APPENDIX B

LEGAL PROVISIONS LISTS

LIST A

Title: Significant threat policies that affect decisions under the Planning Act and Condominium Act, 1998
Opening Statement: "Clause 39 (1) (a), subsections 39 (2), (4) and (6), and sections 40 and 42 of the Clean Water Act, 2006 apply to the following policies."

Policy No. 14 -WIL1A1-waste-1(Prescribed Instrument) only as it applies to the City of Windsor and the Town of Amherstburg,
Policy No. 42 - W1W2A1-livgraz-1(Planning)

LIST B

Title: Moderate and low threat policies that affect decisions under the Planning Act and Condominium Act, 1998
Opening Statement: "Subsection 39 (1) (b) of the Clean Water Act, 2006 applies to the following policies."

N/A

LIST C

Title: Significant threat policies that affect prescribed instrument decisions
Opening Statement: "Subsection 39 (6), clause 39 (7) (a), section 43 and subsection 44 (1) of the Clean Water Act, 2006 apply to the following policies."

Policy No.1- W1W2L1A1-combinedsewer-1(Prescribed Instrument),
Policy No.2-W1L1A1-bypass/effluent/storage-1(Prescribed Instrument),
Policy No.3- W1-storage-1(Prescribed Instrument),
Policy No.4-W1W2L1A1-stormwater-1(Prescribed Instrument),
Policy No.5-W1W2L1A1-industrialeff-1(Prescribed Instrument),
Policy No.6-W1W2L1A1-industrialeff-2(Prescribed Instrument),
Policy No.7-W2-bypass/effluent-1(Prescribed Instrument),
Policy No.8-W2applNASM-1(Prescribed Instrument),
Policy No.9-W2storageNASM-1(Prescribed Instrument),
Policy No.10-W1L1A1-applicationNASM-1(Prescribed Instrument),
Policy No.11-W1L1A1-storageNASM-1(Prescribed Instrument),
Policy No.12-W1W2L1A1-hauledsewage-1(Prescribed Instrument),
Policy No.13-W1L1A1- minetail-1(Prescribed Instrument),
Policy No.14-W1L1A1-waste-1(Prescribed Instrument),
Policy No.15-W1W2L1A1-applPesticide-1(Prescribed Instrument),
Policy No.16-SLWA123-handlestorefuel-1(Prescribed Instrument),
Policy No.17-SLWA123-handlestorefuel-5 (Prescribed Instrument),

LIST D

Title: Moderate and low threat policies that affect prescribed instrument decisions
Opening Statement: "Clause 39 (7) (b) of the Clean Water Act, 2006 applies to the following policies."

N/A

LIST E

Title: Significant threat policies that impose obligations on municipalities, source protection authorities and local boards
Opening Statement: "Section 38 and subsection 39 (6) of the Clean Water Act, 2006 applies to the following policies."

Policy No.19- All123-transportcorridor-3(Specify Action)
Policy No.34- W2bypass-1(Specify Action), W2effluent-1 (Specify Action),
Policy No.35- W2effluent-1 (Specify Action),
Policy No.36-W1W2-combinedsewerbypasseffluent-1 (Specify Action),
Policy No.37-W1W2-combinedsewer-2 (Govern Research),
Policy No.38-W1W2-combinedsewerstorm-3 (E&O),
Policy No.39-W1W2-combinedsewerbypasseffluent-4 (Stewardship/Incentive),
Policy No.40-W1L1A1storage-1 (Specify Action),
Policy No.41-SLWA123-handlestorefuel-1 (Specify Action),
Policy No.45-SLWA123-handlestorefuel-1 (Stewardship/Incentive)
Policy No.47-W1A1L1-deicair (Specify Action),
Policy No.48-L1-livgraz-1 (E & O)

LIST F

Title: Monitoring policies referred to in subsection 22 (2) of the Clean Water Act, 2006
Opening Statement: "Section 45 of the Clean Water Act, 2006 applies to the following policies."

Policy No.1M-W1W2L1A1- combinedsewer-2 (Monitoring Policy),
Policy No.2M-W1L1A1-bypass/effluent/storage-2 (Monitoring Policy),
Policy No.3M-W1-storage-2 (Monitoring Policy),
Policy No.4M-W1W2L1A1-stormwater-2 (Monitoring Policy),
Policy No.5M-W1W2L1A1-industrialeff-3 (Monitoring Policy),
Policy No.6M-W1W2L1A1-industrialeff-3 (Monitoring Policy),
Policy No.7M-W2-bypass/effluent-3 (Monitoring Policy),
Policy No.8M-W2applNASM-2 (Monitoring Policy),
Policy No.9M-W2storageNASM-2 (Monitoring Policy),
Policy No.10M-W1L1A1-applicationNASM-2 (Monitoring Policy),
Policy No.11M-W1L1A1-storageNASM-2 (Monitoring Policy),
Policy No.12M-W1W2L1A1-hauledsewage-2 (Monitoring Policy),
Policy No.13M-W1L1A1-minetail-2 (Monitoring Policy),
Policy No.14M-W1L1A1-waste-2 (Monitoring Policy),
Policy No.15M-W1W2L1A1applPesticide-2 (Monitoring Policy),
Policy No.16M-SLWA123-handlestorefuel-2 (Monitoring Policy),

