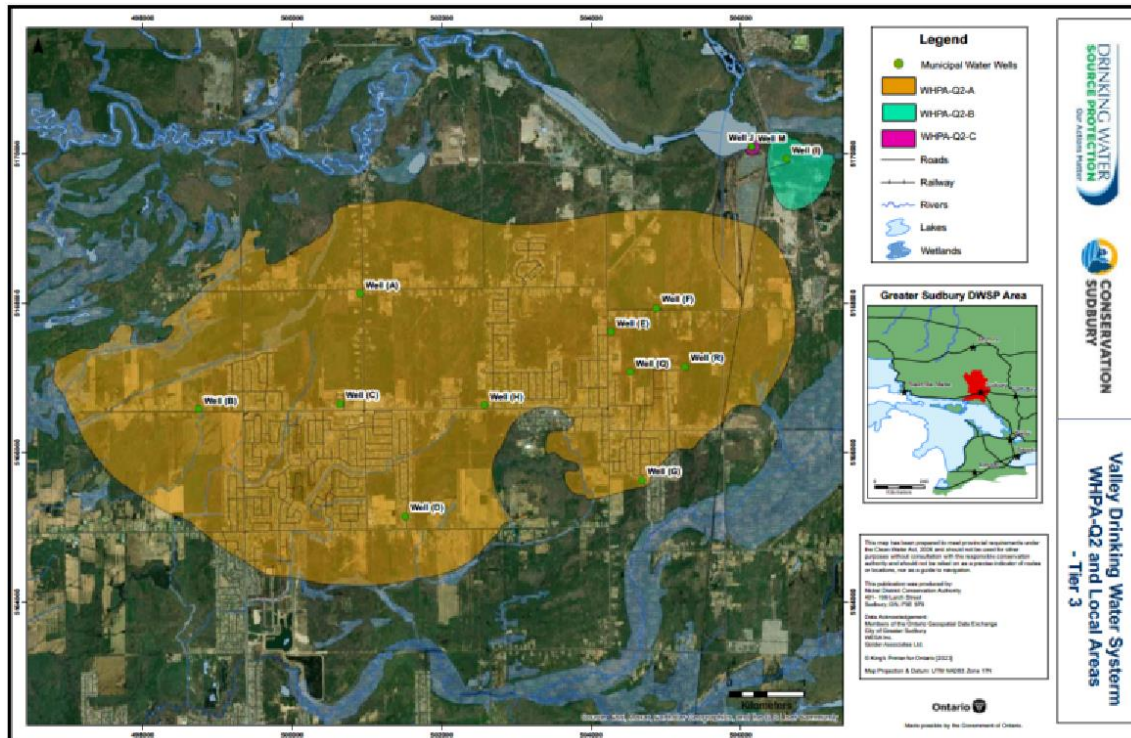


Figure 2: Updated map for WHPA-Q2

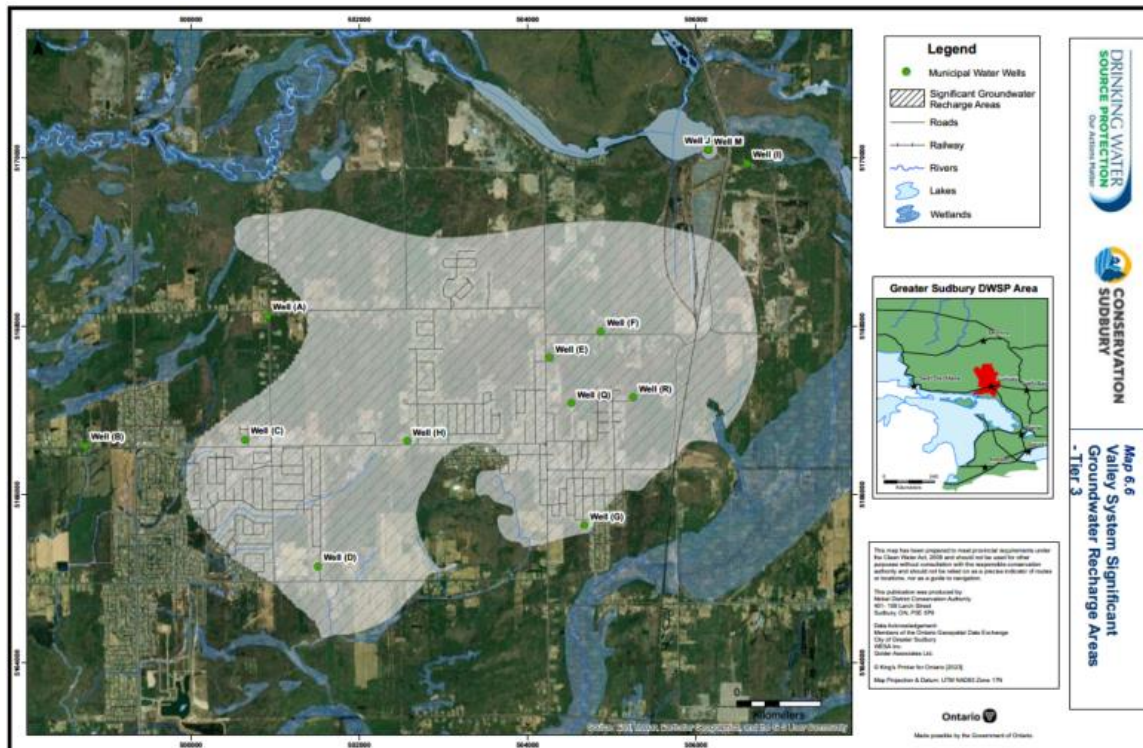


Figure 3: Updated map for the Valley SGRAs

### Ramsey Lake Intake Protection Zone 3 Delineation

The current Intake Protection Zone 3 (IPZ-3) delineation for Ramsey Lake was established during the first round of source protection planning which began in 2010. The updated delineation of the Ramsey Lake IPZ-3 will include changes to the stormwater infrastructure, roads that were not captured in the original delineation and new and future development areas. This update adds 3.77 km<sup>2</sup> to the Ramsey Lake IPZ-3. These new areas will be subject to existing Source Protection Plan policies. Of note, the updated Ramsey Lake IPZ-3 boundary has expanded to capture both the Science North and Health Sciences North properties, which will now both require Risk Management Plans.

As a result of the updated delineation boundary, the Technical Rules require an update for the evaluation of managed lands, livestock density, and impervious surfaces for the Ramsey Lake Intake Protection Zone. The updated map is shown in Figure 4.

