WETLAND CLASSIFICATION AND HYDRIC SOIL INDICATORS FOR PRAIRIE POTHOLE WETLANDS

RESEARCH SUMMARY | JULY 2026
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We are still looking for agricultural fields to participate in this study!
If you are interested, please fill out the form through the QR code and we will be in touch!

Scan here to get updates on this project!

WHY THIS RESEARCH?

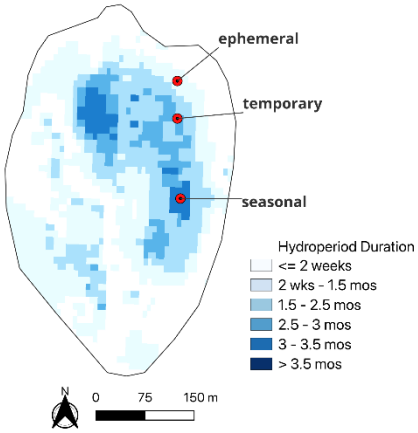
- Effective and efficient wetland classification methods are needed to quantify ecosystem services and support agricultural management.
- Wetland classification, such as the Steward & Kantrud (S&K) system relies on native plants which is challenging to use in cultivated areas.
- Soil characteristics, such as classification and hydric conditions, may provide a more reliable way to identify and classify these wetlands.

RESEARCH GOALS

Quantify the relationships between wetland classification, hydric soil indicators, and soil classification across cultivated landscapes in Saskatchewan.

PROCESS

Soil data from 101 archived wetlands previously sampled and nine seasonal wetlands (to be sampled in 2026) will be used for this study. Three soil pits will be sampled within each seasonal wetland to understand how soil properties vary across wetland areas; soil samples will be analyzed for pH, electrical conductivity, texture and iron.



IMPORTANCE

Photo: B. Claeys

Address a critical knowledge gap in wetland identification, classification, and management in cultivated fields.

Improve the valuation and monitoring of wetland ecosystem services in the Prairie Pothole Region.

Production Type:

Crops

Practice Benefits:

Wetland conservation

Ecosystem Services

Research Locations

SK Brown and Dark Brown soil zones

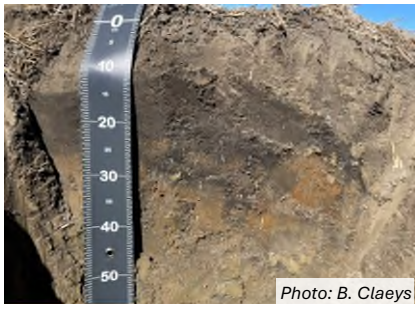


Photo: B. Claeys

Soil Properties Measured

- pH & EC
- Texture
- Iron

Wetland Classification

- Duration of water ponding
- Soil classification
- Hydric soil indicators

Results Expected

- September 2027

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