

Worksheet #2 – Getting to Know Your Property

Why should you be concerned?

- In rural areas, you are your own WATER QUALITY STEWARD!
- As a rural landowner, you are the steward of a property that is a small piece of the larger rural landscape. What you do on your property affects not only your well-being but that of your neighbours and the other creatures that share the landscape and the ecosystems that support it all.
- Upstream practices WILL affect your property, and your actions will affect downstream users.
- A property's soil and landform can influence water quality by influencing surface water and groundwater contamination, erosion of soil by water and wind, and soil compaction.
- Provincial regulations and municipal bylaws may restrict development of any kind and affect how you can use your property.
- Knowing your property will ensure you make informed decisions. Talk to neighbours and other local people to be aware of things like informal traditional access on your property for hunting, fishing, or hiking, etc.

What can you do?

- 1.** You or your legal representative can contact the local Ministry of Natural Resources or Conservation Authority office to learn of any alteration restrictions (especially watercourses, groundwater sources, and shorelines) and how these may affect any future property projects.
- 2.** Talk with long-time residents to learn more about how the property may be affected by natural processes and potential hazards.
- 3.** Make a map of the property. Identify physical characteristics such as soil type, flood zones, and depth to water table, and learn how these can affect the vulnerability of your property and water quality. Accept these natural conditions and modify your activities accordingly to protect yourself and your property.
- 4.** Determine if your property contains any special landscape designations, such as an Environmentally Sensitive Area (ESA), Area of Natural or Scientific Interest (ANSI), or Provincially Significant Wetland. Learn how this affects your rights and responsibilities as a landowner.
- 5.** Determine if current services (e.g. water and sewage) are adequate for your planned/intended use of the property.
- 6.** Look beyond property boundaries. This is important for you to be able to analyze the potential for surface water contamination, wind and water erosion, and groundwater contamination.

Making a Map of Your Homestead

Why make a map?

The homestead is the area that includes your house and other associated buildings and the immediate surrounding area. It is the “lived on” part of your property, your “yard”.

A map can help you identify the areas or aspects of your property that pose the greatest risk to the natural environment and determine what requires immediate attention. It is an important tool for the future management of your property and can help you protect yourself against the risks that come with living in hazard areas.

