

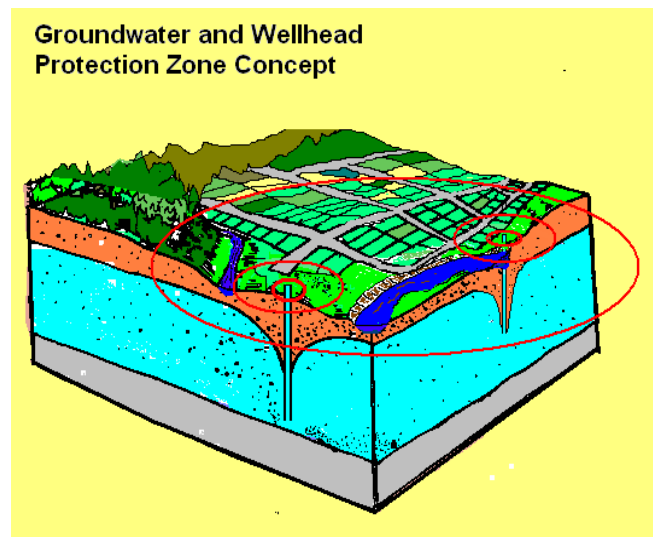
## 2.10 WATER RESOURCE PROTECTION AND MANAGEMENT

Council recognizes that a safe and reliable water supply is critical to public health and stable economic growth. In 2001, Community wells in New Minas supplied water to approximately 4,500 residents<sup>1</sup> in 1,937 separate households<sup>2</sup>. Add to this number, the demands of dozens of institutional, commercial and industrial users, and the task of securing the Village's water supply takes on paramount importance as a community planning issue. In 2000, the New Minas Water Commission engaged the services of Hiltz & Seamone Co. Ltd. and W.G. Shaw & Associates Ltd., to prepare a "water resource management plan". To support the Water Commission's initiative to protect this vital resource and the substantial public investment in this water supply system, Council intends to institute specific land use policies and regulations.

The goals, objectives and policies contained in this part of the New Minas Sector Plan reflect the consultants' recommendations to reduce the risk of contamination of the groundwater from overlying development, and the loss of volume (well yield) from private – interfering– wells, drawing from the same aquifer(s).

According to the Water Resource Management Plan, "The Village of New Minas derives all of its potable water from eight production wells." In terms of risk management, the consultant evaluated the productivity of each well and identified four "zones" which correspond to the relative risk of contamination and interference. In general, the closer an activity is to a well, the shorter the time required for a pollutant to travel through the ground to groundwater. Therefore the zones around the well reflect the relative increase in the time of travel (T-o-T) and therefore a declining level of risk of pollution with distance from the well. This data forms the basis of the technical recommendations for management and in turn supports the Municipality's protective policies and land use controls.

In addition, Council acknowledges that some activities that pose a threat to groundwater, such as the application of salt for de-icing roads, sidewalks and parking lots, the spraying of pesticides and herbicides, other domestic and resource related activities, in addition to improperly abandoned or de-commissioned wells, are beyond Municipal jurisdiction to regulate. Therefore, the Municipality will continue to work with the Water Commission to explore options available under Provincial government (and if appropriate Federal) legislation to implement an all-encompassing approach to water supply management in New Minas.



<sup>1</sup> Source: Statistics Canada Census

<sup>2</sup> Source: Municipality of the County of Kings- New Minas Water Commission Billing Records

**2.10.1 Goals for Managing Groundwater Supplies**

- To ensure an adequate supply of water for current and future community demand where central services are provided;
- To protect the integrity of the New Minas Water Commission's well water supplies.
- To foster groundwater protection and water conservation practices among residents, institutions and the business and resource sectors.

**2.10.2 Objectives for Achieving Groundwater Supply Goals**

- Undertake aquifer assessment and well water protection studies, and implement recommendations through this Plan, the Land Use Bylaw and other relevant community planning documents, and programs.
- Institute policies and regulations to implement wellhead, well capture, wellfield, and recharge area protection methods.
- Implement a community awareness program(s) relating to both private well and community well water supplies.
- Promote responsible groundwater management and conservation practices.
- Act in partnership with the New Minas Water Commission, Village Commission and other government agencies, and municipalities, institutions, interest groups and industry to achieve sustainable use of groundwater resources.
- Identify and secure alternative water supply sources.

