DRINKING WATER SOURCE PROTECTION
Our Actions Matter

Kings Bay 2025

The Kings Bay municipal drinking water system is one of 53 systems in the Trent Conservation Coalition Source Protection Region and it was examined as part of the studies completed for the Drinking Water Source Protection program. The system is located in the Kawartha-Haliburton Source Protection Area, within the Township of Scugog, and is owned by the City of Kawartha Lakes. The areas around the wellhead, the wellhead protection areas, are the vulnerable areas around the system where activities have the potential to be significant threats to the drinking water source. The Trent Source Protection Plan contains policies to manage or eliminate the significant threats that have been identified for the Kings Bay municipal drinking water system. Policies also apply to activities that would be significant threats if they were carried out in the future. This Factsheet provides a summary of Source Protection planning and the existing significant threats for the Kings Bay system.

System Summary	
Water Source	Groundwater
Operating Authority	Ontario Clean Water Agency
SDWA Classification	Large Municipal residential
Serviced Population	~300

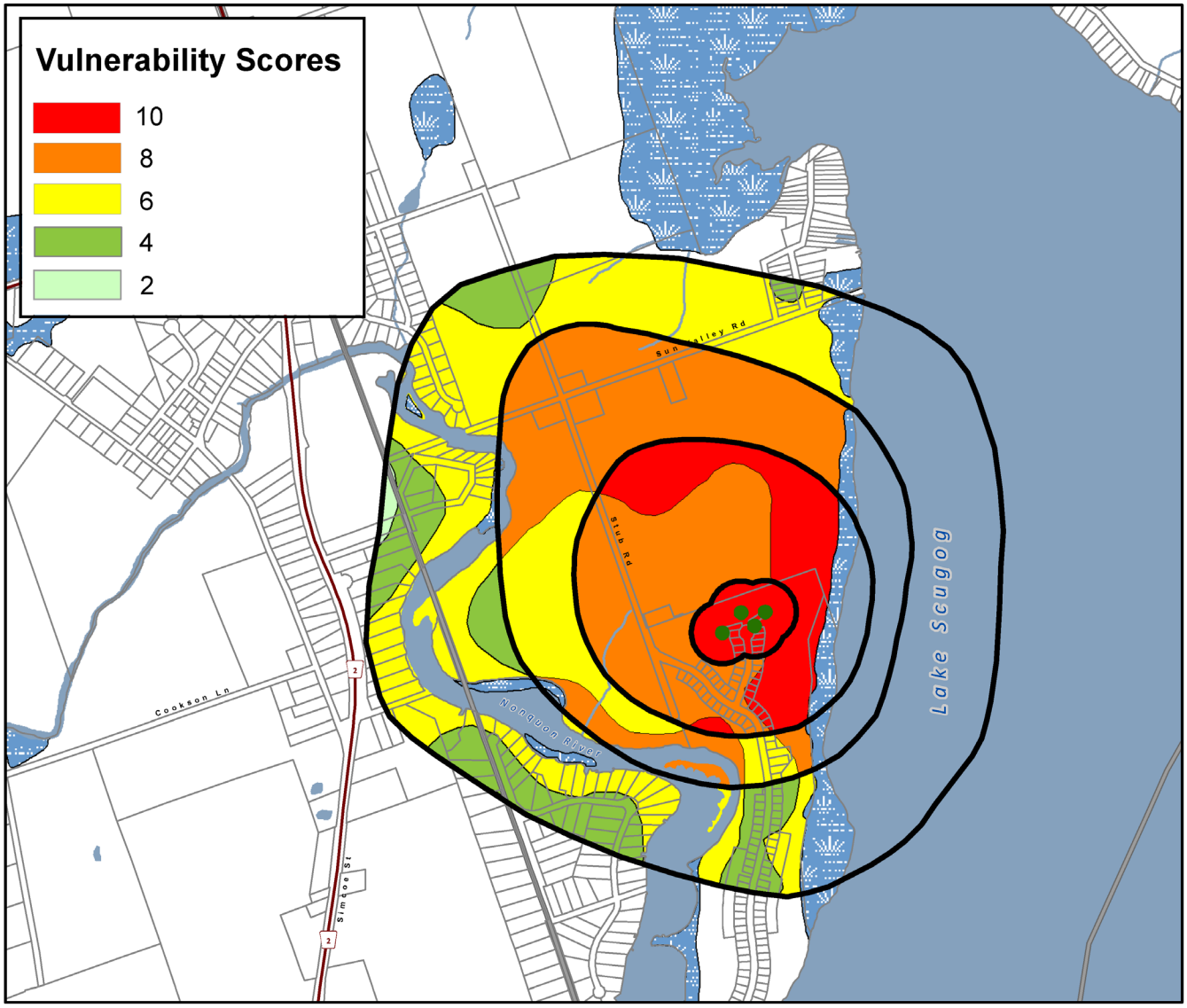
Areas Where Policies Apply – See Map Below

