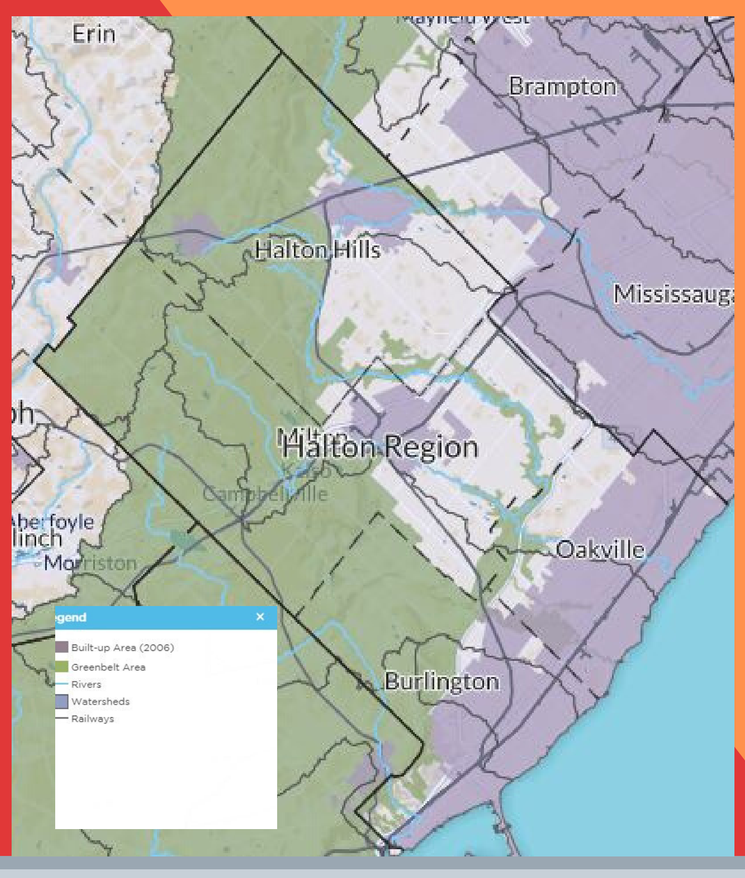
RYERSON UNIVERSITY

Land Suitable for Development within Halton Region

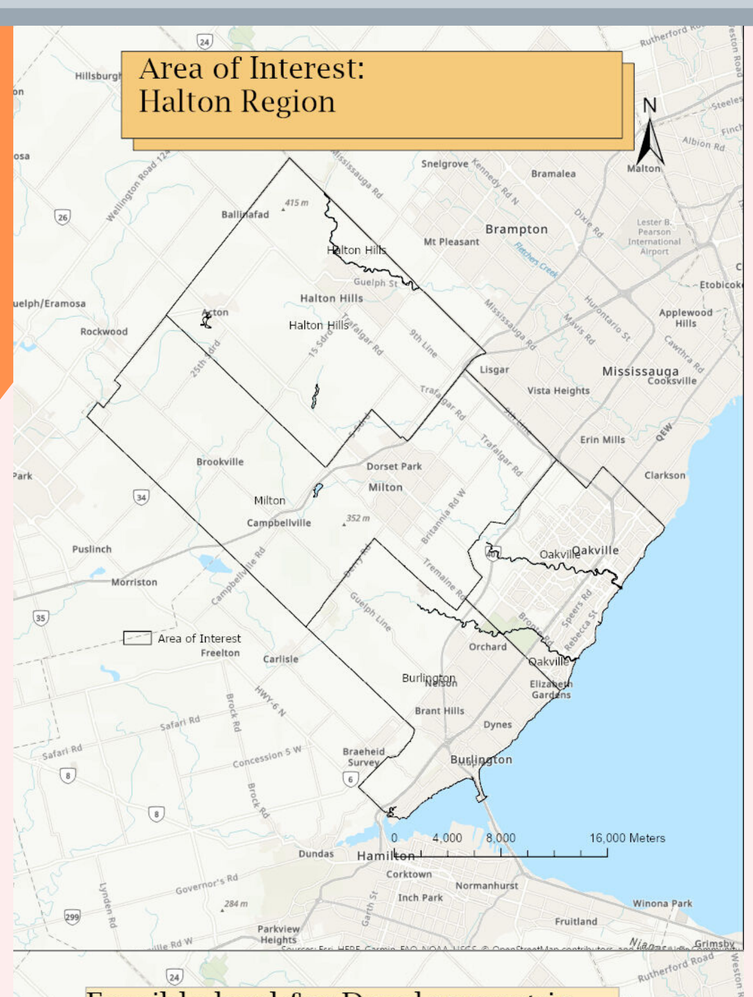
SET GOAL

The regional municipality of Halton is located within the south eastern regions of Ontario, Canada and located within the Golden horseshoe. The golden horseshoe being the most industrialized and densely populated area within Canada. As densely populated as the region is there are still large pieces of land that are undeveloped and open for development. The Region of Halton is made up of the city of Burlington and the towns of Milton, Halton Hills and Oakville. Although Oakville and Burlington are largely developed, Milton and Halton Hills are new and could be great grounds for development. The objective of this assignment is to locate areas within these regions that have land open for development.



