Ecologic Function

Coarse Scale Habitat – Remoteness
Target –Ecologic Function

The purpose of setting a target related to this value is to ensure that the preferred scenario includes areas that have been minimally impacted by development.

Remoteness can be difficult to define and quantify. It is possible to use roads as one measure of remoteness or distance from urban areas, etc. In a landscape such as the Niagara watershed no natural area including the largest ones are truly remote and not impacted in some way by human activities.

Datasets
The following datasets were considered as potential sources with which to facilitate potential target development for this ecological objective:

1. NPCA NAI ELC Community Series Mapping
2. Ontario Road Network (Land Information Ontario, MNR)

Patches of natural cover were derived by dissolving the ELC communities into individual mapping units. A derivative patch is a polygon of natural cover that does not share a border with another patch, there needs to be a separation by non natural cover in between.

A continuous surface of distances to the nearest road features in the Ontario Road Network was created. This surface was used to populate the natural cover patches with several statistics derived from overlay from the distance surface.

Average natural cover patch distance from roads in the watershed is 149m.

Discussion
The discussion related to this target focused on the fact that the literature suggests that natural cover that is more than 2 kilometers from any road or settlement is most likely to be remote and not impacted by human activities. The average distance of natural cover from roads or settlements in the watershed is 149 meters.

Given the fragmented nature of the habitat in Niagara, it was decided that the group could not set a meaningful target on this value.

Data Gap
None noted.

Decision
Date: May 5, 2011

This value was not target worthy.
There is a serious lack of remoteness in the watershed.

Representation in the Learning Scenarios
Due to the fact that no target was set for this value, there is nothing to report in relation to their performance in the scenarios.

Representation in the Final Scenarios
Due to the fact that no target was set for this value, there is nothing to report in relation to their performance in the scenarios.

Recommendations

Future analyses could consider quantifying and determining an amount of natural cover to include in the Natural Heritage System that is of higher value due to lower levels of anthropogenic influence. Remoteness by definition may not be a factor in Niagara, however it is a well understood concept that natural features that are less accessible or with less intense surrounding uses and activities generally provide better quality habitat and are more likely to be used by sensitive species.