Activity		Areas Where Policies Apply	
Onsite Sewage Systems	Onsite Sewage Systems	Red	
	Other Sewage Systems	Red	Orange
Agricultural Source Material	Application	Red	
	Storage	Red	
Non-Agricultural Source Material	Application (meat plant or sewage material)	Red	
	Handling & Storage (meat plant material)	Red	
Commercial Fertilizer	Application		
	Handling & Storage	Red	
Pesticide	Application	Red	
	Handling & Storage	Red	
Road Salt	Application		

Activity		Areas Where Policies Apply	
	Handling & Storage	Red	
Fuel	Handling & Storage	Red	
DNAPL	Handling & Storage	Red	Orange, Yellow
Organic Solvents	Handling & Storage	Red	
Aircraft De-Icing	Management of Runoff	Red	
Livestock Grazing or Pasturing, Outdoor Confinement, or Farm Animal Yard		Red	
Waste Disposal Sites (within the meaning of Part V of the EPA)		Red	Orange
Snow Storage		Red	

Vulnerable Zone Map

The map shows the areas where activities can be significant drinking water threats and Source Protection Plan policies could apply.



Wellhead Protection Areas

Wellhead protection areas (WHPA) are delineated based on the length of time it takes for water to move from the ground surface, underground to the well. This delineation helps to identify the length of time it would take most contaminants to travel from the location of a spill or leak to the associated well.

Once a contaminant comes into contact with a permeable surface, it will percolate through the layers of soil until it reaches an aquifer where it is then transported to the municipal well.

- WHPA-A is the area immediately adjacent to a well. It is delineated as a circle with a 100 metre radius centered on the well.
- WHPA-B, WHPA-C and WHPA-D are delineated based on the amount of time it takes water to travel horizontally through the aquifer towards the well. These three WHPAs represent two, five, and twenty-five year times of travel, respectively.

Significant Drinking Water Threats

An activity is considered a significant drinking water threat if it is undertaken in a vulnerable area under circumstances that pose a significant risk to the water source. These circumstances can be searched at www.swpip.ca to determine if they are significant drinking water threats. All significant drinking water threats are addressed by policies in the Source Protection Plan.

Identifying Drinking Water Threats

Drinking water threats were initially assessed in 2009- 2010 during the preparation of the Assessment Report. A verification of these threats was carried out in summer/fall 2013 to confirm the findings of the initial assessment and to obtain more specific information about the circumstances of the identified activities. The threat verification identified activities taking place at the time of the assessment and activities that take place seasonally, rotationally, or occasionally as part of regular operations on the property (e.g. application of manure). These activities are considered existing threats. Activities that begin to occur after the Source Protection Plan comes into effect are considered future threats.

Potential Drinking Water Threats	Learn More
Onsite Sewage Systems	Sewage Systems Fact Sheet
Agricultural Activities	Agricultural Activities Fact Sheet
Non-Agricultural Source Material	info@trentsourceprotection.on.ca
Commercial Fertilizer Handling & Storage	Info@trentsourceprotection.on.ca
Pesticide	Pesticide Fact Sheet
Road Salt	info@trentsourceprotection.on.ca

Potential Drinking Water Threats	Learn More
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Source Protection Plan

Source protection policies make use of a variety of approaches such as education and outreach, land use planning, inspections, and monitoring. For some activities, policies require landowners to work with a Risk Management Official to identify and implement measures to be more protective of drinking water. For activities already managed through existing tools, such as Environmental Compliance Approvals or Nutrient Management Plans, policies call for a review of these documents to ensure drinking water is addressed. In a limited number of cases, policies prohibit new activities from being started. Education and outreach to landowners will be a key component in the successful protection of our drinking water.

Fun Facts

- The average pumping rate for the Kings Bay system is 28 cubic metres per day.
- There are 4 wells ranging from approximately 17.4 to 18.3 metres deep.

You can check your property to find out if you are in a vulnerable zone and what Source Protection Plan policies apply by viewing our Interactive Source Protection Map and inputting your address.

For more information about the Clean Water Act or drinking water source protection:

Visit our website at www.trentsourceprotection.on.ca or Lower Trent Conservation, at (613) 394-3915 ext. 246

Or contact the Kawartha-Haliburton Source Protection Lead and RMO, Sarah Lavoie-Bernstein at: SlavoieBernstein@kawarthaconservation.com, Tel: 705.328.2271 ext. 224

Ontario This project has received funding support from the Government of Ontario