**Methodology**

1. Download Wetland Inventories from US (USNWI) and CAN (CNWI)

Canada - <https://data-donnees.az.ec.gc.ca/data/sites/habitat/canadian-national-wetlands-inventory/?lang=en> – Downloaded 10 June 2025

US - <https://www.fws.gov/program/national-wetlands-inventory/data-download>

Downloaded 29 May 2025

\*Downloads are made by Provinces/ States

1. Download NALCMS Land Cover – 2020

<https://www.cec.org/north-american-environmental-atlas/land-cover-30m-2020/>

1. Merge states/provinces vectors

Codes: can\_merge.R and us\_merge.R

* 1. Check and fix geometries when needed;
  2. Reproject to same CRS as NALCMS;
  3. Merge vectors into two main vectors for CAN and US.

1. Rasterize Wetland Invetories (WI) for US and CAN

Codes: rasterize\_can.R and rasterize\_us.R

\*to facilitate visual exploration in QGIS

1. Reclassify vectors – Details in Table 1

Codes: can\_reclassify.R and us\_reclassify.R

1. Merge reclassified US and CAN Wis

Codes: merge\_WIs.R

* 1. Merge vectors;
  2. Check and fix geometries of merged layer.

1. Rasterize WI reclassified vector

Codes: rasterize\_Wis.R

* 1. Rasterize Wis
  2. Check CRS of raster – need to be the same as NALCMS

1. Update NALCMS Land Cover with Wis classes – Details in Table 2

Codes: update\_raster.R

1. Plot NALCMS\_WI raster

Codes: plot\_map.R – Color palette in Table 3

Table 1: Crosswalk between USNWI and CNWI for Reclassification



Table 2: Results of Reclassification and Final Raster Values and Classes.



Table 3: Colour Pallete for NALCMS\_Wis raster