**2.10.3 Groundwater Supply and Management Policies**

*2.10.3.1 Council accepts the technical recommendations for well protection contained in the Village of New Minas Water Resources Management Plan (Hiltz and Seamone Co, Ltd Consulting Engineers and W.G. Shaw and Associates Ltd. Consulting Geoscientists, June 12, 2001).*

*2.10.3.2 Council shall, in keeping with Policy 2.10.3.1 implement protective measures in the General Provisions section of the Land Use Bylaw, pursuant to the Municipal Government Act. Additionally, Council intends to continue to work with the Village Water Commission to explore other legal mechanisms and incentives to restrict activities such as the application of road salt (and other de-icing products),*

*pesticides and herbicides, agricultural production and waste management, drilling of private wells, and aggregate extraction, which are beyond the scope of municipal planning legislation. Council also intends to work in concert with the local water authority and provincial agencies to determine the number and locale of abandoned wells, which are potential conduits for aquifer contamination.*

2.10.3.3 *Council shall institute in the general provisions section of the Land Use Bylaw, four categories or “Zones” of ground water protection recommended in the Water Resources Management Plan for the Village of New Minas<sup>3</sup>, and which it shall identify on the New Minas Urban Zoning and Wellfield Protection Zones map, Schedule “11g” of the Land Use Bylaw. These four special zones are as follows:*

1. **Wellhead Protection - Zone A**

*The Wellhead Protection Zone consists of lands within a 250-foot radius of all water production wells. This distance is based on a 1 day to 2 weeks (maximum) time of travel<sup>4</sup>. Other than single unit dwellings, uses within this zone shall be restricted to those that are directly related to the operation of the well and the water transmission system.<sup>5</sup> Council shall zone, on the New Minas Land Use Bylaw Zoning Map, all publicly owned or controlled lands within a Wellhead Protection Zone A, as Water Supply (02) on the Zoning Map.*

*While its generally accepted that managers of public water supply systems do not encourage any form of development in the Wellhead Protection Zone A, Council acknowledges that some uses legally existed prior to instituting these policies. It is Council’s intention that all existing uses in Zone A shall be permitted to continue as non-conforming uses. Expansions (or change in use) to such non-conforming multi-unit residential, commercial, institutional or industrial uses, shall be eligible for consideration only by development agreement pursuant to Section 2.2 Urban Non-Conforming Uses, Policy 8 of this Sector Plan. However, Council does not intend to allow new multi-unit residential, commercial, institutional or*

---

<sup>3</sup> As revised on May 1, 2002 to take into consideration both the sand & gravel aquifer, the sandstone aquifer as well as surface watercourses which can act as avenues of rapid introduction of contaminants into the wellfield area (Zone B and Zone C). Correspondence: W.G. Shaw & Associates Ltd. May 1, May 12, May 23, 2002, and Zone B and C as revised per map attachment, communication on January 26, 2004.

<sup>4</sup> Ibid. 1

<sup>5</sup> (Hiltz and Seamone Co, Ltd Consulting Engineers and W.G. Shaw and Associates Ltd. Consulting Geoscientists, June 12, 2001)

*industrial development on any lands within Wellhead Protection Zone A.*

**2. Well Capture - Zone B**

*Zone B is approximately 3 square kilometres in size and is designed to include all of the capture zones of the existing production wells. It is based on a 2 week to 3 month maximum time of travel<sup>6</sup>.*

*It is Council's intention that all of the uses in the following list shall be excluded from Zone B. Any uses from this list that are already in existence shall become non-conforming:*

- a. Automotive servicing, painting, auto body and engine repair as a main or accessory use*
- b. Automotive sales*
- c. Bulk storage of petroleum fuels over 300 gallons<sup>7</sup>*
- d. Bulk storage of petroleum solvents over 10 gallons*
- e. Bulk storage of salt*
- f. Bulk storage of fertilizer, pest and weed control products and all chlorinated organic compounds over 20 gallons*
- g. Cemetery*
- h. Dry-cleaning and laundry*
- i. Existing hatchery*
- j. Forestry*
- k. Garden centres as an accessory or main use*
- l. Heavy equipment, parts, sales and service*
- m. Livestock operation and manure storage*
- n. Outdoor commercial display*

---

<sup>6</sup> Ibid. 1

<sup>7</sup> Gallons are in Imperial units

- o. Professional trades involving painting, acrylic/fiberglass and similar such processes*
- p. Septic tank service*
- q. Service station and gas bar*
- r. Uses listed in M2 and M3 Zones excluding warehousing and storage*

*Expansions (or change in use) to such non-conforming uses shall be eligible for consideration only by development agreement pursuant to Section 2.2 Urban Non-Conforming Uses, Policy 8 of this Sector Plan.*