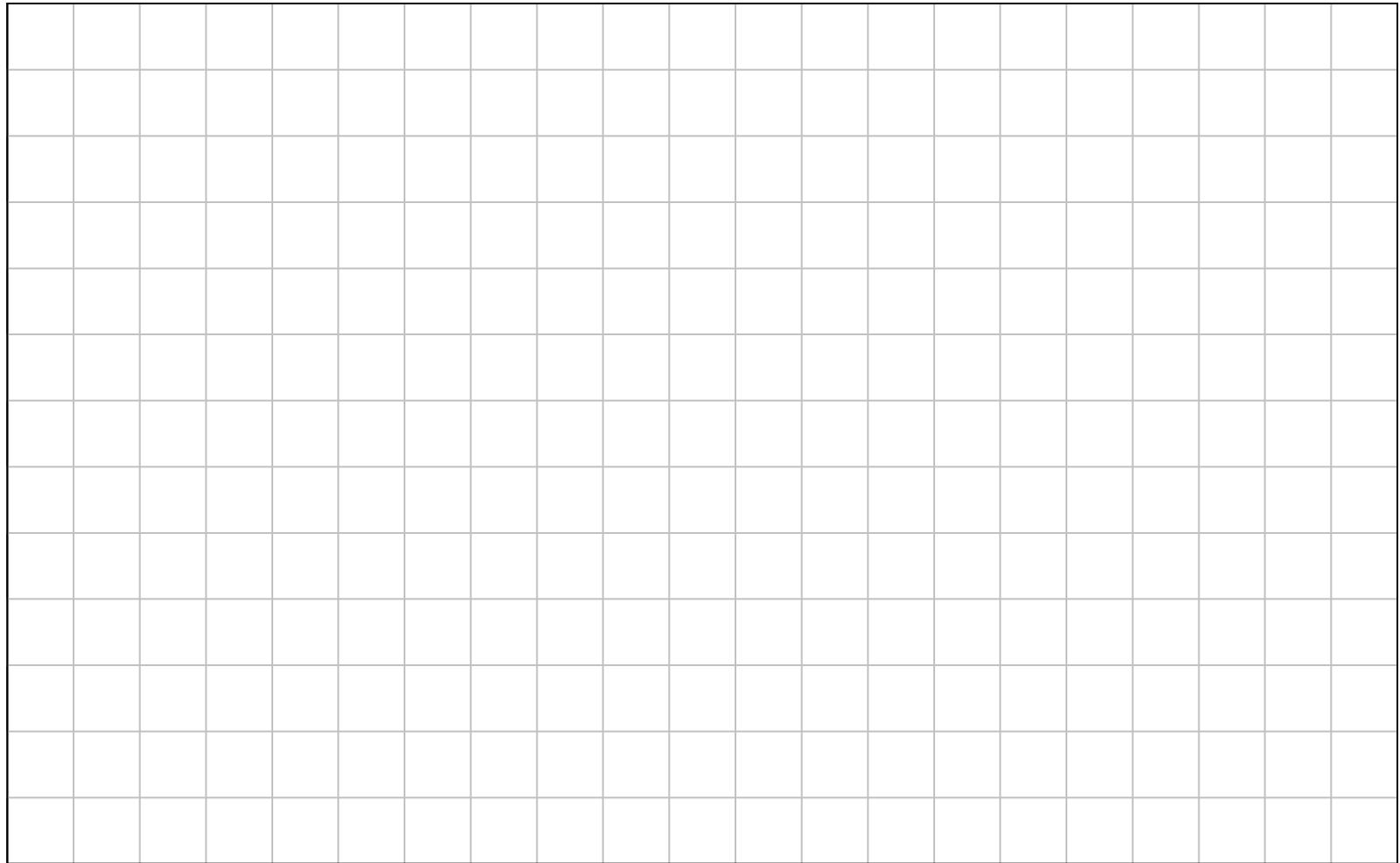
tip

Exposed or buried oil tanks, septic systems, dumps, gas stations, and other potential contaminants on adjacent properties can contaminate your groundwater. Be sure that you know where any of these are located on your property. Make sure to investigate the area around your property and include this information on your map.

What you should include:

- Any buildings or structures
- Roads, driveways, parking, and/or other impervious surfaces
- Sewage system leaching bed, outhouses
- Foundation drains and outlets
- Drainage tile outlet
- All drinking wells (including dry or unused wells)
- Eaves trough drains and direction of drainage from them
- Sump pump drains
- Swimming pool backwash drain
- Area used for swimming pool or hot tub drainage water
- Lawn area(s)
- Nearest open/surface water (stream, pond, lake, etc.)
- Drainage ditches
- Dog house/dog run/kennel/pen/corral
- Pesticide/herbicide storage
- Hazardous materials storage (paints, solvents, pesticides, etc.)
- Any underground or aboveground storage tanks of fuel oil, gasoline, or other petroleum product
- Trees, flower beds, vegetable garden(s), or any cultivated area(s)
- Burn barrels
- Area for snow piles and snowmelt
- Orientation of all living spaces (sunlight/shadows)
- Environmentally sensitive features (rare trees, wetlands, etc.)
- Any buried cables or underground infrastructure

Making a Map of Your Homestead



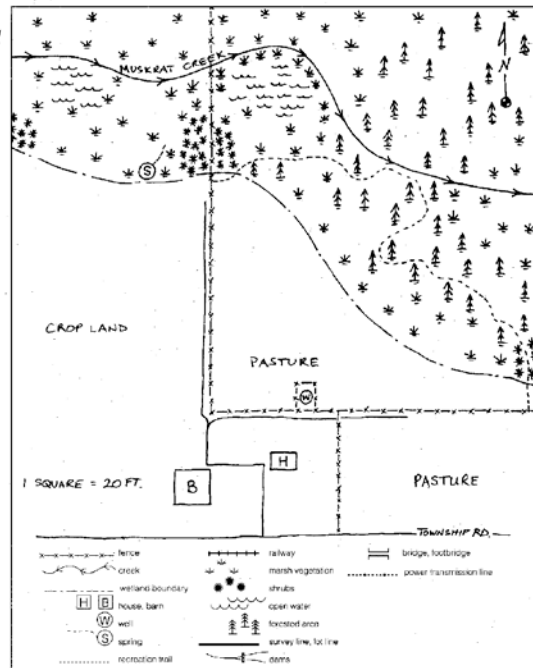
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Making a Map of Your Property

Why make a map?

