

**MINNESOTA LOCAL ROAD AUTHORITY  
REFERENCE GUIDE  
to  
U.S. ARMY CORPS OF ENGINEERS  
(CORPS)**

**CLEAN WATER ACT SECTION 404  
&  
RIVERS AND HARBORS ACT SECTION 10  
Permits**

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A cooperative effort of:  
U.S. Army Corps of Engineers, St. Paul District  
&  
Minnesota Department of Transportation, State Aid for Local Transportation.

### **U.S. Army Corps of Engineers' Regulatory Mission**

The mission of the Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands.

#### **Regulatory Program Goals:**

- Protect the aquatic environment
- Enhance regulatory program efficiency
- Make fair, reasonable, and timely decisions
- Achieve No Net Loss of Aquatic Resources

### **State Aid for Local Transportation (SALT)**

Established to administer the County State Aid Highway (CSAH) and Municipal State Aid Street (MSAS) portions of the Highway User Tax Distribution Fund (HUTDF), along with federal aid highway dollars. The division also serves as the liaison between the Minnesota Department of Transportation (Mn/DOT) and the county and municipal engineers through their engineering associations. The strong supportive relationship between local governments and Mn/DOT is key to the success of the State Aid system.

#### **SALT & MnDOT District Offices roles and responsibilities with respect to the State Aid program.**

- Supervises the distribution of county and municipal State Aid highway funds and federal funds to counties and cities.
- Authorizes grants and bonds for road & bridge construction from the Minnesota State Transportation Fund.
- Coordinate local federal aid projects.

### **Vision Statement**

The counties and cities of Minnesota are charged with building and maintaining a safe and efficient secondary road system. These activities frequently impact water bodies, requiring that the local road authorities interact with the Corps of Engineers to get permits to do their work. The US Army Corps of Engineers and the State Aid Division of MnDOT collaborated to develop this manual in order to provide details about the Corps permitting process, ensure that the requirements and process are made as clear as possible for the applicant and assure that the regulations are implemented in a consistent manner. We believe by cooperatively preparing this guidance, we are providing a way to make it easier for the transportation agencies to provide the required information, to make it easier for the Corps staff to evaluate the impacts and to allow permits to be issued in a timely and fair manner that satisfies all the partners.

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## 1 INTRODUCTION

### 1.1 Purpose of this Guide

The purpose of this manual is to assemble the guidance necessary to assist transportation authorities in preparation and submittal of sufficient information for the U.S. Army Corps of Engineers (Corps) to make permit decisions when required in the course of maintaining, upgrading or replacing roadways. This benefits both the Corps in its review capacity, and road authorities in receiving timely permit decisions.

The guide seeks to provide an overview of the wetland permit process with guidance pertaining to the required elements in a permit application so that the review process completed by the Corps can be as streamlined as possible.

### 1.2 Legislative Authority

- [Section 10 of the Rivers and Harbors Act \(RHA\) of 1899 \(33 U.S.C. 401, 403, 407\)](#) is the statutory authority for requiring a permit to work in, over, or under a navigable water. The Corps has jurisdiction over all navigable waters of the U.S.
- [Section 404 of the Clean Water Act \(CWA\)\(33 CFR Parts 320-332\)](#) authorizes the Corps to issue permits for the discharge of dredged or fill material into navigable waters. Navigable waters were later expanded to include “waters of the United States” for section 404 purposes.
- A Corps permit is a “federal action” and therefore requires compliance with other federal laws and rules. The following are a subset of some regulations to comply with:
  - CWA Section 401 certification (33 CFR Chapter 26)
  - Section 106 of the National Historic Preservation Act (NHPA) (16 USC 470 et seq.)
  - Section 7 of the Endangered Species Act (ESA) coordination (Title 50 of CFR)
  - NEPA (42 USC§ 4321 et seq.)
  - CWA Section 404(b)(1) guidelines (40 CFR)
  - Public Interest review (33 CFR Part 325)

### 1.3 Intended Audience

The intended primary users of this manual include county and city highway department staff, their consultants, and any other local road authorities working on transportation related projects or facilities in Minnesota.

### 1.4 About This Guide

This manual provides guidance to help users determine if they need a permit from the Corps and if one is required, it should help to navigate the permit process. If a permit is necessary, the manual will help guide the user through the Corps Section 10 and Section 404 permitting process from early investigation and coordination, pre-application, and submitting complete applications, to providing information sufficient for a permit decision. Permitting can be a complex process. This handbook is intended to be an overview and not a substitute for knowledge of the laws, regulations and guidance governing permit decisions. Road authorities are encouraged to contact the Corps for specific information, early and throughout the process. Although this manual deals primarily with the Corps permit program, it is important to note that much of the information presented will also satisfy the requirements of the MN Wetland Conservation Act (WCA) as described in MN Rules, Chapter 8420.

Wetland policy and guidance regarding the implementation of the CWA is continually evolving. For this reason it is expected that this manual will be periodically updated to reflect those changes, therefore the most recent version of the guidance should be consulted when planning a project. Comments and

suggestions for improving the manual are welcome. See Appendix H for agency contact information. The current version is available at <http://www.dot.state.mn.us/stateaid/environmental-forms.html>

## 2 WATERS OF THE UNITED STATES

### 2.1 Waters of the U.S. as Defined in 33 CFR 328.3

- Waters that are currently used, or were used, or may be used for interstate commerce, including all waters subject to ebb and flow of the tide. All interstate waters including interstate wetlands.
- All other waters such as lakes, rivers, streams, mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes or natural ponds which could affect interstate or foreign commerce.
- All impoundments of waters otherwise defined as waters of the U.S.
- Tributaries of waters.
- The territorial sea.
- Wetlands adjacent to waters identified above.