Policy No.17M-SLWA123-handlestorefuel-6 (Monitoring Policy),
Policy No.19M-All123-transportcorridor-4 (Monitoring Policy),
Policy No.20M-W1W2L1A1-applASM-2 (CWA Monitoring Policy),
Policy No.21M-W1W2L1A1-storageASM-2 (CWA Monitoring Policy),
Policy No.22M-W1L1A1-applNASM-2 (CWA Monitoring Policy),
Policy No.23M-W1L1A1-storageNASM-2 (CWAMonitoring Policy),
Policy No.24M-W1L1A1-storageroadsalt-2 (CWAMonitoring Policy),
Policy No.25M-W1L1A1-storagesnow-2 (CWA Monitoring Policy),
Policy No.26M- W1L1A1-hazardouswaste-2 (Clean Water Act)
Policy No.27M-W2-applNASM-2 (CWA Monitoring Policy),
Policy No.28M-W2-storageNASM-2 (CWA Monitoring Policy),
Policy No.29M-W1W2A1L1applPesticide-2 (CWA Monitoring Policy),
Policy No.30M-W1A1L1-storagepesticide-2 (CWA Monitoring Policy),
Policy No.31M-SLWA123-handlestorefuel-3 (CWA Monitoring Policy),
Policy No.32M- All123-handlestorefuel-2 (Monitoring Policy)
Policy No.33M- W1W2A1L1-allactivities-2 (Monitoring Policy)
Policy No.34/35M-W2bypass/effluent-2 (Monitoring Policy)
Policy No.36/37/38/39M-W1W2-combinedsewerbypasseffluent-5 (Monitoring Policy)
Policy No.40M-W1L1A1-storage-2 (Monitoring Policy),
Policy No.41M-SLWA123-handlestorefuel-2 (SpecActMonitoring Policy),
Policy No.42M-W1W2A1-livgraz-2 (Monitoring Policy),
Policy No.45M-SLWA123-handlestorefuel-2 (Monitoring Policy),
Policy No.47M-W1A1L1-deicair -2 (Monitoring Policy)
Policy No.48M-L1-livgraz-2 (Monitoring Policy)

LIST G

Title: Policies related to section 57 of the Clean Water Act, 2006
Opening Statement: "The following policies relate to section 57 (prohibition) of the Clean Water Act."

Policy No.20-W1W2L1A1-applASM-1 (Clean Water Act),
Policy No.21-W1W2L1A1-storageASM-1 (Clean Water Act),
Policy No.22-W1L1A1-applNASM-1 (Clean Water Act),
Policy No.23-W1L1A1-storageNASM-1 (Clean Water Act),
Policy No.24-W1L1A1-storageroadsalt-1 (Clean Water Act),
Policy No.25-W1L1A1-storagesnow-1 (Clean Water Act)

LIST H

Title: Policies related to section 58 of the Clean Water Act, 2006
Opening Statements: "The following policies relate to section 58 (risk management plans) of the Clean Water Act."

Policy No.26-W1L1A1-hazardouswate-1 (Clean Water Act)
Policy No.27-W2-applNASM-1(Clean Water Act),
Policy No.28-W2-storageNASM-1(Clean Water Act),
Policy No.29-W1W2A1L1applPesticide-1(Clean Water Act),
Policy No.30-W1A1L1-storagepesticide-1(Clean Water Act),
Policy No.31-SLWA123-handlestorefuel-1(Clean Water Act)

LIST I

Title: Policies related to section 59 of the Clean Water Act, 2006
Opening Statement: "The following policies relate to section 59 (restricted land use) of the Clean Water Act."

Policy No.32-All123-handlestorefuel-1 (Clean Water Act)
Policy No.33-W1W2A1L1-allactivities-1 (Clean Water Act)

LIST J

Title: Strategic Action policies
Opening Statement: For the purposes of section 33 of Ontario Regulation 287/07, the following policies are identified as strategic action policies

Policy No.18- All123-transportcorridor-1 (Specify Action),
Policy No.18M-All123-transportcorridor-2 (Monitoring Policy),
Policy No.19-All 123-transportcorridor-3 (Specify Action),
Policy No.19M-All123-transportcorridor-4 (Monitoring Policy
Policy No.43-All IPZs (E&O),
Policy No.43M-All IPZs E&O (Monitoring),
Policy No.44-HVAs, SGRAs, Wells-1 (E&O),
Policy No.44M-HVAs, SGRAs, Wells (E&O-Monitor),
Policy No.46-All IPZs, HVAs, SGRAs, Wells-1 (Stewardship/Incentive)
Policy No.46M- All IPZs, HVAs, SGRAs, Wells-2 (Monitoring Policy),
Policy No.49- ERSPA-microcystinLR-1 (E&O)
Policy No.49M- ERSPA-microcystinLR-2 (Clean Water Act)
Policy No.50- LE-microcystinLR-1 (Clean Water Act)
Policy No.50M- LE-microcystinLR-2 (Clean Water Act)

LIST K

Title: Significant threat policies that represent a non-legally binding commitment
The policies that do not belong to the other Lists A to J are included in the List K.

Policy No.19-All 123-transportcorridor-3 (Specify Action)

APPENDIX C

Clean Water Act Part IV Section 57, 58 and 59 Lists

List of activities to which Section 57 (Prohibition)* applies and areas within which Section 57 applies for each designated activity

List of activities to which Section 57 applies	Areas within which Section 57 applies for each designated activity
The application of Agricultural Source Material (ASM)	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
The storage of Agricultural Source Material (ASM)	Windsor IPZ-1, Windsor IPZ-2, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
The application of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
The storage of Non Agricultural Source Material (NASM)	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
The storage of road salt	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1
The storage of snow	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1

*Only for activities under circumstances that do not occur, or are highly unlikely to occur. See Section 4.1 for more details.