For this map, draw the features of your whole property. Aerial photos and topographic maps will be helpful for this (see the **Resources List** at the end of this section).

This map will assist with your planning and establish the relationship between the various features of your property.



What you should include:

- Property boundaries
- North arrow
- Any buildings or structures
- Roads, trails
- Bridges
- Fields, both working and retired
- Orchards
- All wells (including dry or decommissioned wells)
- Surface water features (stream, pond, lake, etc.)
- Springs
- Dams, weirs
- Drainage ditches, drainage tile outlets
- Fences and treed fencerows
- Forested areas, plantation and natural
- Wetlands
- Utility lines
- Communication towers
- Easements and right of ways
- Known special or sensitive features (e.g. raptor nests, stone piles)

Making a Map of Your Property

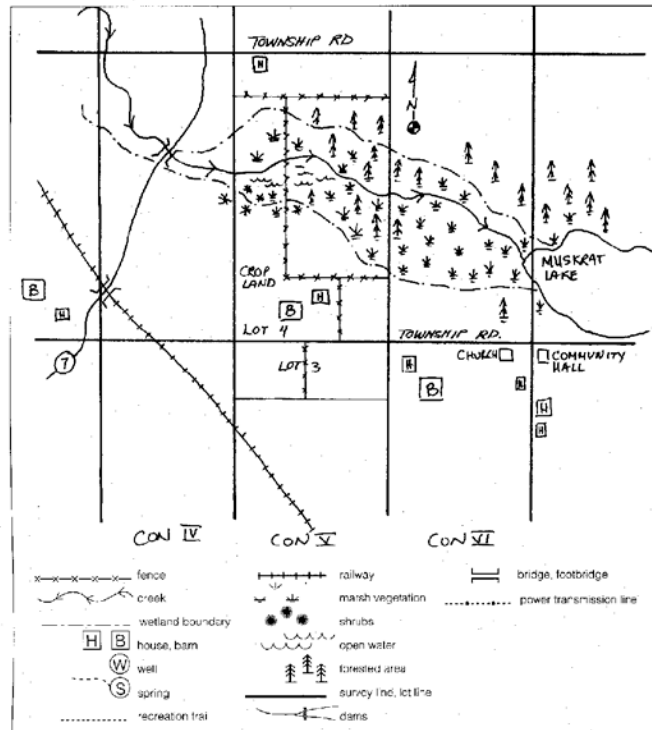


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Making a Map of Your Local Landscape

Why make a map?

Now that you have mapped the features of your homestead and property, make a map of your immediate, local landscape. This will help you to see how your property and its features fit into the larger context. As a guide, cover an area of about one or two kilometers around your property. Once again, aerial photos and topographic maps will be helpful for this (see the **Resource List** at the end of this section).



What you should include:

- Property boundaries (yours at least, neighbours' if known)
- North arrow
- Any buildings or structures
- Roads, trails
- Railways
- Road allowances
- Bridges
- Fields, both working and retired
- Orchards
- All wells (including dry or decommissioned wells)
- Surface water features (stream, pond, lake, etc.)
- Springs
- Dams, weirs
- Drainage ditches
- Fences and treed fencerows
- Forested areas, plantation and natural
- Wetlands
- Utility lines
- Communication towers
- Known special or sensitive features (e.g. raptor nests, stone piles)

Making a Map of Your Local Landscape



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Getting to Know Your Property – Understanding Risk

Use this page to help assess your property’s vulnerability to water contamination.