### 2.2 Wetlands

Wetlands are defined by the Corps and EPA as **"those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."** (40 CFR 230.3(t)).

While the Corps regulates all waters of the U.S., which include streams and rivers, wetlands are the subject of most questions regarding the Section 10/404 programs. The emphasis of this guide will be wetlands and the Corps regulatory program in Minnesota. Stream and river impacts, however, also require permits.

## 3 REGULATORY AGENCIES

The Section 10/404 permit process is the responsibility of the U.S. Army Corps of Engineers with some influence from the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and the Minnesota Pollution Control Agency. Other state and local authorities also have influence over wetland and water impacts in Minnesota and separate permits may be required to satisfy their programs. Since the purpose of this manual is to provide guidance regarding the section 10/404 programs, any reference to other state and local programs is for informational purposes only.

### 3.1 US Army Corps of Engineers (Corps)

Under the CWA, the Corps has been delegated authority to issue permits for dredge or fill impacts to waters of the U.S. Section 404 jurisdiction includes waters that are either navigable or that have a "significant nexus" to navigable water or waters of the United States.

The Corps also issues permits for Section 10 waters. Section 10 of the RHA requires permits to work in, over or under a navigable water. Navigable waters have been designated based on their past, present or potential use for transportation or interstate commerce. See section 4.7.2 for further information. In Minnesota, there is a published list of Section 10 waters which include major rivers and lakes.

[http://www.mvp.usace.army.mil/docs/regulatory/mn\\_nav\\_waters.pdf](http://www.mvp.usace.army.mil/docs/regulatory/mn_nav_waters.pdf)

### 3.2 U.S. Environmental Protection Agency (EPA)

As part of its mission to protect human health and the environment, the EPA has oversight authority over the Corps Section 404 program. EPA was required to develop the [Section 404\(b\) \(1\) Guidelines](#) that the Corps must use in deciding whether to issue or deny a permit. The EPA and the Corps also developed the 2008 compensatory mitigation rule ([Appendix F](#)). The EPA makes comments for larger environmental projects that require an Environmental Impact Statement (EIS) or Environmental Assessment (EA) through the NEPA process. They also can comment on the permit during the Public Notice process. They also have the ability to elevate a Corps decision under 404(q) procedures or assume responsibility for permitting in special circumstances.

Water quality certification under section 401 of the CWA has been delegated to the states. The Minnesota Pollution Control Agency (MPCA) has 401 authority in Minnesota. EPA typically acts as the certifying authority on tribal lands when the tribe lacks certification authority. The tribes can request 401 authority and have Treatment as State (TAS) authority if they develop their own water quality standards. As of January 2010, two tribes in Minnesota have developed water quality standards approved by EPA and have been granted 401 certification authority: the Fond du Lac Band and the Grand Portage Band of the Minnesota Chippewa Tribe.

### 3.3 US Fish and Wildlife Service (USFWS)

The Corps has entered into an MOU with the Department of the Interior to formalize coordination of the Section 10 and 404 programs, the Endangered Species Act and the Fish and Wildlife Coordination Act. Generally, the US Fish and Wildlife Service (USFWS) provides comments to the Corps to aid the decision-making process. In case of disagreement, there is a process to elevate the review to higher levels in the respective agencies. The 404(q) MOA can be found at:

[http://www.fws.gov/habitatconservation/404qMOA\\_FWS.pdf](http://www.fws.gov/habitatconservation/404qMOA_FWS.pdf)

### 3.4 Minnesota Pollution Control Agency (MPCA)

Water quality certification authority under the Clean Water Act Section 401 is delegated to the states. In Minnesota the MPCA has been assigned 401 authority. A 401 water quality certification or waiver is required for every Corps permit; however, for general permits and letters of permission, a 401 certification or waiver has been completed in advance. For individual permits, the MPCA conducts an individual review. See section 5.4.1.

### 3.5 Minnesota Department of Natural Resources (DNR)

The DNR administers a [Public Waters Work Permit Program](#) that covers an inventoried subset of lakes, rivers and larger wetlands within the state (MS 103G). DNR permits may be necessary if the project affects inventoried waters. The DNR permit would be in addition to a Corps permit.

### 3.6 Minnesota Board of Water and Soil Resources (BWSR)

In conjunction with Local Government Units (LGUs), BWSR administers the [Minnesota Wetland Conservation Act](#) (WCA), which regulates all wetlands except those that are deemed Public Waters under the DNR Public Waters Work Permit program (Wetland Conservation Act 1991, Laws 1991, chapter 354, as amended and Chapter 8420 (MN Rules 2009)). WCA approval does not preclude the need for a Corps permit.

### 3.7 Watershed Districts (WD)

Watershed districts and Water Management Organizations (WMO) also have permitting authority within their boundaries to regulate water quality under MS 103D.

[http://www.bwsr.state.mn.us/publications/WD\\_Guidebook/index.html](http://www.bwsr.state.mn.us/publications/WD_Guidebook/index.html)

## 4 PROCESS GUIDANCE

### 4.1 Effect of Project Funding on Project Development and Permitting

#### 4.1.1 Non-Federally Funded Projects

Non-Federally funded projects such as State Aid Projects (SAP) or locally funded projects are not required to follow the Federal Highway Administration (FHWA) NEPA process. However, if a Corps permit is necessary, the project becomes a federal action and must comply with the [Section 404\(b\) \(1\) Guidelines](#) and the [NEPA Implementation Procedures for the Regulatory Program](#). The Corps will need to prepare its own NEPA document with supporting information provided by the applicant for any individual permit. When general permits are authorized, the NEPA process is completed as part of the approval process. For reporting type GPs, the Corps will verify eligibility for the permit based on submitted information.