List of activities to which Section 58 (Risk Management Plan)* applies and areas within which Section 58 applies for each designated activity

List of activities to which Section 58 applies	Areas within which Section 58 applies for each designated activity
The application of Non Agricultural Source Material (NASM)	Windsor IPZ-2
The storage of Non Agricultural Source Material (NASM)	Windsor IPZ-2
The application of pesticide	Windsor IPZ-1, Windsor IPZ-2, Amherstburg IPZ-1 and Lakeshore IPZ-1
Storage of pesticide	Windsor IPZ-1, Amherstburg IPZ-1, Lakeshore (Belle River) IPZ-1
The handling and storage of fuel	All Events Based Areas within IPZs in the Essex Region Source Protection Area
The storage of hazardous or liquid industrial waste	Windsor IPZ-1, Lakeshore (Belle River) IPZ-1 and Amherstburg IPZ-1

* See Section 4.1 for more details.

List of land uses to which Section 59 (Restricted Land Use)* applies and areas within which Section 59 applies for each land use

List of land uses to which Section 59 applies	Areas within which Section 59 applies for each land use
Official Plans - Land Use Designations: Agriculture Commercial Institutional Industrial Open Space Waterfront Recreation Parks Waterfront Port	Policy No.32-All123-handlestorefuel-1 (Clean Water Act): All Event Based Areas within the boundaries of the City of Windsor, Town of Amherstburg, Town of Essex, Town of Kingsville, Town of Lakeshore, Town of LaSalle, Municipality of Leamington, Town of Tecumseh, and Township of Pelee. Policy No.33-W1W2A1L1-allactivities-1 (Clean Water Act): Windsor IPZ-1, Amherstburg IPZ-1, Lakeshore (Belle River) IPZ-1
Zoning Bylaws – Zoning Classifications: Agricultural Commercial Green District Institutional Industrial Manufacturing Open Space Waterfront Recreation Parks Waterfront Port Transportation/Shipping	

* See Section 4.1 for more details.

APPENDIX D

List of Prescribed Instruments Policies

Prescribed Instruments which apply to Source Protection Plan Policies in Lists C and D (Section 34(4) of Ontario Regulation 287/07)

Policy No.	Policy Reference No.	Legal Effect (conform with, have regard to)	Ontario Water Resources Act	Environmental Protection Act	Nutrient Management Act	Safe Drinking Water Act	Aggregate Resources Act
1	W1W2L1A1-combinedsewer-1	Conform with	X				
2	W1L1A1-bypass/effluent/storage-1	Conform with	X				
3	W1-storage-1	Conform with	X				
4	W1W2L1A1-stormwater-1	Conform with	X				
5	W1W2L1A1-industrialeff-1	Conform with	X				
6	W1W2L1A1-industrialeff-2	Conform with	X				
7	W2-bypass/effluent-1	Conform with	X				
8	W2-applNASM-1	Conform with		X			
9	W2storageNASM-1	Conform with		X			
10	W1L1A1-applicationNASM-1	Conform with		X			
11	W1L1A1-storageNASM-1	Conform with		X			
12	W1W2L1A1-hauledsewage-1	Conform with		X			
13	W1L1A1-minetail-1	Conform with	X	X			
14	W1L1A1-waste-1	Conform with		X			
15	W1W2L1A1applPesticide-1	Conform with		X			
16	SLWA123-handlestorefuel-1	Conform with				X	
17	SLWA123-handlestorefuel-5	Conform with					X

APPENDIX E

TERMS AND DEFINITIONS

100 Year Storm is a frequency based storm that on average will occur once every hundred years; however, has a one percent chance of occurring or being exceeded in any given year.

Abandoned Well is a well that is deserted because it is dry, contains non potable water, was discontinued before completion, has not been properly maintained, was constructed poorly, or it has been determined that natural gas may pose a hazard.

Activity is an action that has the potential to contaminate or deplete a source of drinking water. Activities are prescribed in the Table of Drinking Water Threats: Clean Water Act, 2006 dated December 12, 2008 and in the Technical Rules: Assessment Report (no "local threats" have been defined). Generally they include actions such as storage, handling, application, or pasturing;

Agricultural Managed Land is managed land that is used for agricultural production purposes including areas of cropland, fallow land and improved pasture where agricultural source material (ASM), commercial fertilizer or non-agricultural source material (NASM) is applied or may be applied.

Agricultural Source Material is material used for land application of nutrients that originate from agricultural activities such as livestock operations. May include manure, livestock bedding, runoff water from animal yards or manure storage and compost (see Nutrient Management Act, 2002 for legal description).

Algal Bloom refers to rapid growth of small aquatic plants on the surface of lakes and rivers, usually as a result of excessive nutrients.

Anthropogenic means influenced by human activity or of human origin.

Aquifer is a water-bearing layer (or several layers) of rock or sediment capable of yielding supplies of water; typically consists of unconsolidated deposits of sandstone, limestone or granite, and can be classified as confined, unconfined or perched. The water in an aquifer is called groundwater.

Aquifer Vulnerability Index (AVI) is a numerical indicator of an aquifer's intrinsic or inherent vulnerability to contamination expressed as a function of the thickness and permeability of overlying layers.

Baseflow is the sustained flow (amount of water) in a stream that comes from groundwater discharge or seepage. Groundwater flows underground until the water table intersects the land surface and the flowing water becomes surface water in the form of springs, streams/rivers, lakes and wetlands. Baseflow is the continual contribution of groundwater to watercourses and is important for maintaining flow in streams and rivers between rainstorms and in winter conditions.

Bedrock is solid or fractured rock usually underlying unconsolidated geologic materials; bedrock may be exposed at the land surface.

Best Management Practices (BMPs) are structural, non-structural and managerial techniques that are recognized to be the most effective and practical means to control non-point source pollutants yet are compatible with the productive use of the resource to which they are applied. BMPs are used in both urban and agricultural areas.

Chemical means a substance of distinct molecular composition which has been deemed to be of concern to drinking water due to its toxicity, environmental fate, quantity in a specific circumstance (see the Ministry of the Environment publication Table of Drinking Water Threats: Clean Water Act, 2006 dated December 12, 2008), method of release into the environment and type of vulnerable area into which it might be released;

Clean Water Act the "Clean Water Act, 2006" was passed as Bill 43 to protect drinking water at the source. The Act requires the development of a watershed based Source Protection Plan.