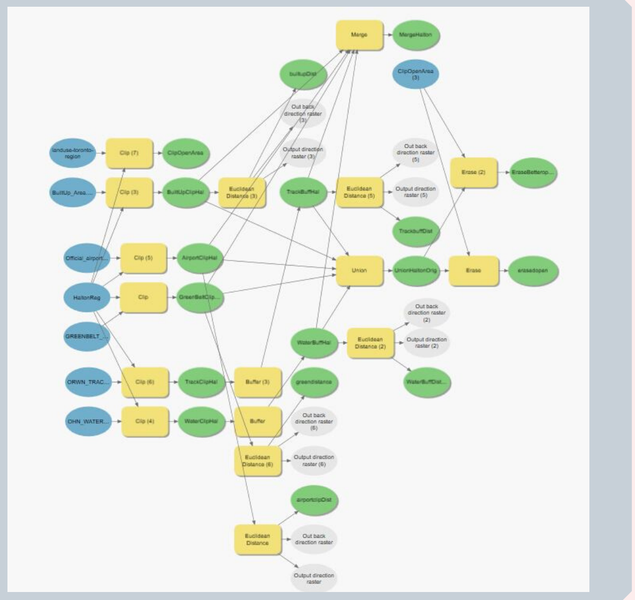
AREA OF INTEREST

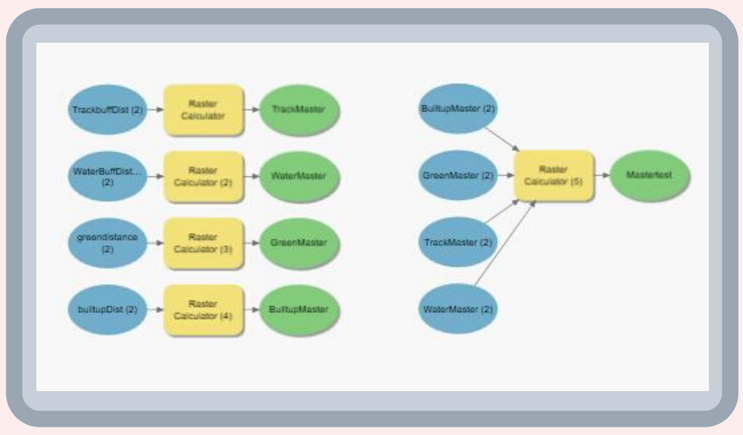
The Area of Interest chosen is the region of Halton. Neptis web was an important tool in finding an area with land for development while avoiding constraints such as streams and rivers, train tracks, built up and developed lands and the greenbelt. After extensive searching I landed on the region of Halton as it is a relatively new region and Milton and Halton Hills still have lots of undeveloped land.

