

Glossary

Abandoned well: A well that has been permanently plugged and sealed.

Air gap: An air space (open space) between the hose or faucet and the level of liquid. This is one way to prevent backflow of liquids into a well or water supply.

ANSI (Area of Natural and Scientific Interest): Areas identified by the Ministry of Natural Resources as containing natural landscapes or features that have been identified as having life or earth science values related to protection, scientific study, education and natural heritage appreciation. Such designation helps to protect representative and special natural areas, plants and animals.

Anti-backflow device: Check valve, vacuum breaker or other mechanical device that prevents liquids from flowing backwards through a water supply pipe to a well or surface water source. Also called an anti-back siphoning device.

Approved containers: A portable container made of metal or other material that has been approved for use by the Underwriter's Laboratories of Canada (ULC), the Canadian Standards Association (CSA), or Transport Canada. An approved container must have a certification label such as jerricans-CTC-5L, BTC-5L, ICC-5L, DOT-5L, TC-5L.

Aquifer: An underground layer of rock and sand that stores water, and which lies above a layer of clay or other impermeable material that does not allow the water to flow to lower depths. Aquifers can be present at various depths depending on the location of the impermeable material. They are an important source for wells.

Backflow: The unwanted reverse flow of liquids in a piping system.

Baffles: Inlet and outlet devices in a septic tank, designed to reduce the transfer of solids to the leaching bed. They also prevent fats, oils, and grease from discharging to the leaching bed. They increase the amount of solids retained, prevent plugging of inlets and outlets, and prevent rapid flow of wastewater through the tank.

Beach: A band of variable width, typically of sandy material located adjacent to the lake. The sand is deposited and removed by the action of waves and currents.

Bilge: The lowest part inside a boat's hull or frame where water, fuel, oil and other hazardous chemicals can collect.

Biodegradable: The ability of a substance or material to break down into harmless substances.

Boat wake: The wave(s) that spreads behind a boat as it moves forward through the water.

Bog: A highly acidic type of wetland that is fed by precipitation and is characterized by peat-filled depressions, sphagnum moss mats, and low shrubs.

Bored well: Large diameter well constructed by using specialized earth boring equipment. Casing material is usually concrete or corrugated steel. These wells are typically 60 to 90 cm (24-36 in) in diameter.

Buffer: An area of natural vegetation that runs along the shoreline, stream or bluff. It extends from the high water mark to

the water's edge. Also referred to as a buffer strip, filter strip or riparian zone.

Building permit: A municipally-issued document that regulates construction and enforces Building Code compliance.

Burn barrels: Open burning of household waste in barrels that results in very high levels of toxic chemicals emitted in the smoke.

Certified Arborist: A professional trained in the planting, care and maintenance of individual trees and a current member of the International Society of Arboriculture.

Clear water infiltration: Entry into a septic system by water that does not need treatment, such as rainwater or sump pump.

Coastal Feature: A distinctive or characteristic element or part of the coastal landscape.

Coastal wetland: Areas that are permanently or temporarily submerged, or saturated for at least part of the year. Unlike upland wetlands, coastal wetlands don't transition into drier communities.

Coliform organisms: Harmful bacteria usually found in polluted water. If they are found in a water sample, it indicates that the water may not be safe for drinking or food preparation.

Compaction (soil): Compression of soil that decreases the spaces between soil particles. This hinders the movement of air and water into and through the soil. Consequently the soil holds less water and surface runoff, and erosion occurs. Soil compaction may be caused by ongoing pedestrian traffic, one time or ongoing vehicular traffic, construction equipment or the storage of materials.

Conifer/Coniferous: An evergreen tree or shrub that bears cones and has needle or scale-like leaves. Examples include pine, spruce, cedar, juniper, and fir.

Conservation easement: A legally binding agreement not to develop part of a property, but to leave it "natural" permanently or for some designated period of time. The property still belongs to the landowner, but restrictions are placed both on the current landowner and on subsequent landowners. The easement becomes part of the land deed so that all future property owners are bound by the terms of the easement.