Conceptual Water Budget is a written description of the overall system flow dynamics for each watershed in the Source Protection Area, taking into consideration surface water and groundwater features, land cover (e.g. proportion of urban vs. rural uses), man-made structures (e.g. dams, channel diversions, water crossings) and water takings.

Condition is the presence of a substance in a vulnerable area that results from a past activity and that also constitutes a drinking water threat.

Conservation is the wise use of natural resources.

Conservation Authorities are local watershed management agencies that deliver services and programs that protect and manage water and other natural resources in partnership with government, landowners and other organizations.

Consumptive Use is the portion of water withdrawn or withheld from the water source and assumed to be lost or otherwise not returned to the water source due to evaporation, incorporation into products, or other processes.

Contaminant (pollutant) is an undesirable substance that makes water unfit for a given use when found in sufficient concentration.

Data Gaps is the lack of site specific information for a geological area and/or specific type of information.

Decommissioned Wells are capped, plugged and sealed in compliance with regulatory requirements by the Ministry of the Environment.

Dense Non-Aqueous Phase Liquid (DNAPL) is an organic chemical in concentrations greater than its aqueous solubility and more dense than water. Such a chemical will sink in groundwater and accumulate in aquifer depressions.

Designated System is a drinking water system that is included in a Terms of Reference, pursuant to resolution passed by a municipal council under subsection 8(3) of the proposed "Clean Water Act, 2006".

Discharge is the flow of surface water in a stream or canal, or the outflow of groundwater to a well, ditch or spring. It is the volume of water in cubic metres per second (m3/s) running in a watercourse.

Diversion is a redirection of water from one drainage or watercourse to another.

Drainage Area is the area which supplies water to a particular point.

Drainage Basin is the area of land, surrounded by divides, that provides runoff to a fluvial network that converges to a single channel or lake at the outlet.

Drinking water has the same meaning as in the Safe Drinking Water Act, 2002;

Drinking Water 1. Water intended for human consumption. 2. Water that is required by an Act, regulation, order, municipal by-law or other document issued under the authority of an Act, (a) to be potable, or (b) to meet or exceed the requirements of the prescribed drinking water quality standards.

Drinking Water Concern is a purported drinking water issue that has not at this time been substantiated by monitoring, or other verification methods. Concerns may be identified through consultations with the public, stakeholder groups, and technical experts (e.g. water treatment plant operators).

Drinking Water Issue is a substantiated condition relating to the quality or quantity of water that interferes or is anticipated to soon interfere with the use of a drinking water source by a municipality. As defined in Technical Rule 114, regarding the quality of water in a vulnerable area: 1) The presence of a parameter in water at a surface water intake or well, at a concentration that may result in deterioration of the water quality or where there is a trend of increasing concentrations of a parameter. 2) The presence of a pathogen at a concentration that may result in deterioration of the water quality or there is a trend of increasing concentrations of the pathogen.

Drinking Water System is a system of works, excluding plumbing, that is established for the purpose of providing users of the system with drinking water and that includes, (a) anything used for the collection, production, treatment, storage, supply or distribution of water, (b) anything related to the management of residue from the treatment process or the management of the discharge of a substance into the natural environment from the treatment system, and (c) a well or intake that serves as the source or entry point of raw water supply for the system.

Drinking Water Threat means an activity or condition that adversely affects or has the potential to adversely affect the quality (chemical or pathogen) or quantity of any water that is or may be used as a source of drinking water, and includes an activity or condition that is prescribed by the regulations as a drinking water threat. Regulation 287/07 sets out in Section 1.1 a prescribed list of drinking water threats;

Drought is a complex term that has various definitions, depending on individual perceptions. For the purposes of low water management, drought is defined as weather and low water conditions characterized by one or more of the following: a) below normal precipitation for an extended period of time (for instance three months or more), potentially combined with high rates of evaporation that result in lower lake levels, streamflows or baseflow, or reduced soil moisture or groundwater storage; b) streamflows at the minimum required to sustain aquatic life while only meeting high priority demands for water, water wells becoming dry, surface water in storage allocated to maintain minimum streamflows; c) socio-economic effects occurring on individual properties and extending to larger areas of a watershed or beyond. As larger areas are affected and as low water and precipitation conditions worsen, the effects usually become more severe.

Ecosystem Approach is a holistic way of planning and managing natural resources; it means that the consequences of an action (including the cumulative effect of many small actions) on all other parts of the ecosystem will be considered and evaluated before the action is undertaken.

Environmental Bill of Rights, 1993 is a statute of Ontario that provides a number of legal rights and formal procedures for the public to participate in environmental decision-making.

Environmental Protection Act the purpose of this Act is to provide for the protection and conservation of the natural environment. R.S.O. 1990, c. E.19, s. 3.

Erosion is a physical process causing the deterioration and transport of soil surfaces and river channel materials by the force of flowing water or wind, ice or other geological agents, including such processes as gravitational creep. Geological erosion is naturally occurring erosion over long periods of time.

Evaporation is the process by which water or other liquids change from liquid to vapour; evaporation can return infiltrated water to the atmosphere from upper soil layers before it reaches groundwater or surface water, and occur from leaf surfaces (interception), water bodies (lakes, streams, wetlands, oceans), and small puddle depressions in the landscape.

Evapotranspiration is the combined loss of water from a given area and during a specific period of time by evaporation from the soil surface and by transpiration from plants.

Event is an occurrence of an incident (isolated or frequent) with the potential to promote the introduction of a threat into the environment. An event can be intentional, as in the case of licensed discharge or accidental, as in the case of a spill.

