

Wetland Definition

Wetlands are defined as "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

Wetland Types and Characteristics

Wetlands may be vegetated with forest, shrubs; or low-growing plants such as marshes, sedge meadows, or wet meadow. Some wetland types may have open surface water for a considerable time during the growing season. Other wetlands may be wet for only a short period in the spring or summer.

To be designated as a wetland, an area must meet criteria set by the US Corps of Engineers including hydrology, vegetation, and soil type.

What Agencies Regulate Wetlands?

Federal: The United States Army Corp of Engineers (USACE) and the US Environmental Protection Agency (USEPA) through the Minnesota Pollution Control Agency (MPCA).

State: The Board of Water and Soil Resources (BWSR) administered through the Wetland Conservation Act (WCA) Local Governmental Unit (LGU) and the Minnesota Department of Natural Resources (MNDNR) if a Public Water, Public Water Wetland, or unnumbered Public Watercourse is potentially impacted.

Local: Watershed rules and City Ordinances.

Wetlands are defined and delineated per the USACE Wetland Delineations Manual and Regional Supplements. Delineated wetland boundaries and wetland types must be approved through a process called the Technical Evaluation Panel (TEP), consisting of representatives of the WCA LGU, BWSR, Conservation District, and the MNDNR if Public Waters are involved. Concurrence from the USACE is solicited as well. The approved



Roadside marsh wetland



Meadow wetland



Forested wetland

wetland boundary is the basis for calculating wetland impacts during the permitting process.

WCA LGUs relevant to the Metro Blue Line Extension include the Watersheds of Shingle Creek (northern 2/3 of the project area) and Bassett Creek (southern 1/3 of the project area) and potentially the Cities of Osseo, Minneapolis, Crystal, Brooklyn Park, and Golden Valley.



How are Wetland Impacts Identified?

Once the boundaries of wetlands have been identified, then wetland impacts are those wetland areas that lie within the limits of disturbance of the proposed project.

The Process: from Wetland Delineation to Construction Start

Timeline	Event
Spring 2015	Complete Wetland Delineation
Summer 2015	Wetland Delineation Report and meet with agencies to agree on the correct wetland boundaries
2016	Publish Final Environmental Impact Statement and submit wetland permit application
2017	Receive wetland permit authorizing construction to impact wetlands and mitigate for impacts

When are Permits Required?

Projects with wetland impacts greater than 5 acres will require a USACE Individual Permit (IP). A permit application can be submitted when wetland boundaries have been approved, when construction limits are well-established, and when sufficient construction details are known. Applications often take over 4 months to process prior to issuance of the IP. IPs also require that an Individual Water Quality Certification per Section 401 of the Clean Water Act be processed and issued by MPCA.

The permit application will require an accounting of all permanent and temporary wetland impacts associated with the LRT track footprint, and associated infrastructure, and construction staging areas. A key discussion in the permit application is sequencing with respect to wetland and aquatic resource impacts; measures to avoid impacts, minimize impacts, and mitigate for unavoidable impacts.

It is a good practice to allow contractors to review issued permits prior to construction start so they can become familiar with special permit conditions and bid accordingly on what is required to be compliant.

How are Wetland Impacts Mitigated?

Wetland impacts are usually mitigated at a ratio of 2:1. Thus, if 10 acres of wetland are impacted then 20 acres would be required for mitigation. Mitigation can be "on-site" where suitable upland in or near the project is converted to wetland and upland buffer or mitigation can proceed through purchase of existing credits from a suitable private wetland mitigation bank. On-site wetland mitigation will require a grading plan and planting plan. Banked wetland credit availability is updated daily by the Board of Water and Soil Resources. The price per credit is available by contacting the wetland banker. Currently, credits in the north Metro vary in price from ~\$45,000 - ~\$80,000 per acre of mitigation. Several factors can increase or reduce the mitigation ratio.

What Monitoring is Done to Ensure Impacts are Mitigated?

If needed credits derive from on-site wetland mitigation, then wetland monitoring will be required to assure that the mitigation site is functioning per established criteria. The monitoring period would begin immediately after construction of the mitigation site. Annual reporting of mitigation monitoring may be 5 years or a shorter period if the site is progressing satisfactorily. Corrective actions such as weed control or hydrological adjustments may be necessary in the course of monitoring. Such corrective actions are not necessary if mitigation credits are purchased from an existing bank.

More information at BlueLineExt.org