The source of funding does not change the permit requirements. The Corps permit application requirements will essentially require the same information as is usually provided in a federal NEPA document. All projects that require a federal permit must comply with other federal laws such as the Section 106 of the National Historic Preservation Act (NHPA) and Section 7 of the Endangered Species Act (ESA). Currently, MnDOT does not complete the Section 106 or Section 7 review process for non-federally funded projects. It is the Corps' responsibility to ensure the project is in compliance with the NHPA. The Corps will notify the applicant of additional information needs such as survey requirements which would be the responsibility of the project applicant. If a survey is completed, the report and any SHPO correspondence should be provided to the Corps so they can assess additional needs and move towards completion of the 106 review.

**Cautionary Note:** *Currently, the SHPO prefers that the Corps initiate the Section 106 review and coordination with their office. Although the applicant may initiate the historical review process and may receive a letter back from the SHPO, the letter does not satisfy the Section 106 coordination process. In the absence of any federal funding, the Corps must complete the Section 106 process.*

*Typically, the public notice starts the SHPO process. However, a GP type project may still need to go through 106 coordination even though there is no public notice. This would become apparent during the verification process the Corps completes for reporting type GPs.*

#### 4.1.2 Federally Funded Projects (Federal Aid)

All federally funded transportation projects must comply with the National Environmental Policy Act (NEPA) whether they are proposed by the state, a county, township or a municipality. A NEPA document (categorical exclusion determination, project memorandum, environmental assessment or environmental impact statement) is prepared for all federally funded projects. Under a [Section 106 Programmatic Agreement](#) (PA) with the FHWA, the Corps, State Historic Preservation Office (SHPO) and MnDOT; the MnDOT Cultural Resources Unit (CRU) conducts the Section 106 review on behalf of FHWA which also satisfies Section 106 requirements for the Corps. Also by agreement between the Corps, MnDOT, USFWS and the FHWA; the Mn/DOT Office of Environmental Stewardship completes the Section 7 ESA review process. These coordination efforts completed



by MnDOT on behalf of the other federal agencies, can be documented by the Corps as sufficient to fulfill their Section 106 and Section 7 responsibilities associated with the permit.

The NEPA document (e.g. project memo, EA or EIS) usually provides sufficient information to assist in the Corps permit review (especially documenting project purpose and need and alternatives) and is recommended to be submitted to the Corps. The Corps can utilize the NEPA document to confirm that the information is sufficient for their NEPA responsibilities (NEPA Implementation Procedures for the Regulatory Program) which are provided in 33 CFR Part 325 Appendix B. The Corps can also review the information to see if it is sufficient to document compliance with the Section 404 (b) (1) guidelines. In some cases, additional information may be requested. The Corps then follows the regulations outlined in 33 CFR Part 320 and 33 CFR Part 325 in determining the need for a permit and the processing of permits.

## 4.2 Preliminary Review

### 4.2.1 Items for Applicant to Identify During Early Review

An in-office review of available supporting documentation is the first step to help decide what level of effort needs to be expended to document wetland impacts and to determine preliminary permit requirements

- Presence of Waters of the US within the project area (wetlands, streams, lakes).
- Project wetland impacts: cut, fill, temporary, conversion.
- Direct, secondary or temporary nature of wetland impact: see Appendix C.
- Cultural Resources/Historical Properties (Federally funded projects should be submitted directly to Mn/DOT CRU for review).
- Biological resources: federal, state or tribal listed or sensitive species.
- Potential minimization/mitigation measures.
- Water quality certification requirements.

Some resources available to identify the above elements include:

- National wetland inventory maps (NWI).  
***Cautionary Note:** The NWI maps are an approximation, not a regulatory determination and consequently should not be relied upon to represent field conditions.*
- Web soil survey or county soil survey.
- USGS topographic maps.
- Aerial photography.
- Precipitation records.
- Previous wetland delineations.
- Environmental documentation/Preliminary plans.

### 4.2.2 Field Review

All projects that include disturbance beyond the shoulder point of intersection (PI) require some sort of field review to verify the findings of the office review. At a minimum, an onsite review of the project corridor can usually verify what was assumed during the office review, or demonstrate the need for additional on-site investigations or data collection. Field reviews can also be used to make estimations of potential impacts for projects that can't be immediately delineated. It is



recommended that the reviewer note any other site issues that may be relevant to the permit review, NEPA documentation or public interest review, such as sensitive wetland resources, migratory birds, fishery resources, historic properties, or anticipated construction complications.

### 4.3 Early Coordination

Early coordination or pre-application consultation (33 CFR 325.1(b)) is a discussion and information exchange that benefits both applicant and regulator. The applicant benefits from finding out what aspects of the project are important for the permit process. The regulator benefits by becoming familiar with the project. Both parties benefit by having major issues discussed before a permit application is actually submitted. Early coordination can be used to generate a project and permitting timeline so that expectations of both the regulator and applicant are better understood. Generally, the need for early coordination increases with the amount and nature of the proposed wetland impact or if the project is controversial. Early coordination can involve meetings, phone conversations, email exchanges or direct mailing of layouts or plans. Especially for large projects, the Corps may request revisions to satisfy Section 404 requirements including a thorough assessment of the project purpose and need, avoidance alternatives and minimization measures. It may be beneficial to hold joint early coordination meetings with the Corps and the WCA Technical Evaluation Panel (TEP), composed of the WCA LGU, BWSR, SWCD and DNR. In some cases, road authorities already conduct annual meetings with the Corps that could be considered part of the early coordination process.