Event Based Areas (EBA) are the areas within the Intake Protection zones (parts of IPZ-1, IPZ-2 and IPZ-3) where event-based modeling has demonstrated that a spill can reach the intake at a concentration which would deteriorate the water for the purposes of drinking. Event-based modeling involved the use of specific events which were not to exceed an extreme event as defined by the Technical Rules. The spills modeled may be the result of the local threat activity (transportation) or it may be the result of a similar prescribed drinking water threat (storage or handling). Within the EBA these activities are identified as SDWT under the circumstance (volume) modeled. Each EBA is associated with a specific contaminant and quantity.

Extreme event is a period of heavy precipitation or winds up to a 100 year storm event; a freshet; or a surface water body exceeding its high water mark (Technical Rules). An event up to an extreme event is used for event based modeling

Existing Drinking Water Source is the aquifer or surface water body from which municipal residential systems or other designated systems currently obtain their drinking water. This includes the aquifer or surface water body from which back-up wells or intakes for municipal residential systems or other designated systems obtain their drinking water when their current source is unavailable or an emergency occurs.

Existing Threat see definition stated in Section 5.4.;

Flood is an overflow or inundation that comes from a river or other body of water and causes or threatens damage. It can be any relatively high streamflow overtopping the natural or artificial banks in any reach of a stream. It is also a relatively high flow as measured by either gauge height or discharge quantity.

Flow is the volumetric rate of water discharged from a source, given in volume with respect to time. Measured in cubic metres per second (m3/s); see also "discharge".

Flow Regime is the basin's flow magnitude and duration given a particular precipitation event (amount and intensity) and also the frequency of the events. Given the temporal component of frequency, a basin's flow regime would encompass baseflow, low magnitude (high frequency events) and high magnitude (low frequency events).

Freedom of Information and Protection of Privacy Act (FIPPA) was created for the following purposes: To provide a right of access to information under the control of institutions in accordance with the principals that information should be available to the public, necessary exemptions from the right of access should be limited and specific, and decisions on the disclosure of government information should be reviewed independently of the government. To protect the privacy of individuals with respect to personal information about themselves held by institutions and to provide individuals with a right of access to that information (R.S.O. 1990, c.F31, s1.)

Future Threat see definition stated in Section 5.4;

Geology is the study of science dealing with the origin, history, materials and structure of the earth, together with the forces and processes operating to produce change within and on the earth.

GIS (Geographic Information System) is an electronic map-based database management system which uses a spatial reference system for analysis and mapping purposes.

Great Lakes Basin refers to the watershed of the Great Lakes and the St. Lawrence River upstream from Trois-Rivieres, Quebec

Groundwater is water that has percolated into the ground and occupies spaces between soil particles or cracks and fissures in otherwise solid rock. (Source: Ministry of the Environment. 2004. White Paper on Watershed-based Source Protection Planning.);

Groundwater Recharge is inflow of water to a ground water reservoir from the surface. Infiltration of precipitation and its movement to the water table is one form of natural recharge.

Headwater is the source of a river or water immediately upstream of a structure. The source waters of a stream or river.

Heavy Metals is a general term used to describe more than a dozen metallic elements. Some heavy metals, such as zinc, copper and iron, although harmful at high concentrations are essential parts of our diets at trace levels. Others, like lead and mercury, have no known health benefits and can have harmful effects on human health and the environment at very low concentrations.

Herbicide is chemicals used to kill undesirable vegetation.

Highly Vulnerable Aquifer (HVA) is an aquifer that can be easily changed or affected by contamination from both human activities and natural process as a result of: a) its intrinsic susceptibility, as a function of the thickness and permeability of overlaying layers, or; b) by preferential pathways to the aquifer.

Hydraulic Conductivity is the term used to describe the rate at which water moves through a medium; a controlling factor on the rate at which water can move through a permeable medium.

Hydrogeology is the study of the interrelationships of geologic materials and hydraulic processes.

Hydrologic Cycle is the cycle of water movement from the atmosphere to the earth and it's return to the atmosphere through various stages, such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.

Hydrology is the scientific study of the properties, distribution and effects of water on the Earth's surface, in the soil, underlying rocks and in the atmosphere.

Impermeable is not allowing water to pass through.

Impervious is a term denoting the resistance to penetration by water or plant roots.

Implementing Body can be a provincial ministry, municipality, local board, source protection authority, or other body;

Infiltration is the process of water moving from the ground surface vertically downward into the soil.

Infiltration Rate is the quantity of water that enters the soil surface in a specified time interval. Often expressed in volume of water per unit of soil surface area per unit of time (eg. centimetres per hour, cm/hr).

Inflow is the water that flows into a lake, reservoir or forebay.

Inland Lake is a body of standing water, usually fresh water, larger than a pool or pond or a body of water filling a depression in the earth's surface.

Intake Protection Zone (IPZ) means a zone established around a surface water intake of drinking water as prescribed in the Technical Rules: Clean Water Act, 2006.

Intrinsic Susceptibility is a measure of the natural protection of an aquifer from overlying layers with low permeability.

Intrinsic Susceptibility Index (ISI) is a numerical indicator of an aquifer's intrinsic susceptibility to contamination expressed as a function of the thickness and permeability of overlying layers.

Irrigation is the controlled application of water for agricultural purposes through man-made systems to supply water requirements not satisfied by rainfall.

Knowledge Gaps is lack of referenced materials or expertise to assess certain characteristics of the specific watershed that can be adequately described without tabular or spatial data.

Legal Effect The policies in the Source Protection Plan have one of three types of legal effect – "must conform/comply with" policies, "have regard to policies", and "non-legally binding" policies (Source: Conservation Ontario. 2011. Legal Effect of Source Protection Policies.);

Littoral is along and close to the shore, particularly describing aquatic plants, animals, currents and water deposits.