Contaminant source: Anything which can cause pollution. Septic systems, stored pesticides, fuels, pet wastes, furnace oil, paints and cleaners are all possible contaminant sources. Contaminants may be colourless and/or odourless.

Contiguous: Connecting without a break.

Crown land: Publicly owned land, typically under the jurisdiction of the provincial and/or federal government and administered on behalf of the people.

Design capacity: The total daily sanitary sewage flow that the septic system is designed to handle. The Ontario Building Code (OBC) determines wastewater flows.

Dioxins: A group of chlorinated organic chemicals with similar chemical structures. Dioxins have no uses. They are formed unintentionally and released as by-products of human activities such as waste incineration, fuels combustion, chlorine bleaching of pulp and paper, or pesticide manufacturing. Natural processes such as forest fires and volcanoes also form them.

Drainage pattern: The network of water courses (streams and rivers) that drain a watershed(s) into a lake or water body.

Drilled well: Well not dug or driven. These wells are normally 10 to 20 cm (4 to 8 in) across.

Dripline: The outer extent of a tree's branches. The dripline is used as a rule-of-thumb, indicating the extent of a tree's root system, though most roots in fact extend beyond the dripline.

Dug well: Large-diameter well often constructed by power shovel, back-hoe or by hand.

E-coli: Harmful bacteria that comes from human and animal feces. If E-coli is found in drinking water, it is not safe for drinking, food preparation or bathing. Water with any levels of E-coli should not be used for any purpose.

Ecological corridor: An area of vegetation, typically linear that is similar to or the same as wildlife habitat areas, which allows wildlife to move between habitat areas. The size of the corridor determines its effectiveness as a safe means of travel.

Ecosystem: A complex, natural system created and maintained by the interaction and interdependency between all living organisms and their particular environment. Any action taken at any level in this interacting system has a potential domino effect on every other organism or element within the ecosystem.

Emissions standards: Emission standards limit the amount of pollution that can be released into the atmosphere from sources such as industry, power plants, vehicles and small equipment such as lawn mowers.

Energy audit: A thorough assessment of how much energy a building uses, as determined by an energy audit professional. It pin-points the areas where the building is losing energy, and includes suggestions on how to improve energy efficiency.

EnerGuide: A rating system developed by Natural Resources Canada that helps consumers compare the energy efficiency of appliances and buildings.

Energy Star: An internationally recognized symbol for energy efficiency. In Canada, the international Energy Star symbol is monitored and promoted by Natural Resources Canada's Office of Energy Efficiency.

Erosion: Movement and loss of soil caused by wind or water (rain, surface water runoff, or direct contact with a water body).

ESA (Environmentally Sensitive Area): Designation given to an area with valuable ecological features or habitat that need special protection due to its surrounding landscape, wildlife or historical value.

Evaporation: The conversion from a liquid to a gas. For example, the process of rainwater becoming water vapour (clouds).

Exotic (plant): An exotic species (also known as an introduced species) is an organism that is not indigenous to the place where it is found and that has been accidentally or deliberately transported to its location by human activity. Exotic species can often be damaging to the ecosystem to which they have been introduced.

Faucet aerator: A round case at the mouth of the faucet that contains a mesh-like disk, through which the water flows. Low-flow faucet aerators save water as well as any energy used to heat that water.

Fen: A peat land where the water table is at or close to the surface and water drainage is very slow. It is dominated by sedges, mosses, and some grasses. Trees are few and are typically coniferous and stunted. Fens are rare in southern Ontario.

Fill: Material that is brought from elsewhere and added to the existing landscape, such as soil, gravel, sand or loam.

Floodplain: The area adjacent to a water body or water course that is flooded during high water levels. Often this occurs following snowmelt or an extreme rainfall event.