**Early coordination is typically not necessary for small projects on existing roads with impacts of less than ½ acre.** However, such projects may benefit from a discussion with the Corps project manager if there are complicating circumstances (i.e. endangered species, cultural or historic resources, etc.).

**For projects impacting more than ½ acre (but less than 5 acres) of wetland, some level of early coordination is recommended.** The extent and method of coordination/discussion depends on the amount and nature of the impact. A meeting may be more appropriate for larger projects, while a phone call and e-mail exchange may be enough for smaller projects. If the project impacts have been estimated and are near the 5 acre threshold, early coordination is strongly encouraged to ascertain if impacts may exceed the threshold. Possible topics for discussion include the appropriate level of wetland delineation and expectations for permitting timelines. Under WCA, TEP concurrence is required for qualifying local road authority projects in this category of impact, so at least one face-to-face meeting is likely – and this meeting may as well include the Corps.

**Early coordination is critical for projects that are estimated to impact more than five acres of wetland or for complicated or controversial proposals.** Because of the extended timeline of such projects and the time required to complete planning and design, a two-step process is recommended.

- The first step is an early “pre-application” meeting with the Corps and TEP to discuss general aspects of the project, such as purpose and need, alternatives and potential minimization measures. A level 1 wetland delineation is acceptable for this stage of project development (see 4.4.1).
- The second step is a final “pre-application” meeting with the Corps and TEP to discuss how agency concerns have been addressed, the final wetland impact and/or the wetland delineation. The Corps will notify the applicant of any potential Section 106 or Section 7 issues. If the Corps or TEP concerns were addressed at the first meeting, a second meeting may not be necessary and the additional information exchange can take place via phone conversations or email. It is recommended to have regulatory concerns addressed before submitting a permit application.

## 4.4 Wetland Delineation

Wetland delineations are required for any project that will affect a wetland, either temporarily or permanently, however, the level of delineation should be commensurate with the level of impacts associated with the project. The delineation must be completed in a manner consistent with the [Corps of Engineers Wetlands Delineation Manual \(1987 Manual\)](#) and appropriate [Regional Supplements](#). The 1987 Manual uses two terms interchangeably, delineation and determination. Both terms relate to a prescribed methodology to determine the presence or absence of wetlands. The prescribed methods range from a Level 1 routine delineation where no on-site inspection is necessary and documentation is minimal, to a comprehensive determination where extensive on-site data collection and documentation is required.

In Minnesota, wetland professionals have informally used the term “determination” to be the rough equivalent of a level 1, routine delineation.

Wetland delineation is a discipline that requires application of the sciences (parameters) of botany, soils and hydrology. It is important for road authorities to have qualified people performing the work, either by

- developing internal expertise,
- hiring a qualified consultant,
- or through an agreement with another local government office to perform delineations such as SWCD, planning and zoning.

Appropriate training, and practice in the application of the 1987 Manual and Regional Supplements are the keys to successful wetland identification. Regional ecological differences within the state create a complicated matrix that requires wetland delineators working in different parts of the state to be aware of. It was these regional differences that added to the difficulty of producing the NWI maps and caused varying degrees of success in mapping wetlands across the state. See [Appendix E](#) for more information.

All of the approaches described below are taken from the 1987 Manual and can be used as appropriate, based on the complexity of the project being proposed. A description of the methodology used to identify wetland edges is recommended to be submitted to the Corps project manager. Also, all wetlands within the project work areas should be identified even if they will not be affected. This has become a standard condition of many permits. Those areas can be mapped using vegetation breaks and will require very little effort.

The 1987 Manual discusses two general types of delineation/determination approaches, **routine** and **comprehensive**. The routine approach is used in the vast majority of situations.

### 4.4.1 Routine Approach

There are three levels of routine delineations requiring different levels of effort.

- **Level 1: Onsite Inspection Unnecessary.**
  - Used when there is sufficient offsite information available to make a determination.
  - Exact wetland edge determination is not critical.
  - Involves review of mapping resources such as soils maps, air photos, NWI maps and personal knowledge of the site. It is recommended that a field review be implemented where a vegetation break can be mapped.
  - Briefly describe how determination was made.

- Used for temporary impacts such as in-kind culvert replacements (same size, length and elevation), maintenance activities that restore a previous condition (culvert cleaning or ditch restoration to original design dimensions), permanent impacts where the edge is not critical (toe of roadway slope is edge or entire impact is within a wetland).

**Cautionary Note:** While not required by the 1987 Manual, a field review of Level 1 delineations is recommended to verify offsite conclusions. The visit may be necessary to complete mapping of the wetlands.

- **Level 2: Onsite inspection Necessary.**
  - Most common type of delineation performed.
  - Includes collecting data on soils, vegetation and hydrology in the field.
  - Used when the wetland boundary is critical to determine extent of permanent wetland impacts.
- **Level 3: Combination of Levels 1 and 2.**
  - A portion of the site is delineated utilizing using offsite methods and another portion is delineated using onsite data collection.
  - Used when the exact boundary for only a portion of the site or project is relevant, such as, on linear projects where only a portion of the wetland is within the right of way, or the ends of large wetlands bounded by road fills for long stretches.

#### 4.4.2 Comprehensive Approach

Comprehensive delineations apply quantitative procedures and are usually completed by a team of experts.

