

# Caring for Your Land and Water

## CONSTRUCTION NEAR NATURAL AREAS

FACTSHEET 17



Construction of homes, other buildings, swimming pools, and driveways can easily damage natural areas. Simple measures can be taken to minimize the impact that such construction has on your land.

### How can construction impact nearby trees?

Construction of driveways, patios, or buildings can have a serious impact on nearby trees. In general, *it is recommended that no fill be placed over a tree's roots and no excavation should take place within the drip line of the tree canopy.* In the city there are bylaws that construction companies must adhere in an effort to protect trees.

Tree roots in the soil mirror the area occupied by the tree canopy and must remain undisturbed for the tree to be healthy. Cutting out a portion of the trees roots, or placing fill over them may severely damage or kill the tree.

### What can you do for hydro lines that cross your wetland?

In most cases construction of hydro lines require a permit. Hydro lines that cross wetlands can also disrupt drainage. If a berm is necessary in order to install a buried hydro line, installing culverts to allow continued surface water flow through the wetland should minimize impact on surface hydrology. This will also avoid causing ponding upstream.

### Action Steps



Avoid disturbing or covering soil under trees



Leave a buffer area of 10-50 feet between the new construction and the environmental feature of concern



Empty your pool gradually, letting the chlorine evaporate for a few weeks



Ask expert advice before starting any new construction project



Avoid using a lot of artificial lighting in areas you want to keep natural; this will aid in nighttime viewing of nocturnal wildlife patterns



Avoid construction activity during fish spawning or bird nesting seasons



The creation of a berm may increase the possible establishment of invasive species brought in as seed with the fill. Monitor the berm for invasive plants the first few years.

### **Can you build near your wetland?**

Building sites that encroach on wetland areas are also a problem. It is best to leave 15m-30m buffer between the construction and your wetland. Excavation may result in disruption to wetland hydrology, and foundations may later suffer from shifting, cracking, or heaving from frost. Wood used in construction in wet areas suffers from rot, mildew, and mould. In severe cases, construction can cause upstream water ponding. Drier soils or bedrock always make for a better foundation.

### **How can you keep a swimming pool without disrupting the surrounding environment?**

The flushing of swimming pools, as well as their construction, can disrupt wetland or stream hydrology. Chlorine has detrimental effects on plants and animals and in high concentrations can be lethal. This may pose a threat to nearby wetlands and downstream fisheries. Flushing a pool so that the water filters onto dry ground will minimize the input because the soil sediments will remove the chlorine.

If you do build a pool, empty the pool gradually, after allowing the chlorine to evaporate for a few weeks and drain the water to a location where it will soak into dry ground rather than run off into nearby waterbodies and create an erosion problem.

### **Keeping forest habitats natural:**

Rural homeowners often feel it is an improvement to 'tidy up' the undergrowth layer in woodlands. In fact, the undergrowth layer is the foundation of the forest foodchain. This layer is the key providing the regeneration of future forests and habitat for invertebrates. The forest understory including fallen branches and logs, and the leaf litter on the forest floor itself plays a vital role in forest dynamics. It provides seeds for future trees, shelter, food, and habitat for many forms of wildlife and increases the biodiversity and genetic diversity of the forest. Avoid clearing logs, branches and undergrowth except on trails; leave forest habitats natural.

#### **Who can you contact for assistance?**



Conservation Authority Biologist



Conservation Authority Forester



Municipal Bylaw Officer

#### **Other relevant factsheets in this series include:**



Buffer Strips and Swales

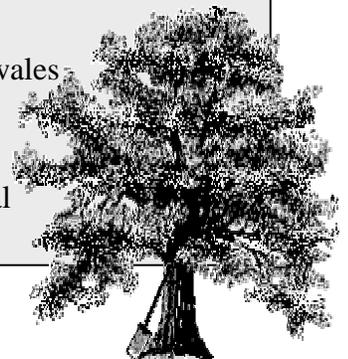


Septic Care



Wetlands and Vernal Pools

Scientific references available upon request



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