



# Minnesota Wetland Professional Certification Program (MWPCP) Exam Study Guide

This document explains specific Minnesota Wetland Professional Certification Program (MWPCP) policies and procedures related to Continuing Education.

## General

The exam is intended to determine if you have the fundamental understanding of the basic technical concepts of wetland delineation and the rules, policies and guidance associated with wetland regulatory compliance in Minnesota.

The exam *does not* test your competency in conducting work associated with wetland regulatory compliance.

Both Professional and In-Training Professional exams cover the same topics and concepts. As compared to the In-Training exam, the Professional exam includes significantly more situational questions that require a concept or technique to be applied to a specific situation. The questions are all multiple choice.

## Studying and Exam Topics

This section includes an extensive and specific list of topics (organized by major subject category) covered by the exam. The major subject categories are wetland delineation, regulation, functional assessment, and monitoring. The approximate percentage of the exam questions that involves topics in each category is indicated so you know where to focus your studying. For each topic listed you should be familiar with the concept/definition and how it is applied. Questions are multiple-choice so you do not necessarily have to memorize the exact language of a specific definition, indicator, exemption, etc. as you will not be required to reproduce it. The key is to understand the basic meaning/purpose and how it is applied. There are many more detailed aspects of the four major subject categories that are not covered by the exam and thus are not listed as specific topics. However, understanding some of the listed topics will require knowledge of or familiarity with unlisted topics.

Completing the practice exam is a good way to become familiar with the types of questions that will be asked. The 4.5-day basic wetland regulation and delineation course offered by the MWPCP will cover all listed topics through a combination of lecture, field and online training.

### **Wetland Delineation** (40%)



- Definition of a wetland.
- Wetlands vs other aquatic resources (deepwater habitats, streams).
- Routine levels 1, 2, 3 and comprehensive methodology – 87 Manual and supplements plus MN-specific guidance.
- Delineation report submittal requirements for MN.
- Completing and interpreting routine onsite wetland delineation data forms.
- Interpretation and use of standard wetland mapping resources – aerial imagery, NWI, Soil Survey, DNR Protected Waters Inventory.
- Normal climate conditions and Normal circumstances meaning on top of data sheet.
- Atypical situations, problem areas, and other difficult situations – concepts and general procedures.
- Growing season- definition and field indicators.
- Hydrophytic vegetation – definition, indicator status, national wetland plant list, common morphological and physiological plant adaptations.
- Vegetation sampling procedures- strata, plot sizes and establishing transects.
- Vegetation dominance determination- rapid test, 50/20 Rule, prevalence index.
- Soil properties, sampling procedures, and profile descriptions- texture, color (hue, chroma, value), contrast, and degree of organic decomposition.
- Hydric soil definition and basic formation processes- parent material, landscape position, coloring agents.
- Hydric soil indicators – indicator categories (A, F, S), diagnostic zones, reduced matrix, common indicators.
- Web Soil Survey- generating and interpreting soil reports.
- Wetland hydrology technical standard.
- Wetland hydrology indicators – indicator categories and groups.



- Drainage scope and effect – definition, concepts, variables, setback tables.
- Antecedent precipitation analysis – MN-specific guidance.
- Offsite hydrology and wetland determinations – MN-specific procedures.

### **Wetland Regulations** (45%)

- Major wetland regulatory/compliance programs in MN (MN Wetland Conservation Act; Section 10, Section 401 & Section 404 of the Federal Clean Water Act; MN Public Waters Work Permit Program, Food Security Act) – what they regulate, administration, how they interact, and general implementation.

### **Wetland Conservation Act (WCA)-Specific Topics**

- Basic history and administration of MN Rule Chapter 8420.
- Purpose and Scope of WCA- activities that WCA does and does not regulate.
- Important definitions- impact, fill, incidental wetlands.
- Pre-settlement area designations and their effect on regulations.
- Local Government Unit (LGU) roles and responsibilities.
- Technical Evaluation Panel (TEP) procedures.
- Basic application procedures- Notice of Application (NOA) and Notice of Decision (NOD) requirements. MN Statute 15.99 timeline requirements.
- No-Loss and exemption activities/projects – definition, procedures.
- Exemptions – general standards for de minimis (do not need to know specific amounts), agriculture, drainage, and forestry exemptions.
- Replacement plan application requirements and common review standards- sequencing (avoid, minimize, replace), alternatives analysis.
- Special Considerations –threatened & endangered species and rare natural communities – rule and guidance.
- Replacement ratios, siting, Bank Service Areas, and In-kind replacement.