- May be necessary when:
  - A project is extremely complex or controversial.
  - Severe disagreements over a completed delineation cannot be resolved.
  - A project is likely to end up in court.
- Typically completed by a team of experts in each parameter.

## 4.5 Wetland Documentation

### 4.5.1 Computations

Once delineations have been completed, maps of the delineated boundaries should be created and impacts quantified. This preliminary estimate of impacts should consider all types of impacts to wetlands as discussed in [Appendix C](#). Be prepared to re-compute impacts as the project plans progress and be prepared to adjust the project time line if nearing the five-acre threshold.

### 4.5.2 Wetland Delineation Report

The level of effort in preparing documentation for wetland impacts is commensurate with the scale of the project. For instance, a small impact project where only Level 1 delineations were performed will be sufficiently documented with a short description of the methods used and a photo of the project area. Larger projects should include more information. While a formal delineation report is not required, the following elements will assist in preparation of the permit application:

- Cover letter, including a short description of the work involved.
- A short description of methods used to identify wetlands (level of delineation, etc).

- Location maps, including specific location data with enough detail to drive to the project.
- A good map of the delineated wetlands showing boundaries, flow direction arrows, impact areas, and wetland types.
- A table with information for each wetland including:
  - Location (major watershed, section, township, range).
  - Wetland types.
  - Wetland impacts.
  - Dominant vegetation.
- The data sheets from any Level 2 delineations. (If requested).
- Photos.
- Plan sheets showing proposed construction in wetlands, if available.

**Cautionary Note:** *In Minnesota where the season is short, it is sometimes necessary to perform delineations outside the growing season. Verifying wetland delineations is difficult in the late fall or winter. If the delineation is in a difficult area where the determination is based on soils, slight topographical differences or seasonal vegetation; it may be impossible to assess the validity of the work and delay approval. The reasons for completing delineations outside the growing season along with methodology used should be documented.*

## 4.6 Jurisdictional Determinations

While delineations determine if an area is wetland, the Jurisdictional Determination (JD) is a determination made by the Corps of whether an area is subject to Corps jurisdiction. As a result of the Supreme Court decisions in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001) (SWANCC), and the consolidated cases Rapanos v. United States, and Carabell v. United States, 126 S. Ct. 2208 (2006), case by case evaluations are sometimes required to determine if there is a “significant nexus” to navigable waters. JDs can be requested early or as part of the permit application.

There are two types of JDs used to determine whether an area is subject to Corps jurisdiction: preliminary or approved.

### 4.6.1 Preliminary JD

- Assumes that all aquatic resources within the area of review are subject to CWA jurisdiction.
- Not appealable.
- Result in an expedited review by the Corps since each resource does not have to be evaluated.

### 4.6.2 Approved JD

- Corps individually assesses each aquatic resource to determine CWA jurisdiction.
- Decision is appealable.
- Potentially time consuming process that could slow project approval.
- May be desirable if there are a limited number of wetlands on a project and they may all be determined to be non-jurisdictional. Infrequently used for road projects.

To assist the Corps Project Manager in making an approved JD, the following information at a minimum needs to be submitted:

- Wetland boundaries.
- USGS map.
- Floodplain information.
- Drainage flow arrows.
- Locations of navigable waters near the project area.

**Cautionary Note:** *It is important to note that wetlands determined to be non-jurisdictional still must comply with Executive Order 11990 and the Minnesota WCA.*

## 4.7 Types of Corps Permits

While a project will likely require more than one permit or approval when affecting waters/wetlands (i.e.: WCA, DNR, MPCA) this guide only addresses the Corps permits for Section 10 and Section 404 of the CWA. A single [joint permit application](#) form has been developed to be used for all state and federal permit applications in Minnesota. For road projects use the “Public Transportation and Linear Utility Projects” application. For other projects (i.e. buildings, storage areas) use the general “Minnesota Local/State/Federal Application Forms for Water/Wetland Projects”. All Minnesota specific general permits and letters of permission may be viewed on the St. Paul District Corps website:

<http://www.mvp.usace.army.mil/regulatory/> Individual permit guidance is described in [33 CFR part 325](#).

### 4.7.1 Section 404

The Section 404 permit covers waters determined to be jurisdictional either by being navigable or having a significant nexus to navigable waters or waters of the U.S. There are two types of Corps Section 404 permit categories, general and individual.

There are three types of general permits. Programmatic General Permits (PGP), Regional General Permits (RGP) and Nationwide Permits (NWP) are issued periodically for categories of activities that result in only minimal adverse impacts, individually and cumulatively, to the aquatic environment. These have been pre-authorized by the Corps as having impacts below certain thresholds or considered minor enough to receive an abbreviated review and consequently can be authorized within a short time frame. The average goal is to issue general permits within 60 days. The general permits available in Minnesota are:

- **RGP-003-MN**
  - Statewide regional general permit that authorizes a specific list of projects meeting specific thresholds.
  - Generally authorizes impacts of up to 1/2 acre or less of water/wetlands depending on the category of activity.
  - The Corps has already completed NEPA analysis during the issuance of the RGP. Information provided by project sponsor is used to confirm the project meets the requirements of the GP.
- **GP-001-MN**
  - A statewide programmatic general permit to authorize activities that are regulated and approved by the DNR under the Minnesota Protected Waters statutes, reducing regulatory duplication. This GP requires the Corps to coordinate with the State Historic Preservation Office (SHPO). Can be used to cover impacts to DNR Public Waters of up to three acres. This permit is used less now that RGP-003-MN is approved for section 10 waters.
- **GP-10-R**
  - For use within the exterior boundaries of Indian Reservations except Fond du Lac.