Livestock Density is the number of nutrient units over a given area, and is expressed by dividing the nutrient units by the number of acres in the same area, where, (a) in respect of land used for the application of nutrients, the number of acres of agricultural managed land in the vulnerable area; and (b) in respect of land that is part of a farm unit and that is used for livestock, grazing or pasturing, the number of acres that is used for those purposes.

Low drinking water threat means a drinking water threat that, according to a risk assessment, poses or has the potential to pose a low risk (Source: Clean Water Act, 2006. O Reg. 246/10.);

Maximum Acceptable Concentration (MAC) is the term used for limits applied to substances above which there are known or suspected adverse health effects.

Milligrams per Litre (mg/l) is a measure of the amount of dissolved solids in a solution in terms of milligrams of solid per litre of solution; equivalent to part per million in water or 1µg/l=1ppm .

Model is an assembly of concepts in the form of mathematical equations or statistical terms that portrays the behaviour of an object, process or natural phenomenon.

Moderate drinking water threat means a drinking water threat that, according to a risk assessment, poses or has the potential to pose a moderate risk (Source: Clean Water Act, 2006. O Reg. 246/10.);

Municipal Residential System is all municipal drinking-water systems that serve or are planned to serve a major residential development (i.e. six or more private residences).

Nitrate (NO3) is a chemical formed when nitrogen from ammonia (NH3), ammonium (NH4) and other nitrogen sources combine with oxygenated water. An important plant nutrient and type of inorganic fertilizer (most highly oxidized phase in the nitrogen cycle). In water, the major sources of nitrates are septic tanks, livestock feed lots and fertilizers.

Nitrite (NO2) is a product in the first step of the two-step process of conversion of ammonium (NH4) to nitrate (NO3).

Non-Agricultural Source Materials is used to apply to land as nutrients that do not originate from agricultural activities. Includes pulp and paper biosolids, sewage biosolids, non-agricultural compost and any other material capable of being applied to land as a nutrient that is not from an agricultural source (see Nutrient Management Act, 2002 for legal description).

Non-Point Source Pollution is pollution of the water from numerous locations that are hard to identify as point source, like agricultural activities, urban runoff and atmospheric deposition.

Nutrient Management Act the purpose of this Act is to provide for the management of materials containing nutrients in ways that will enhance protection of the natural environment and provide a sustainable future for agricultural operations and rural development. 2002, c. 4, s. 1.

Nutrients are chemicals (particularly phosphorus) which stimulate the growth of aquatic plants; the nutrients act as fertilizers and contribute to heavy weed growth and algae blooms.

Nutrient Unit is the amount of nutrients that give the fertilizer replacement value of the lower of 43 kg of nitrogen or 55 kg of phosphate as nutrient as established by reference to the Nutrient Management Protocol (Nutrient Management Act, 2002).

Official Plan is a land use policy document adopted by a municipality to guide the wise and logical development of its area for the benefit of its citizens.

Ontario Drinking Water Quality Standards are regulated standards (O.Reg. 169/03, Ontario Drinking Water Quality Standards made under the Safe Drinking Water Act, 2002) for microbiological, chemical and radiological parameters that, when present above certain concentrations in drinking water, have known or suspected adverse health effects and require corrective action.

Organic Compounds are natural or synthetic substances based on carbon.

Organic Soil are soil materials that have developed predominately from organic deposition (i.e. containing >17 percent organic carbon or approximately 30 percent organic matter by weight).

Overburden is used to describe the soil and other material that lies above a specific geologic feature.

Parcel Level is a conveyable property, in accordance with the provisions of the Land Titles Act. The parcel is the smallest geographic scale at which risk assessment and risk management are conducted.

Part Per Million (ppm) is a measure of the amount of dissolved matter in a solution in terms of a ratio between the number of parts of matter to a million parts of total volume; equivalent to milligram per litre in water or one part per million = one milligram per litre (µg /l).

Pathogen means any disease-producing agent, especially a virus, bacterium, or other microorganism. (Source: Ministry of the Environment. 2004. White Paper on Watershed-based Source Protection Planning.);

Permeable is a porous surface through which water passes quickly.

Permit to Take Water is any person that takes more than 50,000 litres of water per day from any source requires a permit issued by the Ministry of the Environment Director under the Ontario Water Resources Act, unless they meet the criteria for certain exempted water takings.

Pesticides are chemicals including insecticides, fungicides, and herbicides that are used to kill living organisms.

Planned means, with respect to a drinking water system, a drinking water system that is to be established, or a part of a drinking water system that is to be established, if, (a) approval to proceed with the establishment of the system or part has been given under Part II of the Environmental

Assessment Act, (b) the establishment of the system or part has been identified as the preferred solution within a completed planning process conducted in accordance with an approved class environmental assessment under Part II.1 of the Environmental Assessment Act and no order has been issued under subsection 16 (1) of that Act, or (c) the system or part would serve a reserve as defined in the Indian Act (Canada).

Point Source Pollution is pollution from a distinct source, such as an industrial discharge pipe, underground storage tank, septic system, or spills.

Policy is a statement of intention. A policy may be designed to guide current and future actions and decisions, and to achieve a desired goal or outcome. A policy may refer to the policy approaches or the measures that will be used to achieve it.

Policy Lead/ Task Lead: The lead authority as outlined in the appropriate Approved Terms of Reference;

Potable Water is water that is safe for drinking.

Precipitation is moisture falling from the atmosphere in the form of rain, snow, sleet or hail.

Prescribed Instrument is any document of legal effect, including a permit, license, approval, authorization, direction or order, that is issued or otherwise created under an Act and listed in Section 1.0.1 of Regulation 287/07;

Private Well is groundwater that serves one home or is maintained by a private owner.