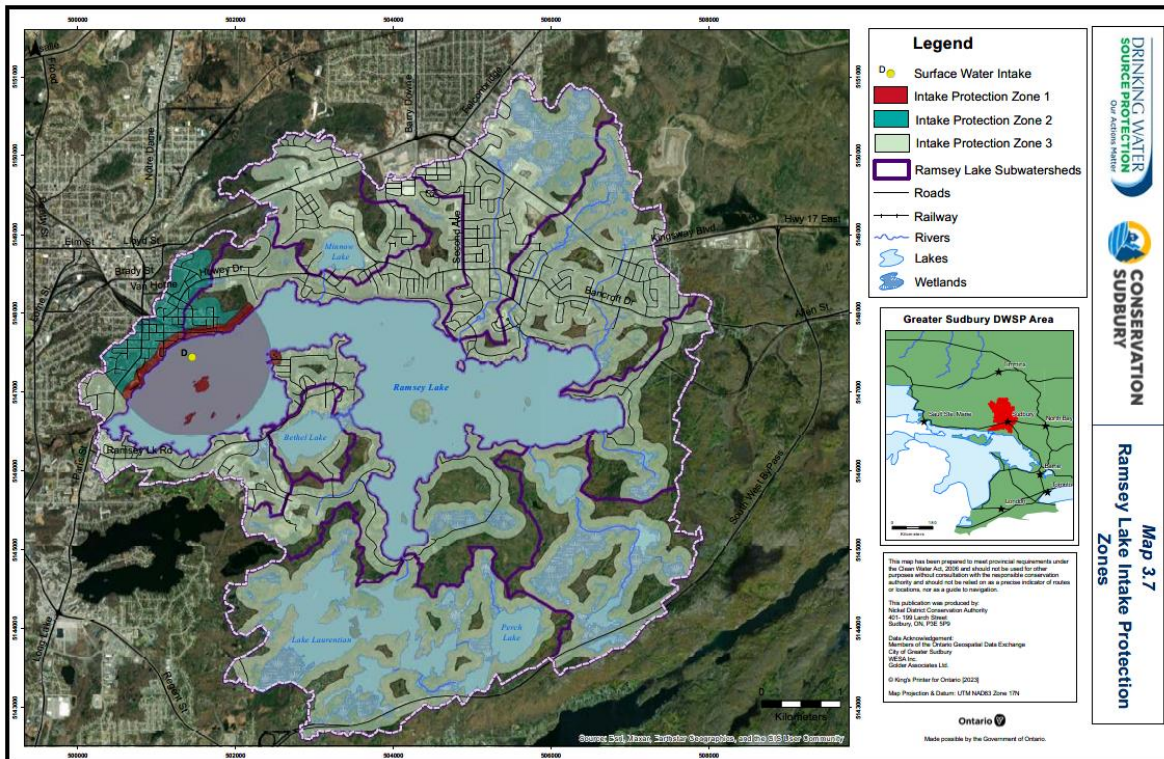


Figure 4: Ramsey Lake Intake Protection Zones

## Salt and Snow Policies

The salt and snow policies were updated to incorporate changes to the 2021 Technical Rules.

The updated policies for *the handling and storage of road salt* include new limits of road salt volume with consideration for the method which the road salt is stored on the property. At this time, these proposed policies will not result in the requirement to establish additional Risk Management Plans.

The updated policies for *handling and storage of snow* no longer apply for lands that are zoned “Residential” or “Institutional”. There is also an exemption within the Technical Rules that would apply to property owners that have been issued an Environmental Compliance Approval for a stormwater management facility by the MECP. The proposed policy update will trigger the requirement to amend some established Risk Management Plans that fall within those conditions to remove the specific measures required for “snow storage”.

## Dense Non-Aqueous Phase Liquids (DNAPL) Policies

DNAPLs are liquid chemicals that are denser than water and only slightly soluble. They tend to sink and can contaminate groundwater.

The DNAPL Policies were updated to incorporate changes to the 2021 Technical Rules.

Policies DOS1E-RMP and DOS2F-s57 have been updated to remove the quantity threshold of “25 litres” to align with Technical Rules. These two policies now contain language that provides the Risk Management Official (RMO) with some discretion to determine if a Risk Management Plan/Prohibition is required for lower quantities of DNAPLs

The Technical Rules also created a requirement for the activity of *handling and storage of DNAPLs* to be a “significant threat” within an Intake Protection Zone (IPZ) with a score of 9. The policy DOS3EF-RMP is proposed to manage existing and future threats with a “risk management plan” in the Ramsey Lake IPZ-2 and IPZ-3 area. As per the Technical Rules, “Commercial Autobody Shops” and “Automotive Service Garages” in the IPZ-2 and IPZ-3 would require Risk Management Plans. Within the Ramsey Lake IPZ-3, there are approximately 25 to 30 of such businesses that would require plans to be established. The language within DOS3EF-RMP has specific criteria that are required of the Risk Management Plan (RMP) which are likely already established by automotive businesses due to “best management practices” for that industry. This will expedite the establishment of the RMPs by providing clear expectations to business owners. The RMO Office will be granted the allowable timeline of three (3) years to fully implement this policy.