- **Nationwide (NWP)**
  - Nationwide permits have been suspended in Minnesota for 404 purposes, but are still used for some Section 10 impacts.

***Cautionary Note:** In some cases, a project that otherwise would qualify for a GP may still require additional coordination for other issues such as section 106 or ESA.*

Individual permits include Letters of Permission (LOP) and Individual Permits (IP) for projects with more significant impacts that require an individual public interest review. The goal is to issue LOPs and IPs within 120 days.

- **Letter of Permission (LOP)**
  - LOP-05-MN establishes abbreviated individual permit procedures for projects that fall into an intermediate category of impacts.
  - Covers impacts < 5 acres of waters of the US for road projects; <3 acres for other projects.
  - Must meet LOP application and public notice requirements (internet notice 10-30 days).
  - MPCA waived 401 certification for LOP-05-MN.
  - Corps prepares abbreviated NEPA and 404 (b) (1) analyses.
  - LOP 10 R is for use within the exterior boundaries of Indian reservations except Fond du Lac. EPA has 401 authority.
  - LOP FDL is used within the exterior boundaries of the Fond du Lac reservation. The Band has 401 authority.
- **Individual Permit (IP)**
  - Applies to projects that impact > 5 acres of wetlands for roads or >3 acres for other projects or affect critical habitat or especially sensitive sites.
  - Subject to more rigorous environmental review, and agency and public scrutiny.
  - MPCA 401 certification review process applies. The Corps public notice serves as the notice for the 401 process. 401 certification will add to the duration of permit processing.
  - 30 day public notice period.
  - Individual permits require the Corps to write an environmental assessment (EA), full 404 (b) (1) analysis and public interest review.
  - IP projects on tribal lands need 401 certification or waiver directly from the EPA or its designee.

#### Points to Remember

In rare cases, the Corps may use its discretionary authority to require a higher level of permit review for any activity eligible for authorization under a general permit based on concern for the aquatic environment or for any other factor of the public interest.

Based on Corps national performance standards, the following permit issuance timelines are an average goal for planning purposes: a minimum of 120 days or more for an IP or LOP and 60 days for a GP. It is recommended that the project applicant have a dialog with the Corps to address anticipated timelines for specific projects.



Generally for IPs, the Corps will send out a “favorable determination letter” that indicates that the Corps review is complete and it intends to issue a permit when the 401 certification is received.

If a permit application is denied and a permit is not issued, the project cannot proceed. There is an administrative appeals process (33 CFR 331).

#### 4.7.2 Section 10

A list of the Section 10 Navigable Waters in Minnesota is published on the St. Paul District website: [http://www.mvp.usace.army.mil/docs/regulatory/mn\\_nav\\_waters.pdf](http://www.mvp.usace.army.mil/docs/regulatory/mn_nav_waters.pdf). Work over, under, or in these waters requires authorization under Section 10. A Section 404 permit may also be needed if there are discharges of dredged or fill material for the project. Although Corps Nationwide Permits have been suspended in Minnesota for section 404, they are still available for Section 10 impacts. For larger projects in Section 10 waters an individual permit may be necessary.

Activities such as maintenance of existing structures, bridge repair or replacement, temporary construction, minor dredging or encroachment into Section 10 waters require review to ensure that they will not cause an obstruction to navigation.

**Cautionary Note:** All types of wetland impacts are considered in calculating thresholds. Also, if projected impacts approach one of the upper permit thresholds, consider the consequences of actual impacts exceeding the threshold later in the process; increased review times and delays in public noticing.

### 4.8 Permit Application Submittals

#### 4.8.1 Amount of Supporting Documentation

General requirements for permit applications are specified in [33 CFR 325, Processing of Department of the Army Permits](#). Additionally, 40 CFR 230, Protection of the Environment, [Section 404\(b\) \(1\) Guidelines](#) for Specification of Disposal Sites for Dredged or Fill Material describes additional information needed for permit evaluation. Consistent with NEPA, 33 CFR, and the Section 404(b) (1) Guidelines, the amount of information required by the Corps to make a permit decision is directly proportional to the complexity of the project and the level of impacts anticipated – more information is required for large and complex projects.

The table below shows a check (✓) for information that is required at each permit level to issue a public notice. Additional information required to make a permit decision is indicated with text. Within 15 days of the receipt of an application, the district engineer will determine if the application is complete (33 CFR part 325.2).

#### 4.8.2 Required Information to be included in a Permit Application

	GP/RGP (PCN)	LOP	IP
Name, address, telephone, date of application	✓	✓	✓
Signature of applicant or agent		✓	✓
Location of activity (map, sect, twp, range, UTM)	✓	✓	✓
Pre-application consultation	Informal	Recommended	Highly recommended
Complete description of proposed activity and scope of	✓	✓	✓



work			
Drawings/plans showing delineations and impact areas	✓	✓	✓
All direct/indirect adverse environmental impacts of proj	✓	✓	✓
Identification of all aquatic resources in project area	✓	✓	✓
Purpose and need statement			✓
Project schedule			✓
Alternative analysis		Possible	✓
Description of work already completed		✓	
Description of fill- type, quantity, locations		Possible	✓
Adjoining landowners name/address		✓	✓
List of authorizations required by agencies	✓	✓	✓
Wetland Sequencing (Avoidance and minimization measures)	Standard condition	✓	✓
Mitigation strategy/plan	✓	Possible	✓
Wetland Delineation (In accordance with 1987 manual and supplements, see Section 4.4)	May be required	May be required	Probably required
USFWS coordination (T&E Species)	Possible	Possible	Possible
Historic/cultural resources	Possible	Possible	Possible
Letter of no effect, or potential effect and mitigation			
Tribal consultation	Possible	Possible	Possible
Timeline (goal)	60 days	120 days	120 days

Note: The RGP refers to a pre-construction notification (PCN), which is a Corps term that is roughly equivalent to an application. The content of a PCN is specified in the permit. In practice, most project proposers submit a combined joint notification form to all of the required permitting agencies to simplify the process.