Quaternary Geology is the study of all geologic activity and events which took place during the Quaternary geologic period (the last 1.8 million years).

Regulated Area is the area near a watercourse or shoreline which is subject to Conservation Authority regulations (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation).

Riparian is situated along the bank of a stream or other body of water.

Risk Management Inspector means a risk management inspector appointed under Part IV of the Clean Water Act, 2006 (Source: Clean Water Act, 2006.);

Risk Management Official means the risk management official appointed under Part IV of the Clean Water Act, 2006 (Source: Clean Water Act, 2006.);

Risk management plan means a plan for reducing a risk prepared in accordance with the regulations and the rules of the Clean Water Act, 2006 (Source: Clean Water Act, 2006.);

Runoff is the portion of precipitation which is not absorbed by the ground surface and finds its way into surface stream channels and becomes the flow of water from the land to oceans or interior basins by overland flow and stream channels.

Safe Drinking Water Act provides for the protection of human health and prevention of drinking water health hazards through the control and regulation of drinking water systems and drinking water testing.

Sediment is transported and deposited particles derived from rocks, soil or biological material. Sediment is also referred to as the layer of soil, sand and minerals at the bottom of surface water, such as streams, lakes and rivers.

Semi-Quantitative is an approach or methodology that uses measurable or ranked data, derived from both quantitative and qualitative assessments, to produce numerical values for articulating results.

Significant drinking water threat means a drinking water threat that, according to a risk assessment, poses or has the potential to pose a significant risk. The Provincial Table of Drinking Water Threats: Clean Water Act, 2006 dated December 12, 2008 along with the vulnerability score in the Assessment Report provides the basis for the risk assessment;

Significant groundwater recharge area means an area within which it is desirable to regulate or monitor drinking water threats that may affect the recharge of an aquifer. (Source: Clean Water Act, 2006.)

Significant Threat Policy is defined in the Act to mean: (a) a policy set out in a source protection plan that, for an area identified in the assessment report as an area where an activity is or would be a significant drinking water threat, is intended to achieve an objective referred to in paragraph 2 of subsection 22 (2), or (b) a policy set out in a source protection plan that, for an area identified in the assessment report as an area where a condition that results from a past activity is a significant drinking water threat, is intended to achieve the objective of ensuring that the condition ceases to be a significant drinking water threat.

Source Protection Area is those lands and waters that have been defined under Ontario Regulation 284/07 as the "study area" for an Assessment Report and a Source Protection Plan under the "Clean Water Act, 2006".

Source Protection Authority means a conservation authority or other person or body that, under subsection 4 (2) or section 5, is required to exercise and perform the powers and duties of a drinking water source protection authority under the Clean Water Act, 2006.

Source Protection Committee means a drinking water source protection committee established under section 7 of the Clean Water Act, 2006;

Source Protection Plan means a drinking water source protection plan prepared under the Clean Water Act; 2006.

Source Protection Region means a drinking water source protection region established by the regulations (Source: Clean Water Act, 2006.);

Source Water is untreated water in streams, rivers, lakes or underground aquifers which is used for the supply of raw water for drinking water systems (see raw water supply).
Source Water Protection is action taken to prevent the pollution and overuse of municipal drinking water sources, including groundwater, lakes, rivers and streams. Source water protection involves developing and implementing a plan to manage land uses and potential contaminants.

Subwatershed is a watershed subdivision of unspecified size that forms a convenient natural unit.

Surface Runoff (overland flow) is precipitation that cannot be absorbed by the soil because the soil is already saturated with water (soil capacity); precipitation that exceeds infiltration; the portion of rain, snow melt, irrigation water, or other water that moves across the land surface and enters a wetland, stream, or other body of water (overland flow). Overland flow usually occurs in urban settings (pavement, roofs, etc.) or where the soils are very fine textured or heavily compacted.

Surface water means water collecting in a stream, river, lake, and wetland. It is the source for drinking water from the Intakes in the Great lakes (Source: Ministry of the Environment. 2004. White Paper on Watershed-based Source Protection Planning.);

Surface water intake protection zone means an area that is related to a surface water intake and within which it is desirable to regulate or monitor drinking water threats (Source: Clean Water Act, 2006.);

Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own and future needs.

Table of Drinking Water Threats is a document released by the MOE that contains a listing of all potential threat activities and circumstances under which these activities may be considered to be significant, moderate or low risks to water supply sources in the province of Ontario.

Terms of Reference is the work plan and budget, as approved by the Minister of Environment, for the preparation of Assessment Report and Source Protection, as defined by the "Clean Water Act". The Terms of Reference outlines the responsibilities assigned to the Source Protection Committee, Source Protection Authority, Conservation Authority and Member Municipalities in each Source Protection Area, in order to produce the Assessment Report and Source Protection Plan.

Tier 1, 2 and 3 Water Budgets is numerical analysis at the watershed (Tier 1), subwatershed (Tier 2) or local (Tier 3) level considering existing and anticipated amounts of water taken from the watershed, as well as quantitative flow between components such as recharge/discharge areas and rates.

Topography is the contour of the land surface; the configuration of the land surface including its relief and the position of its natural and man-made features.

Toxic is a substance which is poisonous to an organism.

Toxin is a poisonous compound that causes certain diseases or health problems.

Transport pathway means a condition of land resulting from human activity that increases the vulnerability of a raw water supply of a drinking water system set out in clause 15 (2) (e) of the Clean Water Act, 2006 (Source: Clean Water Act, 2006. O Reg. 246/10.);

Tributary is any stream that contributes water to another water body.

Turbidity is a measure of water cloudiness caused by suspended solids.

