

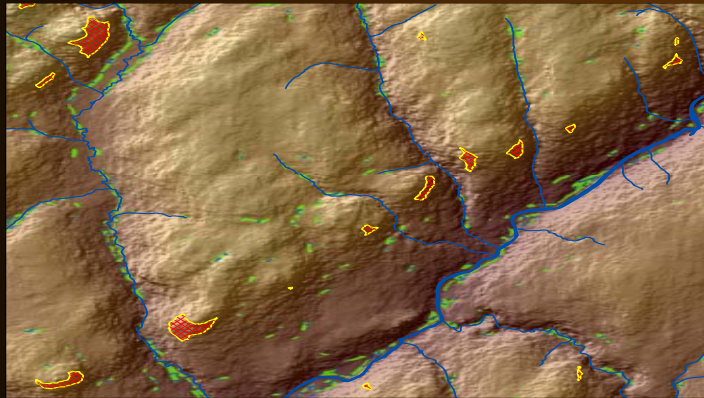
Introduction

New initiatives towards better forest management practices have led to a re-examination of tools to ascertain soil quality and related productivity information. Current soils maps have not been of sufficient detail to clearly delineate conditions in relation to local soil variations and drainage.

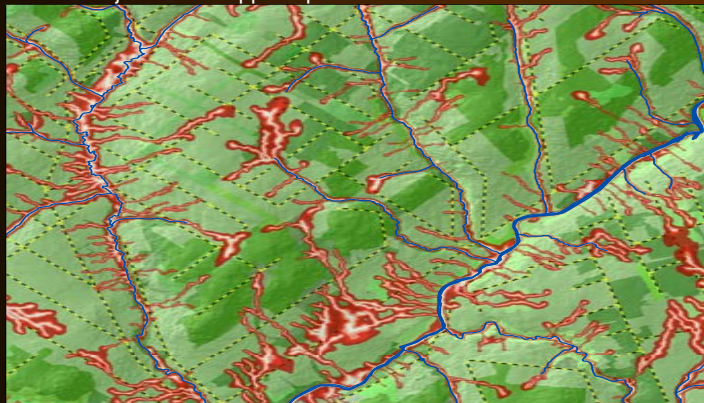
Objective

This poster illustrates 1) mapping of depth to water table (DWT) and 2) the transition from a current soils map to a new version showing topographic and hydrographic influences on soil drainage at 10 m resolution.

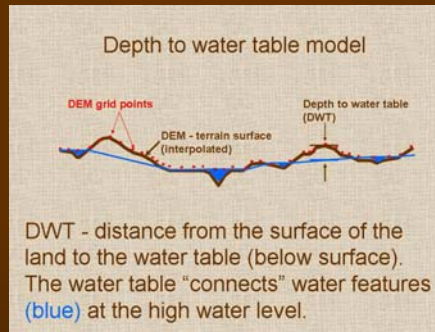
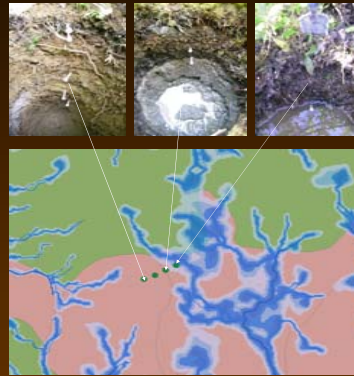
1. Ensure accurate delineation of all open water features and conformance to airphotos and the digital elevation model (DEM).



2. DWT map - Generate a depth to water map, ascertaining likely depth to water adjacent all mapped open water features.

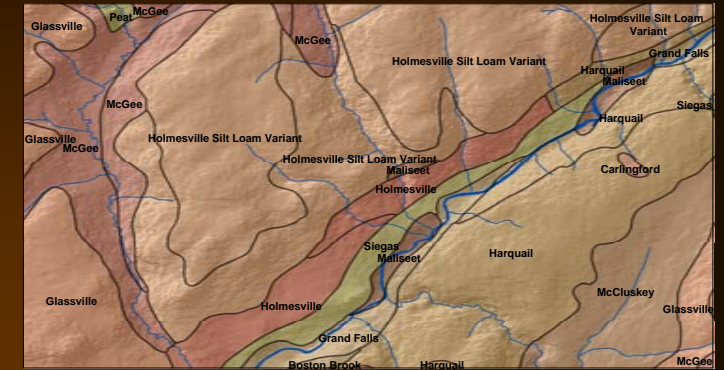


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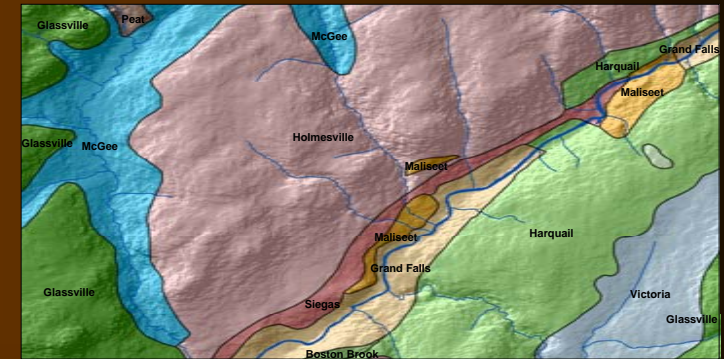


Current conformance between mapped and actual soil drainage conditions is approximately 50%. Visibly different tree growth on apparently similar sites may be due to the fact that local soil and drainage variability was not indicated. Realignment of soil polygons (landforms) with local topographic and hydrographic features will ensure the precise location of soil types and drainage conditions. It is expected that this process will increase conformance. Control sites will validate the predictions with physically measured soil and site characteristics..

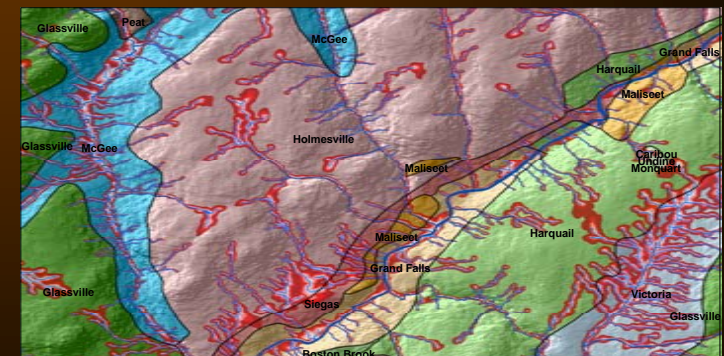
3. Realign forest soils and drainage conditions with topographic and hydrographic features to precisely locate variations in forest site conditions.



A) Original soils map - Langmaid's Soil Map, CanSIS excerpt



B) Topographic realignment and re-contouring of streams & soil polygons.



C) Apply DWT to depict variations in soils with very poor (white) to moderate-imperfect (red) drainage conditions.