### Fuel Policies

The Fuel Policies were updated to incorporate changes to the 2021 Technical Rules.

The Technical Rules has lowered the threshold for a significant drinking water threat for fuel storage from 2,500 litres to 250 litres. In response, Policy F5EF-RMP was created to capture the potential threat of home heating fuel stored on residential properties. This policy will apply to the owners of residential properties that are within the vulnerable areas of Intake Protection Zone “1” (IPZ-1), Wellhead Protection Area “A” (WHPA-A) and Wellhead Protection Area “B” (WHPA-B). These owners will be required to establish a RMP as per this policy.

The following are the estimated number of parcels near the Drinking Water Systems that will be affected by this policy:

- David Street Water Treatment Plant: 96 parcels
- Wanapitei Water Treatment Plant: 9 parcels
- Valley Drinking Water System: 461 parcels
- Garson Wells 1 & 3: 91 parcels
- Dowling Drinking Water System: 77 parcels
- **Total: 734 parcels**

Ground truthing will be required to identify existing threats as the number of fuel tanks are currently unknown. The Section 59 Process, which screens potential Source Protection threats for Planning Applications and Building Permits, will be required to capture new threats. The As-Builts confirmed that many of these parcels are serviced with natural gas which reduces the likelihood of home heating fuel being present at those properties. At this time, the estimate is that 10% of the affected area will require a Risk Management Plan (RMP). The Source Protection Committee has provided feedback indicating that only the parcels that are not serviced by Natural Gas will require ground truthing, due to the widespread area of concern.

The language within F5EF-RMP has specific criteria that are required of the RMP which will expedite the establishment process by providing clear expectations to homeowners that are currently using home heating fuel to heat their dwellings. The RMP will contain risk measures that are reasonable for a residential owner to undertake. The residential owner will be required to have an annual inspection by a qualified fuel inspector, keep a log of inspections and repairs to address deficiencies, develop a spill contingency plan, and provide

proof of pollution liability insurance. The RMO Office will be granted the allowable timeline of three (3) years to fully implement this policy.

### Transition Provision Policy

The Transition Provision policy was updated to account for future amendments to the Source Protection Plan and to clarify the definitions of existing and future threats. Most Source Protection Plan policies generally manage “future threats” by prohibiting the activity from being established. To manage “existing threats”, the Source Protection Plan policies would allow the activity to continue but would require a RMP to be established which would mitigate the threatening activity. The updated language of the Transition Provision Policy clarifies how certain development proposals are to be evaluated by the Source Protection Plan depending on the timing of their complete application under the *Planning Act*, *Condominium Act*, and/or under *the Building Code Act*.

## **Conclusion**

Staff support the changes in this report as they comply with the MECP updates and will improve source water protection for years to come. The Environmental Compliance Team within Water Wastewater Treatment & Compliance has the capacity to take on the additional workload with no budgetary implications. The work required of our residents and businesses to comply is minimal as they are already fulfilling these obligations. The Risk Management Plan brings together these separate obligations into one cohesive document.

If approved, Conservation Sudbury will proceed to public consultation before submitting its official plan amendment to the Ministry of the Environment, Conservation and Parks.

## **Resources Cited**

1. *Clean Water Act, 2006*
2. 2021 technical Rules under the Clean Water Act, <https://www.ontario.ca/page/2021-technical-rules-under-clean-water-act>
3. Greater Sudbury Source Protection Area, Updated Source Protection Plan, March 16, 2021: <https://www.greatersudbury.ca/live/water-and-wastewater-services/source-water-protection/water-protection-files/greater-sudbury-source-protection-area-updated-spp-mar21-pdf/>
4. “Protecting Greater Sudbury’s Drinking Water: A Source Protection Overview” presented to the Operations Committee on October 15, 2025