The checked boxes (✓) above indicate the minimum amount of information that must be provided for a complete application according to 33 CFR 325.3 that is sufficient to issue a public notice. Additional information will likely be required to make a permit decision. For instance, the Corps must determine that a proposed activity complies with the terms of the permit for RGP type projects. That may require a wetland delineation at a level sufficient to make that decision. At the LOP level, more information may be needed, such as more detailed plans or an alternative analysis. For IP level projects, the most detailed information must be provided to assure that the Least Environmentally Damaging Practicable Alternative (LEDPA) is chosen, [Section 404\(b\) \(1\) Guidelines](#) (40 CFR sect. 230.10(a)).

For any level of project, if endangered species, historic/cultural resources or tribal lands are present, there will be additional work required to make the permit decision and consequently more time should be budgeted for these projects. Since the Corps permit is a federal action, these issues must be addressed. It is usually possible to calculate reasonable time frames for permit approval by “working back” from the proposed project letting date through early coordination with the Corps. For more detailed pre-application checklist see [Appendix A](#).

## 4.9 Corps Evaluation

### 4.9.1 The Corps evaluation of a permit application involves three analyses:

- **NEPA:** Evaluating the proposal's impacts in accordance with the [National Environmental Policy Act \(NEPA\)](#) as specified in [33 CFR 325](#).

- **Public Interest Review:** Determining the probable impact the proposal may have on the public interest in accordance with [33 CFR 320.4\(a\)](#).
- **404(b)(1):** Determining whether the proposal complies with the [Section 404\(b\) \(1\) Guidelines](#) (40 CFR Part 230). These implementing guidelines for the CWA restrict discharges of dredged or fill material where **less environmentally damaging practicable alternatives** exist.

In very rare cases, the Corps could determine that a proposal is contrary to the public interest and a permit will be denied.

#### 4.9.2 The goal of the process is to assure that:

- The **Least Environmentally Damaging Practicable Alternative (LEDPA)** is chosen.
- Impacts are avoided where feasible.
- Potential effects are minimized.
- Unavoidable impacts are mitigated/compensated.

### 4.10 Exempt Activities

Some activities may not require permits because they are specifically exempted by the CWA.

Under Section 404(f) (1) (c) of the CWA (see also 33 CFR 323.4 (a)(3), 40 CFR 232.3(c)(3) and Regulatory Guidance Letter No. 07-02, discharges of dredged or fill material associated with construction or maintenance of irrigation ditches, or the maintenance (but not construction) of drainage ditches, are not prohibited by or otherwise subject to regulation under Section 404 of the CWA. Maintenance is defined in the RGL as “excavation of accumulated sediments back to original contours and reshaping of side-slopes”.

Under 33 CFR 323.4 (a)(2), a permit is not required for maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge abutments or approaches, and transportation structures. Maintenance does not include any modification that changes the character, scope, or size of the original fill design. Emergency reconstruction must occur within a reasonable period of time after damage occurs in order to qualify for this exemption.

**Cautionary Note:** *Exempt activities may be self-determined but may be questioned by the corps project manager. The project proposer should be aware of the risk of self-determination.*

## 5 SUPPORTING DOCUMENTATION FOR PERMIT APPLICATIONS

The following subjects are required to be addressed with Corps permit applications in accordance with the Section 404 (b) (1) Guidelines and 33 CFR. When a NEPA document is prepared for a federally funded project, it usually provides sufficient information to assist in the Corps permit process. It is suggested that project NEPA documents or pertinent portions be submitted to the Corps early in the permit process to assist them in their NEPA review for federally funded projects.

While a project memo is not required for locally funded projects, information will still need to be developed for locally funded projects to address the Purpose and Need, Alternatives analysis, and Wetland Mitigation Sequencing. See below for additional guidance. Supporting documentation for locally funded projects may utilize the project memo template available through the State Aid Office as a resource.

**Cautionary note:** *In some cases, the NEPA document that satisfies the FHWA for a federally funded project may not meet the Corps requirements for its NEPA analysis. For example, a federally funded project with a Categorical Exclusion (CE) NEPA document or check list may not provide sufficient information for the Corps analysis and may require the Corps to prepare its own Environmental Assessment. The Corps will most likely require information from the applicant to prepare their EA.*

## 5.1 Purpose and Need

The demonstration of purpose and need for the project is the responsibility of the applicant. The purpose and need statement is then used by the Corps to complete the 404 evaluation of the project. The purpose and need discussion for a project is in many ways the most important part of an environmental document. It establishes why a road authority is proposing to expend money. It answers questions such as:

- Why are public dollars being expended?
- What is the problem to be fixed?
- What are the goals of the proposal?

A purpose and need statement should be a simple statement of why the project is proposed and describe what deficiencies and transportation problems need to be addressed. It should clearly demonstrate that a “need” exists.