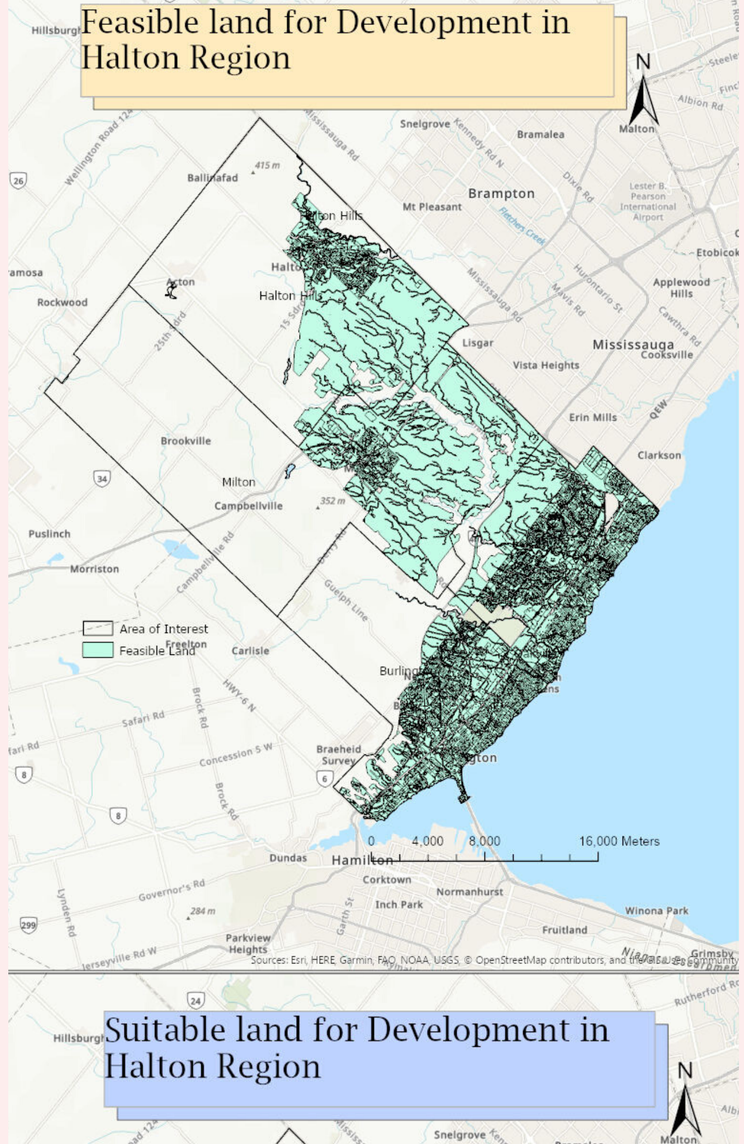


FEASIBLE AREA

The constraints used during this assignment are as follows: Waterways, Railroad tracks, Built up area, Airports, and Greenbelt. These would be clipped to the regions area to confine it only to the region. The water files would be buffered to 30 meters to avoid contamination of any water sources and the railroad tracks would be buffed for 30 meters away to avoid any collisions or accidents followed by this I would unionize all my constraints into one layer and then erased the unionized layer out of the open area to show the feasible area within the region.

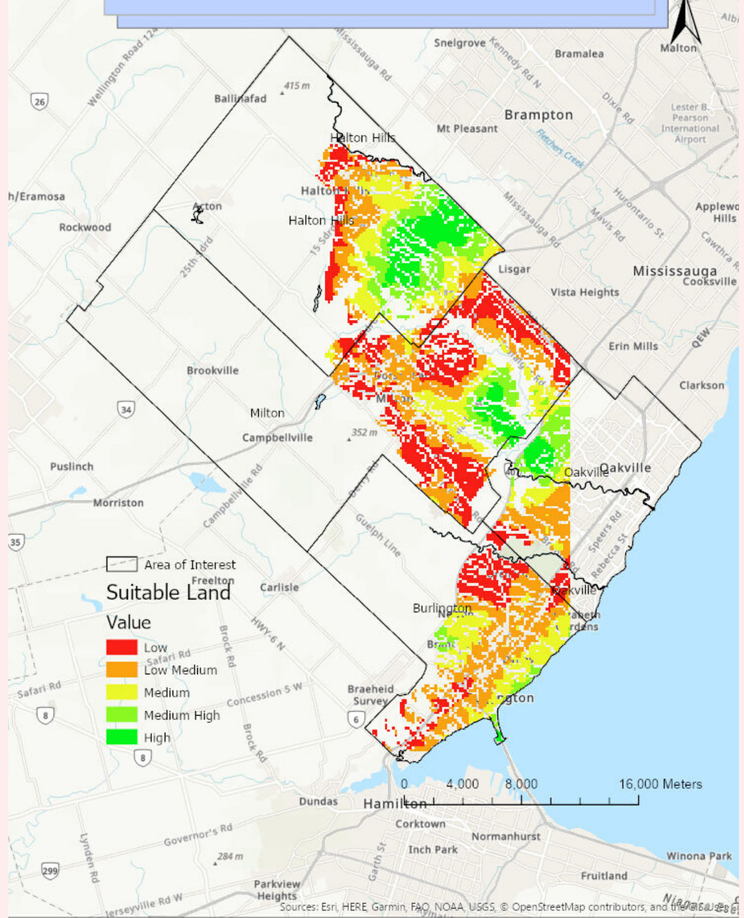






SUITABLE LAND

Following the previous section, using the euclidean distance I would create surface distances for the region of Halton. Following this I would use the raster calculator to rescale the clipped distances and then combine them using the weighted sum to create a sustainability map layer. Through these methods I would be able to create a new map layer to show the sustainable land in the Regional Municipality of Halton.



BRYAN IMAFIDON
CLAUS RINNER
GEO 641

Sources
DMTI 2019
Neptis Geoportal
Scholars Geoportal
GTA municipalities 2019

References
[1]Donnan, Zack A. "Economic Implications and Consequences of Population Growth, Land Use Trends, and Urban Sprawl in Southern Ontario." 2008