

Considerations for the review of wetland maps and WWA's County Wetland Fact Sheets

Wisconsin Wetland Inventory maps show graphic representations of the type, size and location of wetlands in Wisconsin. The maps have been prepared from the analysis of high altitude imagery in conjunction with soil surveys, topographic maps, previous wetland inventories and field work. Due to limitations in aerial photography and image interpretation, wetland maps tend to under represent, and occasionally over represent, the presence of wetlands on the landscape.

This is particularly true of small wetlands which are hard to see on high-altitude imagery, and wetlands in heavily forested landscapes where the canopy obscures the interpreter's view of the ground. For these and other reasons, wetland maps are only meant to serve as a guide for planning purposes. Field verification is always needed for project planning or regulatory considerations.

Discrepancies between wetland maps and field conditions can be found throughout the state, but tend to be most common in the situations described below. Please keep these considerations in mind as you review the *County Wetland Fact Sheets* for your area.

1. Wetlands at the headwaters, and along the margins, of small streams. Wetlands serve as source waters for many streams, often as small springs or seeps that may not be easily detected on imagery. Wetlands along the margins of small streams can also be hard to detect because they are narrow and linear. These situations are particularly pronounced in areas with high concentrations of cold water streams including the Driftless Area and Northern forested landscapes.

2. Ephemeral ponds. These shallow, often poorly-drained basins, are notoriously difficult to map because they are small and frequently only contain standing water in the spring when they are filled because of snowmelt, runoff from rain, or a rising water table. Ephemeral ponds are abundant in many forested landscapes, but can also be found in agricultural settings.

3. Disturbed wetlands. Many areas of current and former wetlands have been altered significantly through grading, drainage, and vegetation removal or conversion. It can be difficult to determine through aerial photos whether all of the required characteristics of wetlands (i.e., soils, hydrology, wetland plants), are present. Some of the most difficult to detect disturbed wetlands are in agricultural landscapes.

4. Wetlands in the Lake Superior Clay Plain. The impermeable clay soils present in the northern portions of Douglas, Bayfield, Ashland, and Iron Counties cause water to perch on the landscape. Small differences in elevation can cause water to pond and form wetlands. The soil mapping in this area is also not as precise as other parts of the state, making soil data in this region a less reliable indicator of the presence of wetlands. These two features combined make it particularly difficult to accurately determine the presence of wetlands remotely.