*Furthermore, rather than impose an absolute constraint on certain land uses in Zone B, Council intends (where underlying zoning would otherwise permit) to allow the following uses as new or expanded developments only by development agreement:*

- 1. Car wash*
- 2. Golf course and driving range*
- 3. Lawn care and landscaping*
- 4. Manufacturing and bottling of beverages*
- 5. Warehousing and storage*

*Where zoning does allow for multi-unit residential uses, multi-unit dwellings may be permitted to a maximum of 12 units per acre, and subject to development agreement provisions in Section 2.3 Residential Policies, of this Sector Plan.*

### **3. Wellfield Protection - Zone C**

*The Wellfield Protection Zone C is an expansion of the Well Capture Protection Zone B to include those areas that have been designated for future water production wells (3 months to 10 years T-o-T<sup>8</sup>).*

*It is Council's intention not to permit the following list of uses in Zone C. Any uses from this list that are already in existence shall become non-conforming:*

---

<sup>8</sup> Ibid. 1

- a. *Automotive servicing, painting, auto body and engine repair as a main or accessory use*
- b. *Bulk storage of petroleum fuels over 300 gallons*
- c. *Bulk storage of petroleum solvents over 10 gallons*
- d. *Bulk storage of salt*
- e. *Bulk storage of fertilizer, pest and weed control products and all chlorinated organic compounds over 20 gallons*
- f. *Cemetery*
- g. *Dry-cleaning and laundry*
- h. *Existing hatchery*
- i. *Forestry*
- j. *Heavy equipment, parts, sales and service*
- k. *Livestock operation and manure storage*
- l. *Professional trades involving painting, acrylic/fiberglass and similar such processes*
- m. *Septic tank service*
- n. *Service station and gas bar*
- o. *Uses listed in M2 and M3 Zones excluding warehousing and storage*

*Expansion (or change in use) of such non-conforming uses shall be eligible for consideration only by development agreement pursuant to Section 2.2 Urban Non-Conforming Uses, Policy 8 of this Sector Plan.*

*Furthermore, rather than impose an absolute constraint on certain land uses in Zone C, Council intends (where underlying zoning would otherwise permit) to allow the following uses as new or expanded developments only by development agreement:*

1. *Car wash*
2. *Golf course and driving range*
3. *Garden centres as a main use (garden centres accessory to a main commercial use are not restricted)*
4. *Lawn care and landscaping*
5. *Warehousing and storage*

4. ***Recharge Area Protection - Zone D***

*The Recharge Protection Area or Zone D includes the watersheds within the Project Area (10 to 25 year T-o-T). This Zone is intended to exclude uses such as, but not limited to:*

- a. *Bulk storage of petroleum fuels over 300 gallons*
- b. *Bulk storage of petroleum solvents over 10 gallons*
- c. *Bulk storage of salt*
- d. *Bulk storage of fertilizer, pest and weed control products and all chlorinated organic compounds over 20 gallons*
- e. *Cemetery*
- f. *Existing hatchery*
- g. *Livestock operation and manure storage*
- h. *Septic tank service*
- i. *Uses listed in M2 and M3 Zones excluding warehousing and storage and heavy equipment, parts, sales and service*

*Any uses from the above list that are already in existence shall become non-conforming. Expansion (or change in use) of such non-conforming uses, shall be eligible for consideration only by development agreement pursuant to Section 2.2 Urban (Non-Conforming Uses, Policy 8), of this Sector Plan.*

*Furthermore, rather than impose an absolute constraint on certain land uses in Zone D, Council intends (where underlying zoning would otherwise permit) to allow the*

*following uses as new or expanded developments only by development agreement:*

- 1. Golf course and driving range*
- 2. Garden centres as a main use (garden centres accessory to a main commercial use are not restricted)*
- 3. Warehousing and storage*

*2.10.3.4 In considering a development agreement enabled by policy 2.10.3.3 for new uses, Council shall be satisfied that the development meets the following conditions:*

- a. A favourable review by the New Minas Water Commission which may stipulate that the applicant undertake appropriate studies by a qualified independent groundwater expert to assess the risk of impacts on the quality and quantity of groundwater, and when appropriate, prescribe performance standards for both the site design and ongoing operational aspects of the development and an independent monitoring regime with regular reporting to the New Minas Water Commission to determine compliance with the terms of the agreement;*
- b. Conformance with Provincial guidelines and conditions attached as individual licenses required under the Provincial Environment Act and other applicable Provincial and Federal regulations;*
- c. Conformance with all other requirements of this Sector Plan including Subsection 3.3.*

*2.10.3.5 Council may require that any or all of the following information be submitted to the Municipality by the Developer with respect to any proposed development which is the subject of a Development Agreement under the Municipal Government Act namely:*