Forest corridor: a linear remnant of a forest community. It is too narrow to be viable as habitat but can have the important role of connecting other larger isolated or separate areas of forests, creating the effect of contiguous forest. This allows animals and other species to travel through disturbed landscapes in relative safety.

Four-stroke engine: Boat engine constructed similarly to that of a car. Its emissions are cleaner, it is quieter, more durable and has better fuel economy than a two-stroke engine.

Furans: A family of chemicals that are formed during combustion. They are extremely toxic.

Garborator: A type of garbage disposal system installed in the kitchen drain, allowing food scraps into the municipal water or septic system.

Great Lakes – St. Lawrence Watershed: One of three primary watersheds in the province of Ontario. The other two primary watersheds are the Hudson's Bay and the Nelson River Watersheds.

Grey water: wastewater from household uses such as dishwashing or bathing.

Groundwater: Fresh water that has seeped through the soil and rock on the earth's surface and naturally collects forming a reservoir, the top of which is referred to as the water-table. This water supplies wells and springs and is the source of most people's drinking water.

Habitat: The environment that provides what an organism requires for survival and reproduction.

Hazard land: An area prone to flooding or erosion such as properties located within a floodplain, on beaches, or subject to high winds or wave activity. Includes features such as quickly-draining sandy soils or sinkholes.

Hazard tree: A tree or any component of a tree that has sufficient structural infirmity to be identified as having a high risk of falling and causing personal or property damage.

Hazardous wastes: Substances that can be dangerous to humans or animals and that must be disposed of in a manner that does not pollute groundwater.

Health Unit: A provincial health agency that administers health promotion and disease prevention programs through local offices. There are 36 Health Units in Ontario.

Herbaceous: Non-woody plant material or vegetation. An herbaceous plant goes dormant or dies back every year.

Impervious: Not allowing water or other substance to pass through.

Infiltration: Allowing water or other substances to pass through pores or spaces in a material(s).

Invasive species: A plant, animal or aquatic organism which typically spreads quickly and may be difficult to control or eradicate. These species are of concern because they can be detrimental to other species and threaten ecosystems.

Landfill: A site specially engineered for the permanent disposal of solid waste on land, constructed so that it will reduce hazard to public health and safety.

Leachate: Liquids that have percolated through soil and carry contaminants.

Leaching bed (trench type): Consists of trenches of buried distribution pipe. Each pipe is set in a bed of stone in a trench. Wastewater leaves the septic tank and flows through the distribution pipe into the soil through perforations in the pipe.

Leaching bed loading: Refers to the volume of wastewater in relation to the capacity of the leaching bed. Increased household water use can overload the system.

Legal Non-Conforming: Buildings or structures which existed before the current municipal zoning by-law was passed. When existing uses do not conform to the regulations in a new zoning by-law, their prior legal existence ensures their continuation as a lawful use. This means that some variations of use can legally exist without requiring an amendment to the zoning by-law.

Legislation: Law or set of laws made by a law-making body. Also referred to as Statutes or Acts.

Marsh: A type of wetland that is periodically or permanently flooded. It is characterized by non-woody emergent vegetation such as cat-tails, rushes, reeds, grasses, and sedges. Vegetation ranges from shrubs in drier areas to floating-leafed or submerged plants in open water.

Mulch: Loose, organic materials such as woodchips, bark, and straw, or a mixture thereof. When applied around a plant, mulch protects the plant, suppresses weeds and retains moisture. Re-apply as mulch breaks down over time.

Municipal by-laws: Local legislation enacted to consider natural heritage, land use, environmental protection and hazard policies.

Native vegetation: A cumulative term to describe any and all plants that are adapted to and occur naturally in a specific location. Also referred to as indigenous.

Natural process: A series of changes or actions that occur within an ecosystem to maintain its health or regulation.

Non-invasive: A plant with a low potential to spread quickly or become difficult to control or eradicate. Local native plants are typically not invasive.

