

During spring and summer of 2019, graduate student Olatunbosun Ayetan (Bosun) undertook a research project in the North Lynden WID to investigate groundwater recharge potential in the area. The objective of his project was to develop a simple method for mapping groundwater recharge potential across working farmlands, using GIS (Geographic Information Systems) software to analyze factors that influence recharge such as land curvature, geology, soil type, land use and land cover. Bosun also visited several sites in the North Lynden WID in order to investigate how soil compaction under different agricultural land uses might affect groundwater recharge. The results of the study can be used to inform groundwater recharge management planning in agricultural areas.

Bosun's research was part of his studies in the Master of Land and Water Systems Program at the University of British Columbia. (<http://mlws.landfood.ubc.ca/>). His research advisers for this work were Prof Les Lavkulich and Dr Heather MacKay.

View the story map and project results at
<https://storymaps.arcgis.com/stories/2c0a8c8b512f4c578b0b9b7789a4a0ea>

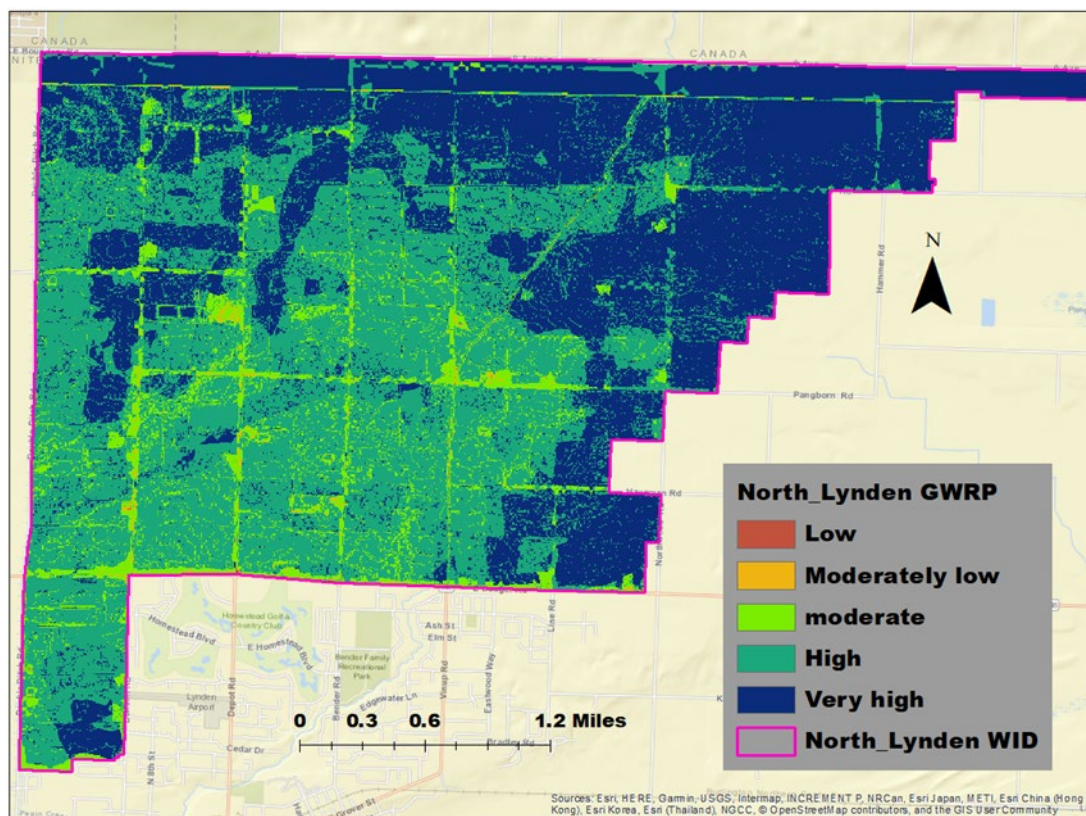


Figure 1 Map showing North Lynden WID groundwater recharge potential using a simple GIS analysis method



Figure 2 Student Bosun Ayetan and Prof Les Lavkulich taking soil compaction measurements with a penetrometer (June 2019)