Type I, Type II and Type III Systems are water supply systems as described in the Clean Water Act, 2006. Type I systems are municipal residential drinking water systems that serve a major residential development (15(2)(e)(ii)). Type II systems are water supply systems that have been included in the Source Protection Planning process by Municipal or Band Council Resolution (15(2)(e)(iii)). Type III systems are water supply systems that are included in the Source Protection Process by the Minister of Environment (15(2)(e)(iv)).

Wellhead protection area means an area that is related to a wellhead and within which it is desirable to regulate or monitor drinking water threats (Source: Clean Water Act, 2006.);

Vulnerable Area means,(a) a significant groundwater recharge area,(b) a highly vulnerable aquifer,(c) a surface water intake protection zone, or (d) a wellhead protection area (Source: Clean Water Act, 2006.);

Waste Disposal Site is any land upon, into, in or through which, or building or structure in which waste is deposited, disposed of, handled, stored, transferred, treated or processed, and any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing of the waste (Environmental Protection Act, R.S.O. 1990).

Water Budget is a description and analysis of the overall movement of water within each watershed in the Source Protection Area, taking into consideration surface water and groundwater features, land cover (e.g. proportion of urban versus rural uses), human-made structures (e.g. dams, channel diversions, water crossings), and water takings.

Water Cycle (Hydrologic Cycle) is the continuous circulation of water from the atmosphere to the earth and back to the atmosphere including condensation, precipitation, runoff, groundwater, evaporation, and transpiration.

Water Quality is a term used to describe the chemical, physical and biological characteristics of water, usually in respect to its suitability for a particular purpose, such as drinking.

Watershed is the land area from which surface water and groundwater drains into a stream system; the area of land that generates total runoff (surface flow, interflow, and baseflow) for a particular stream system. Also referred to as drainage area, basin or catchment area for a watercourse.

Watershed Characterization is a characterization of the physical geography and human geography of the watershed and the characterization of the interactions between the physical geography and human geography.

Water Supply is any quantity of available water.

Water Table is the point where the unsaturated zone meets the zone of saturation is known as the water table. Water table levels fluctuate naturally throughout the year based on seasonal variations and are the reason why some wells go dry in the summer. In addition, the depth to the water table varies. For example, in (select an area in the watershed or community) the water table is "x" metres below the surface. The water table is the surface below which the soil is saturated with water.

Well is a vertical bore hole in which a pipe-like structure is inserted into the ground in order to discharge (pump) water from an aquifer.

Well Head Protection Area (WHPA) is the surface and subsurface area surrounding a water well or well field that supplies a municipal residential system or other designated system through which contaminants are reasonably likely to move so as to eventually reach the water well or wells. Wellhead Protection Area (WHPA) is the surface and subsurface area within which the Municipal well's groundwater sources are vulnerable to surface threats.

Wetlands are lands such as a swamp, marsh, bog or fen (not including land that is being used for agricultural purposes and no longer exhibits wetland characteristics) that, (a) is seasonally or permanently covered by shallow water or has the water table close to or at the surface, (b) has hydric soils and vegetation dominated by hydrophytic or water-tolerant plants, and (c) has been further identified, by the Ontario Ministry of Natural Resources (MNR) or by any other person, according to evaluation procedures established by the Ontario Ministry of Natural Resources , as amended from time to time.

Withdrawal is the removal or taking of water from surface water bodies or groundwater sources.

APPENDIX F

ACRONYMS

AR – Assessment Report

ARA – Aggregate Resources Act

COA – Canada-Ontario Agreement

CWA – Clean Water Act

DWSP – Drinking Water Surveillance Program

EBA – Event Based Area

EBR – Environmental Bill of Rights

EPA – Environmental Protection Act

ERCA – Essex Region Conservation Authority

ERSPA – Essex Region Source Protection Area

FWG – Fuels Working Group

GLWQA – Great Lakes Water Quality Agreement

HVA – Highly Vulnerable Aquifer

IPZ – Intake Protection Zone

MDEQ – Michigan Department of Environmental Quality

MMAH – Ministry of Municipal Affairs and Housing

MNR; MNRF – Ontario Ministry of Natural Resources; Ontario Ministry of Natural Resources and Forestry.*

* Provincial ministries may be realigned from time to time and references to MNR are intended to be generic references to the ministry having responsibilities for natural resources and as such may be a reference to any one of the past or future ministries having that responsibility.

MOE; MOECC; MOEE – Ontario Ministry of the Environment; Ontario Ministry of the Environment and Climate Change; Ontario Ministry of the Environment and Energy.*

* Provincial ministries may be realigned from time to time and references to MOE are intended to be generic references to the ministry having responsibilities for the environment and as such may be a reference to any one of the past or future ministries having that responsibility.

MTO – Ontario Ministry of Transportation*

* Provincial ministries may be realigned from time to time and references to MTO are intended to be generic references to the ministry having responsibilities for transportation and as such may be a reference to any one of the past or future ministries having that responsibility.

NMA – Nutrient Management Act

ODWQS – Ontario Drinking Water Quality Standard

ODWSP – Ontario Drinking Water Stewardship Program

OMAFRA; OMAF – Ontario Ministry of Agriculture, Food and Rural Affairs; Ontario Ministry of Agriculture and Food*

* Provincial ministries may be realigned from time to time and references to OMAFRA are intended to be generic references to the ministry having responsibilities for agriculture and as such may be a reference to any one of the past or future ministries having that responsibility.

OWRA – Ontario Water Resources Act

PA – Pesticides Act

RMI – Risk Management Inspector

RMO – Risk Management Official

SPA – Source Protection Authority

SPC – Source Protection Committee

SDWA - Safe Drinking Water Act

SGRA – Significant Groundwater Recharge Area

SPP/SP Plan – Source Protection Plan

ToR – Terms of Reference

TSSA – Technical Standards and Safety Act

WHPA – Wellhead Protection Area

WTP – Water Treatment Plant