Normal high water mark: The level or elevation along the shore that marks the boundary of the lake bed, which signifies the boundary of the government's ownership. Also known as the upper controlled water elevation.

Nuisance or Problem wildlife: Any wildlife that causes damage to your property or is a potential threat to health and safety.

Official Plan: A municipal policy document that outlines basic principles to guide future development within an area. These documents are available at the municipal office or community library.

Ontario Drinking Water Standards: The minimum water quality standards set by the Ontario Ministry of the Environment to protect public health. It is advisable that drinking water meets these standards.

Passive solar heating/ lighting: The natural heating/ lighting of buildings or rooms by capture of direct sunlight. Buildings can be designed with large windows in south-facing walls and small windows in north-facing walls, to reduce the need for electricity and fossil fuel energy as a source of heat and light.

Pesticide (cosmetic): A general term used to describe any chemical or biological agent used in a non-farming context to kill plant or animal pests. Herbicides, insecticides, fungicides, bactericides, etc., are all types of pesticides.

Portable fuel container: A portable container made of metal or other material that has been approved for use by the Underwriter's Laboratories of Canada (ULC), the Canadian Standards Association(CSA), or Transport Canada to transport and store fuel.

Pressure or Dosed distribution: A septic system that utilizes a pump to load shallow, rapidly-changing, distribution lines in doses.

Prevailing wind: Wind that blows most frequently.

Public Lands Act: Legislation protects the integrity of public lands and waters for all citizens of Ontario. It requires that property owners obtain work permits for activities on shore lands adjacent to navigable waters.

Regulation: A binding rule of law. Regulations are not made by Parliament but rather by persons or bodies that have received authority from Parliament to do so.

Right-of-way (includes Easements): A legal agreement that confers on an individual, company or municipality the right to partially restrict an owner's use of those portions of land use a landowner's property in some way. It also therefore affected by the right of way/easement. Right of ways are typically registered on the certificate of title to the property and are automatically transferred from one owner to another as the land is sold. They remain on the title until the holder of the easement discharges their rights from the certificate of title.

Riparian Area: The transition zone from aquatic to a terrestrial habitat that exists near and along the bank of a natural watercourse or water body (e.g., river, stream, or lake). It is rich in density, diversity, and productivity of plant and animal species.

Runoff: Snow melt or rain that flows overland rather than infiltrates through the soil/rock

Sand point wells/ driven wells: Wells constructed by driving assembled lengths of pipe into the ground. These wells are usually smaller in diameter (5 centimetres or less) and less than 15 metres (50 feet) deep. They can be installed in loose soils, such as sand.

Seiche: The combination of wind set-up and sudden changes in atmospheric pressure creates this short-term, oscillating standing wave. The height of the surface water decreases with each oscillation until the surface level stabilizes. Impact on coastal features such as wetlands is minimal.

Sensitive natural feature: An environmental element of the landscape that is readily affected by or responsive to external influences or change.

Septic system: Consists of a tank to settle the solids out of the wastewater, followed by a leaching bed in which the wastewater is treated and distributed into the soil.

Septic tank: A watertight vault in which sanitary sewage is collected to remove scum, grease, and solids from the liquid without the addition of air. This is where solids settle and anaerobic digestion of the sanitary sewage takes place.

Silt fence: A temporary barrier stretched across an area to trap sediment and prevent runoff water from moving it off-site during construction.

Sinker: Small metal weight, traditionally made of lead, that is attached to fishing lines and is part of the lure. Lead sinkers are not-permissible in some water bodies and alternatives such as brass, tungsten, steel, and bismuth are used instead.

Soil compaction: Reduced pore space in the soil due to human or equipment traffic. Compaction makes it difficult for water to infiltrate and for roots to penetrate the soil.

Soil depth: The depth of soil influences the potential for groundwater contamination. Deeper soils are typically more effective at filtering out contaminants before they can reach groundwater.