Soil type	Clay-silt loam	Silt loam	Silt-sand loam	Either gravel, sand or clay.
Soil depth	Greater than 4 metres (13 feet)		1-4 metres (3-13 feet)	Less than 1 metre (3 feet)
Bedrock	Non-permeable and solid. No direct access from the surface.	Semi-permeable limestone or sandstone. No direct access from the surface.	Any kind. Direct access from the surface.	Fractured bedrock - any kind.
Depth to water table	Greater than 14 metres (46 feet).	5 - 14 metres (16-46 feet).	1-5 metres (3-16 feet).	Less than 1 metre (3 feet).

tip

To find soil depth, bedrock, or depth of water table, check your well-drilling records, ask a neighbour with a well, call a local well-drilling company, or the local Conservation Authority.

tip

The risk of pollution is greater in areas where the groundwater table is near the surface or in highly porous soils (e.g. sand, gravel)

Getting to Know Your Property – Hazards and Sensitive Landscapes

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
1 Knowing the Hazards on Your Property	Understand potential hazards affecting your property, such as flooding and erosion, AND have your own plan to deal with any eventualities.	Understand potential hazards affecting your property.	Limited understanding of potential hazards affecting your property.	No understanding of potential hazards affecting your property.	<input type="checkbox"/>

LIVING WITH SENSITIVE LANDSCAPES

Some landscapes are more vulnerable to hazardous environmental damages than others. Landscape features such as those listed below can enhance your property and your quality of life in many ways. However, with the benefit comes risk. Extra care and attention around these landscapes is required to avoid harm to you, to your property and to the environment. Some sensitive landscapes include:

- **Ravines, valleys, steep slopes (escarpment areas)** – altering these areas could create slope instability resulting in erosion and/or slope failure.
- **Wetlands, including swamps, marshes, bogs, fens, and ponds** – altering these areas could decrease their natural flood buffering properties and increase the risk of flooding, decrease their natural water filtering properties and increase the risk of water quality and quantity issues downstream.
- **Rivers, creeks, flood plains, or valley lands** – altering these areas could re-direct surface water flow to undesirable areas.
- **Lake shorelines** – altering these areas could result in erosion issues and/or water quality issues from un-buffered run-off.

Activities such as building of decks, sheds, installation of pools, dredging, or even adding fill may require approval from your local CA before any work or any alterations are made in or around these features.

These landscapes are regulated by your local Conservation Authority (CA). The CA has jurisdiction over these landscapes in order to ensure the safety of the public as well as the protection of the natural environment.

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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LIVING NEAR WATERWAYS

2	Awareness of Dynamic Shoreline Processes	Understand dynamic nature of waterways and shorelines and plan accordingly, with long-term outlook and flexibility for change.	Understand dynamic nature of waterways and shorelines. No long-term planning for natural change.	Limited understanding of dynamic nature of shorelines. Property management attempts to control any naturally-occurring change.	No understanding of dynamic nature of shorelines and waterways. Attempt to control any naturally-occurring change.	<input type="checkbox"/>
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LEGAL CONSIDERATIONS

3	Environmentally Sensitive Areas (ESAs), Areas of Natural and Scientific Interest (ANSIs), Species at Risk (SAR), and Provincially Significant Wetlands	Know of any significant natural features on the property, such as an ESA, ANSI, SAR, or Wetland, AND understand the purpose of these designations and how they impact use of the land.	Know of any significant natural features on property, such as an ESA, ANSI, SAR, or Wetland, AND consult with a representative of the MNR before any changes are made in these areas.	tip To find out how your property is zoned, contact your municipal office. The Ministry of Natural Resources (MNR) can provide information about the location of ANSIs and Wetlands. Your local Conservation Authority (CA) will have maps of flood zones and further wetland information. ESAs can be identified by your CA or your municipality.	No knowledge of significant natural features within property boundaries, OR no inquiry about zoning on the property before changes are made.*	<input type="checkbox"/>
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4	Flood Plains	Know if the property contains any flood plains in its zoning, AND no construction or changes are made below the high water mark unless approved by your Conservation Authority.	tip Be careful about where you think your property ends. Government may retain ownership of land to the high water mark. Erection of fences or other obstructions below this point is illegal.	No knowledge of possible flood plain zoning on the property, OR changes are made below the high water mark without approval from your Conservation Authority.*	<input type="checkbox"/>
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* These conditions may violate provincial legislation or municipal by-laws.

Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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SPECIAL ZONING – SENSITIVE LANDSCAPES *continued*

5	Development and Natural Hazards	No development or disturbance within 30 m (100 feet) of dunes, beaches, watercourses, or hazard lands.	Minimal disturbance or structures near dunes, beaches, watercourses, or hazard lands.		Development or disturbance within 30 m (100 feet) of dunes, beaches, watercourses, or hazard lands.	<input type="checkbox"/>
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6	Other Special Zoning Considerations	Exact knowledge of actual property limits, setbacks, easements, and right-of-ways. AND Conservation Authority regulations are observed.	General idea of actual property limits, setbacks, easements, and right-of-ways.	tip Typically, septic systems are not included in home inspections. Make separate arrangements for this.	No knowledge of actual property limits, setbacks, easements, and right-of-ways.	<input type="checkbox"/>
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LEGAL CONSIDERATIONS

7	Zoning	Municipal zoning bylaws and Official Plan checked to know how property is zoned, AND property land use is in accordance with this zoning.	Municipal zoning bylaws and Official Plan checked to know how property is zoned. tip Existing shoreline protection structures are a sure indication that erosion and flooding are a concern.	No regard to whether intended use of property is in accordance with Official Plan or Zoning bylaws.	No regard to whether intended use of property is in accordance with Official Plan or Zoning bylaws, AND property land use is not in accordance.	<input type="checkbox"/>
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Topic	Best 4	Good 3	Fair 2	Poor 1	Your Rating
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LEGAL CONSIDERATIONS *continued*

8	Seller Property Information Statement	Vendor provides a notarized statement of the condition of the property.	Vendor provides a Seller Property Information Statement.	Vendor refuses to provide a Seller Property Information Statement.	<input type="checkbox"/>
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9	Buried Fuel Tanks	Ensure that there are no fuel tanks buried or otherwise on the property.		No knowledge of fuel tanks buried or otherwise on the property.	<input type="checkbox"/>
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tip

If a buried, abandoned fuel tank is found, the property owner is responsible for any costs associated with removal or contamination. This is typically not covered under home insurance.

10	Home Insurance	Know whether potential damage to property can be covered by insurance.		No knowledge of what potential damages may be covered.	<input type="checkbox"/>
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Resources List

Getting to Know Your Property

For more information...

Aerial Photos and Topographic Maps

Contact your local Conservation Authority or the Ministry of Natural Resources

Conservation Authorities

Publications:

- Flood and Erosion Hazard Maps. Lines on maps show 1:100 year flood and erosion lines.

Videos:

- Flooding & Erosion Part 1: The Hazards
- Flooding & Erosion Part 2: Avoiding the Hazards

Ontario Ministry of Agriculture, Food and Rural Affairs

omafra.gov.on.ca/

- Soil Erosion Manual, 1986 OMAFRA
- Soil survey reports and maps may be ordered for \$15
- *Best Management Practices: Soil Management* (order no. BMP06E)
- *Best Management Practices: Buffer Strips* (order no. BMP15E)

Ontario Ministry of Environment

ene.gov.on.ca

Publications:

Environmental Living Vol. 3: Protecting the Environment when Building or Buying your Dream Cottage. (ISBN 0-7778-1071-9)

Ontario Ministry of Natural Resources

mnr.gov.on.ca

Ontario Forestry Association

oforest.on.ca

Nature Conservancy of Canada

Conservation land securement options

natureconservancy.ca

tip

To find out how your property is zoned, contact your municipal office. The Ministry of Natural Resources (MNR) can provide information about the location of ANSIs and Wetlands. Your local Conservation Authority (CA) will have maps of flood zones and further wetland information. ESAs can be identified by your CA or your municipality.