- a. Information as to the physical and environmental characteristics of the proposed site including information regarding topography, contours, elevations, dimensions, natural drainage, soils, groundwater, existing watercourses, vegetative cover, size and location of the lands*
- b. Information as to the proposed location, height, dimensions and use of all buildings or structures proposed to be built or erected on the lands*



- c. *Information on the type and amount of site clearing required, if any*
- d. *Information regarding proposed site drainage and servicing with water supply and sewage disposal*
- e. *Information on proposed access and egress to and from the lands and estimated traffic flows to be generated*
- f. *Information on the intended hours of operation*
- g. *Information on the architectural design, including renderings, scaled site plans, profiles, grade elevations and cross sections*
- h. *Information regarding the provision and maintenance of appropriate natural screens and landscaping*

2.10.3.6 *The Land Use Bylaw shall deem where a boundary line for Zone A, B, C or D divides a lot, and where 60% or more of that lot area lies within the more restrictive zone, the regulations of that more restrictive zone shall apply to the entire lot.*

2.10.3.7 *Restrictions in the Land Use Bylaw will take effect in all land use zones, and where more stringent, the standards of protective Zones A, B, C, and D shall supersede the provisions of any zones or other general provisions, and treatment of non-conforming uses and structures.*

2.10.3.8 *Accept as otherwise provided for in this Section of the New Minas Sector Plan, Council will not entertain applications for development by agreement on lands within any of the four protective zones.*

2.10.3.9 *Notwithstanding policy 2.10.3.6, land uses approved pursuant to a current development agreement shall not be subject to those Land Use Bylaw restrictions. However, Council may, if deemed appropriate, discharge a development agreement, whereby future development would become subject to policy 2.10.3.6.*

2.10.3.10 *Notwithstanding any other policy in the New Minas Sector Plan, Council shall limit the form and density of development of residentially zoned lands in Wellhead Protection Zone A by:*

- a. *Restricting residential uses to single unit dwellings as provided for in the R1, R2 and RM Zones, and*

b. *Establishing minimum lot standards for residential uses.*

2.10.3.11 *Policy 14 of Section 3.9 (“contiguous to”) of this Plan shall not apply to development proposals on lands within Zones A, B, C or D shown on the New Minas Ground Water Resource Management Map(s).*

#### 2.10.4 **Future Amendments to the New Minas Sector Plan**

2.10.4.1 In considering an amendment to the New Minas Sector Plan, in a Wellhead Protection Zone A, Council shall not redesignate lands and/or create enabling policy, or provide for development either:

- a. As of right, in the same zone, or by
- b. Site plan approval,

other than for public parks, public water supply environmental open space, and low-density residential development to a maximum density of 4 units per acre.

2.10.4.2 Council, in considering an amendment to the New Minas Sector Plan to change a Future Land Use District Boundary– where such lands are identified as being within one of the four protective zones on the Urban Zoning and Wellfield Protection Zones Map– shall have regard to the following matters:

- a. An assessment (submitted in a written report) by a qualified independent groundwater expert of the current yield of existing wells or wellfield, and ensure that development potential is contained within the sustainable operating capacity of the water supply system;
- b. An assessment by a qualified independent groundwater expert of the risk of contamination of the groundwater supply or over-consumption inherent in changing from one land use designation to another; and
- c. The policies of this Sector Plan including Policy 2.10.3.4 and those for amending the Land Use Bylaw contained in Part 3.3 of this Plan.

2.10.5 **Companion Policies: Groundwater Supply and Management in Rural Land Use Districts Surrounding the Village of New Minas**

*Because the Water Resource Management Plan delineates a Groundwater Recharge Protection Area (Zone D) extending south of the limits of the Village of New Minas, this initiative warrants Council’s consideration of planning for the resource district. Consequently, Council intends to review and undertake complementary amendments to the Municipal Planning Strategy and Land Use Bylaw consistent with the technical recommendations for protecting the Villages water supply.*

*2.10.5.1 Council shall undertake appropriate amendments to the Municipal Planning Strategy and Land Use Bylaw to fully implement Water Supply Protection measures in the Resource Districts south of the Village of New Minas, consistent with the New Minas Sector Plan.*

<b>PART 2</b>	<b>AMENDED DATE</b>	<b>SECTION</b>
	April 26, 2005	2.10
	May 3, 2007	2.10.3.3 - 3, 4
	May 31, 2007	2.10.3.3 – 2 p / 3 o / 4 j
	April 2, 2009	2.10.3.3 – 2, 3, 4