Soil grade: The elevation of the ground surface. Grade may also refer to the steepness or slope of the surface.

Soil type: The material(s) that a soil is made of affect its ability to percolate water and other substances (including pollutants). Sand and gravel soils provide the fastest infiltration and therefore increase the potential for groundwater contamination. Conversely, clay soils are slow to allow water to infiltrate and may cause water to runoff the surface rather than infiltrate. This can encourage erosion and surface water contamination.

Source Water Protection Plan: A plan devised by the Ontario government to ensure that every watershed in the province has an action plan to protect its water resources.

Spawning ground: The place where female fish lay their eggs and males fertilize them.

Species-at-Risk: A general term to describe the state of a species population. This term is further organized into five categories of risk: Special Concern, Threatened, Endangered, Extirpated, and Extinct. The usual causes for a species to be at risk include habitat destruction, genetic and reproductive isolation, the suppression of natural occurrences such as fire, environmental contamination, over-harvesting, climate change, disease, and the presence of invasive species.

Steward: An individual with a personal commitment to care for the land and the surrounding landscape in order that it may be preserved or enhanced for future generations.

Storm sewer: A system of underground pipes (separate from sanitary sewers) that collects and carries only water runoff from building and land surfaces to a discharge point (such as infiltration basin, receiving stream, treatment plant).

Surface water: Any open or exposed body or flow of water including springs, streams, rivers, ponds, lakes, etc.

Survey: A map document made by a licensed surveyor that illustrates and describes the measurements and layout of a parcel of land including its size, boundaries, location, elevations, the dimensions and position of any structures and indicates any easements, rights of ways, etc.

Swamp: This is the most diverse type of wetland and it is often flooded in the spring and drains throughout the dry season. It is dominated by shrubs and trees.

Unused well: A water well that is not currently used or is used occasionally. All wells regardless of use must be properly maintained or they must be properly abandoned (plugged and sealed).

Wastewater: Water of domestic origin, including water-borne waste from kitchen, laundry, and bathrooms.

Wastewater treatment plant: Municipal public facilities that treat water that is collected from home, businesses and industry.

Watercourse: An open flow of water including a stream, spring, channel or river

Water table: The boundary between the saturated soil (where all the soil pore spaces are filled with water) and the unsaturated soil (where soil pore spaces are filled with air, roots, soil organisms and some water).

Well cap: A commercially manufactured device used to cover the top of a well casing pipe. This cap prevents surface water, vermin, or solid material from entering the well.

Well capture zone: The area of land that replenishes water to a pumped well or a group of wells. Determining the size of a capture zone is complex and expensive. Knowing its area may not be necessary if the entire property is treated as the capture zone for the well(s) and potential contaminant sources are managed properly.

Well casing: Steel, fibreglass, plastic pipe or concrete tile, installed when a well is constructed, in order to strengthen the well bore hole so it does not collapse. It also prevents contaminants from entering the well and allows placement of a pump or pumping equipment.

Well pit: Lined, shallow excavation around the top of the well casing of a drilled well.

Well vent: An opening in the well cap or well seal that makes the air pressure inside the well the same as outside. It also lets gases escape. The vent should always have a screen to prevent dirt, vermin, or other materials from getting into the well. A screened pipe may extend from the vent up above ground level to prevent flooding of the well.

Wetlands: Areas that are permanently or temporarily submerged, or saturated for at least part of the year.

Wind set-up: A weather phenomenon whereby strong, persistent winds blow over the lake, they can push the water level up at the downwind shore of the lake. Consequently, this causes the water-level to decrease by the same amount at the opposite, upwind shore. The height of the waves increases with the wind; waves as high as 2.5 metres (8 feet) have been recorded on the Great Lakes. This phenomenon is also known as storm surge

Zoning: The division of a municipality by legislative regulations into areas (zones) that control the use of the land by specifying the uses allowable for the real property in these areas.

