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 tools, 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 circumstances and wetland delineations.
- 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, indicators A1, 2, 3, 4, 11, 12.
- Web Soil Survey- generating and interpreting soil reports.
- Wetland hydrology technical standard.
• Wetland hydrology indicators – indicator categories and groups. All Group A indicators plus indicators C2, D2 and D5.

• 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.

• No-Loss and exemption activities/projects – definition, procedures.

• Exemptions – general standards for deminimis (do not need to know specific amounts), agriculture, drainage, and forestry exemptions.

• Replacement plan application requirements and common review standards- sequencing, 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.

• Section 10 vs Section 404 jurisdiction.

• Regional General Permits (RGP) – what they are and how they work.

• Individual Permits (IP) – what they are and how they work.

• Basis for permit decisions- general 404b1 guidelines.

• Federal Mitigation Rule – specifically the watershed approach, mitigation priority, ILF and bank approval process.

Section 401-Specific Topics

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

• Water quality pre-certification for RGPs and waiver for IPs.
• Prohibited Outstanding Resource Value Waters (PORVW) and Restricted Outstanding Resource Value Waters (RORVW) – water quality certification implications.

• Criteria for individual water quality certification.

**PWWPP-Specific Topics**

• Basic Administration- MN Department of Natural Resources (DNR).

• Definitions – public water basin, public water wetlands, public watercourse, OHWL, alteration.

• PWWPP exceptions to standards/criteria.

• 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).

• 1026 & Certified Wetland Determinations.

• Definition of labels.

• Compliance options – setbacks, mitigation.

**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, 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.

- 1987 Army Corps of Engineers Wetland Delineation Manual
- 1987 Corps Manual Supplements (Great Plains, Midwest, Northcentral/Northeast)
- Submitting Delineation Reports in Minnesota- BWSR
- Wetland Delineations: Choosing the Appropriate Method – BWSR
- Field Indicators of Hydric Soils (latest version) – NRCS
- Wetland Delineations for MN WCA Compliance- Answers to Frequently Asked Questions- BWSR
- Guidance for Offsite Hydrology/Wetland Determinations- Army Corps and BWSR joint guidance
- Wetland Delineation Review Checklist – BWSR
- Classification of Wetlands and Deepwater Habitats of the United States – USFWS
• Wetlands in Minnesota (Circular 39) – BWSR/DNR/USFWS publication
• Field Book for Describing and Sampling Soils – NRCS
• Web Soil Survey – NRCS web-based soil application
• National Wetland and Public Waters Inventory- MN DNR
• National Wetland Plant List- Army Corps
• Land Resource Region Boundaries Fit to Closest Township Map- BWSR
• Evaluating Antecedent Precipitation Conditions- BWSR
• Hydrologic Monitoring of Wetlands- BWSR
• Technical Standard for Water Table Monitoring – Army Corps
• Water Table Monitoring Project Design – Army Corps
• Installing Monitoring Wells and Piezometers in Wetlands – Army Corps
• Hydrology Tools for Wetland Identification and Analysis- USDA and NRCS
• BWSR Guidance Concerning NRCS-developed Drainage Setback Tables
• A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions of Prairie Potholes- Army Corps
• Comprehensive General Guidance for MNRAM
• General Summary of Wetlands Regulation in Minnesota – DNR and BWSR
• Minnesota Rules Chapter 8420 (WCA rules)
• Minnesota Rules Chapter 6115.0150 – 0280 (PWWPP rules)
• Minnesota Rules Chapter 7001
• Section 401 Clean Water Act
• Section 404 Clean Water Act
• Section 10 Rivers and Harbors Act
• 40 CFR Part 230 (Federal Mitigation Rule)
• Regional General Permits MPCA 401 Certification – 2/13/18 letter from MPCA to Army Corps
• Nationwide Permits MPCA 401 Certification – 6/6/17 letter from MPCA to Army Corps
• Minnesota Wetlands Water Quality Standards – MPCA fact sheet
• Water Standard Projects and Priorities – MPCA website
• Section 401 Water Quality Certification – MPCA fact sheet
• Coordination with the Public Waters Permit Program – BWSR/DNR guidance
• Rare Natural Communities Technical Guidance – DNR/BWSR
• Forestry Exemption Guidance for LGUs – BWSR
• Agricultural Bank Exemption – MOU between BWSR and NRCS
• Federal Approvals MOU – MOU between BWSR, DNR, Army Corps
• Decision Timelines – BWSR guidance
• TEP Meetings Procedures and Timing – BWSR guidance
• Establishing a Wetland Bank – BWSR guidance
• Generating Wetland Credits – BWSR guidance
• Performance Standards and Credit Release Schedules - BWSR/Army Corps guidance
• Agricultural Bank vs Regular Wetland Bank Fact Sheet – BWSR