- Project-specific vs banking replacement.
- Actions eligible for replacement credit – general definition and requirements for each action.
- Wetland bank application process and wetland bank types.
- Performance standards and credit release tables.
- Minimum wetland bank monitoring requirements.
- Wetland credit deposit and withdrawal process.
- Local Government Road Wetland Replacement Program – eligibility and process.
- Restoration and replacement orders – roles, responsibilities, and basic WCA enforcement process.

#### **Section 404 & Section 10-Specific Topics**

- Basic administration- US Army Corps of Engineers.
- Waters of the U.S. – definition.
- Regional General Permits (RGP) – what they are and how they work.
- Individual Permits (IP) – what they are and how they work.

#### **Section 401-Specific Topics**

- Jurisdiction & administration- MN Pollution Control Agency (MPCA).

#### **PWWPP-Specific Topics**

- Basic Administration- MN Department of Natural Resources (DNR).
- Definitions – public water basin, public water wetlands, public watercourse, OHWL, alteration.
- Public waters permit application process (MPARS).
- PWWPP and WCA interactions.

#### **Food Security Act-Specific Topics**



- Basic Administration – USDA Farm Service Agency (FSA) & Natural Resource Conservation Service (NRCS).
- Connections & differences to other programs (CWA, WCA).

### **Wetland Functions & Classification** (5%)

- Definition of wetland functions and wetland values.
- Wetland classification systems in MN (Circular 39, HGM, Cowardin, Eggers & Reed) – basis, structure, use in regulations and restoration.
- Functional assessments- MNRAM, Floristic Quality Assessment, functional assessments based on hydrogeomorphic classification system.

### **Wetland Monitoring** (5%)

- Hydrology monitoring wells & piezometers – design, use, installation.
- Antecedent precipitation analysis.
- Interpreting hydrology data.
- Standard vegetation monitoring methods.

### **Restoration** (5%)

- Site selection basics- restoration planning.
- Setting function-based restoration goals and performance standards.
- Hydrologic design considerations.
- Vegetation establishment and management considerations.
- Site management and monitoring.



## Reference Materials for Exam

The following reference materials are either posted or can be accessed via links on the BWSR website. These documents include extensively more information and cover more topics than is covered by the exam.

### Wetland Delineation Reference Materials:

- [1987 Army Corps of Engineers Wetland Delineation Manual](#)
- [1987 Corps Manual Supplements](#) (Great Plains, Midwest, Northcentral/Northeast)
- [Submitting Wetland Delineation Reports in Minnesota](#)- BWSR
- [Wetland Delineations: Choosing the Appropriate Method](#) – BWSR
- [Field Indicators of Hydric Soils \(version 8.2\)](#) – NRCS
- [Guidance for Offsite Hydrology/Wetland Determinations](#)- Army Corps and BWSR
- [Web Soil Survey](#) – NRCS web-based soil application
- [MN NWI Wetland Finder](#)- MN DNR
- [National Wetland Plant List](#)- Army Corps
- [Evaluating Antecedent Precipitation Conditions](#)- BWSR
- [Hydrologic Monitoring of Wetlands](#)- BWSR
- [Wetland Functional Assessment](#) – BWSR guidance
- [MN Wetland Restoration Guide](#)- BWSR
- [Vegetation Monitoring for Compensatory Wetland Mitigation Sites](#)- BWSR

### Wetland Regulation Reference Materials:

- [MN Wetland Conservation Act- 2009 Minnesota Rules Chapter 8420](#)
- WCA Statute Changes since 2009 ([2011](#),[2012](#), [2015](#), [2017](#))
- [WCA Program Guidance Documents](#)
- [WCA Forms](#) (notice forms, TEP and enforcement forms, etc.)
- [Joint Application Form for Activities Affecting Water Resources in Minnesota](#)
- [Wetland Banking Guidance Documents](#)