The need for road projects is often driven by deterioration of the current facility or design deficiencies causing safety or operational problems. Common needs include:

- |  |                                  |
|--|----------------------------------|
| • Accident problems                    | • Drainage – flooding, ice       |
| • Culvert deficiencies                 | • Sight distance deficiencies    |
| • Guardrail deficiencies               | • Inslope or ditch deficiencies  |
| • Meet current design standards        | • System continuity/capacity     |
| • Intersection improvement/turn lanes  | • Pedestrian or multimodal needs |
| • Structural deficiencies- useful life | • Stormwater treatment           |

There may be more than one way to address the problem or need, but the purpose should not identify how the problem will be solved. The purpose statement forms the basis for an alternatives analysis.

Purpose and need statements may be reexamined and updated as appropriate throughout the project development process. A purpose statement is used by the Corps in any subsequent permit evaluation. The purpose statement is used to identify the range of alternatives for a project and is used in the Corps analysis of practicable alternatives.

## 5.2 Alternatives Analysis

All practicable alternatives must be considered and evaluated until the **least environmentally damaging practicable alternative** (LEDPA) can be identified in accordance with Section 404(b)(1) Guidelines. The LEDPA documents that the alternative with the least impact to the aquatic environment has been chosen.

For simple jobs such as a mill and overlay with turn lane additions, the alternatives can consist of a build and a no build. Typically, the no build option will not satisfy the purpose and need of the project, but it

needs to be retained for comparison purposes even if it has been removed from further consideration. As proposed projects become more complex, the alternative analysis also becomes more comprehensive. The alternative chosen for construction must satisfy the purpose and need defined for the project.

### 5.3 Wetland Mitigation Sequencing

Wetland mitigation sequencing refers to the process of first **avoiding** impacts, then **minimizing** impacts to the extent possible, and finally **replacing** whatever can't be avoided or minimized (unavoidable impacts). The underlying assumption is that permits will only be given for unavoidable impacts.

#### 5.3.1 Avoidance

Most **avoidance** measures include either moving the construction to a new location, shifting or eliminating a portion of the project to eliminate an impact.

#### 5.3.2 Minimization

Listed below are a variety of design features that have been employed in the construction of roads in Minnesota to **minimize** wetland impacts. Consider incorporating these design features when they are practical and feasible, and public safety will not be compromised. Use of these methods is subject to the engineering judgment of the project engineer and the project must still meet minimal standards.

- Steeper inslopes (1:4 or steeper)
- Utilize guardrail if necessary and meets design standards.
- Lower vertical profiles.
- "Broken back" inslopes for roads with a high vertical profile (over 10-12 feet).
- Reduced radius curves.
- Reduce ditch widths.
- Steeper backslopes.
- Reduce muck excavation with light weight fill, geotextile, surcharges, etc.
- Narrow shoulders (unless needed for bikes or pedestrians).
- Minimum safe sight distances to minimize the need for cut and fill.
- Turn lanes instead of frontage roads.
- Reduced design speed.
- Designation as a "Natural Preservation Route" to allow reduced design standards in rare cases.
- Construct ditches so that wetland outlets are not lowered.
- Ensure that the location or design does not significantly reduce the contributing watershed of a wetland, resulting in changes to the hydrologic regime.
- Use of bridges rather than culverts, in rare cases.

#### 5.3.3 Mitigation

The EPA and Corps issued revised regulations governing compensatory mitigation for authorized impacts to wetlands, streams, and other waters of the U.S. under Section 404 of the Clean Water Act in April 2008. [[Mitigation Rule on Compensatory Mitigation for Losses of Aquatic Resources \(33 CFR 325 and 332, and 40 CFR 230\), Federal Register, 4/10/08](#) (Mitigation Rule)].

In January 2009, the St. Paul District released the [St. Paul District Policy For Wetland Compensatory Mitigation in Minnesota](#), which emphasizes that a watershed approach should be

used to replace lost wetland functions and values and establishes a consistent approach for Corps Project Managers to address ratios, crediting, debiting, bank service areas and banking procedures.

Public road projects involving the repair, rehabilitation, reconstruction, or replacement of existing roads may go to the [BWSR Local Government Roads Wetland Replacement Program](#) for replacement of unavoidable impacts. To qualify for this program, public transportation authorities must ensure that projects minimize the amount of wetland filling or draining per [Minn. Rule Chapter 8420.0544 Replacement For Public Transportation Projects, Item D](#).

Public road projects involving new roads or expansion solely for increased capacity are not eligible for the BWSR Road Replacement Program and must fulfill the mitigation requirements through other means.

## 5.4 Other Issues

### 5.4.1 401 Water Quality Certification

Section 401 of the CWA requires the MPCA to certify that all projects that receive a federal license or permit are in compliance with state and federal water quality guidelines. For general permits and letters of permission, a certification or waiver has been obtained in advance. For individual permits, the MPCA conducts a separate review, which begins after the Corps has issued its public notice. This process must be completed before the Corps permit is issued, which may affect project timelines.

### 5.4.2 Disposal of Excess Material

Some projects, especially those requiring major grading in less than ideal soils, may result in excess materials to be disposed of outside of the roadway core. The Corps may request the location of any off project disposal sites. Typically, these unsuitable soils become the property of the contractor and must be disposed of outside of the right of way. Special provisions and specifications for the project should prohibit the disposal in wetlands or other sensitive areas, but the contractor should be monitored to assure compliance. There may also be local ordinances or permits required to place material on private property.

### 5.4.3 Borrow Sources

A standard condition of most permits requires a cultural resources survey if borrow material does not come from a licensed commercial source. This becomes an issue when common borrow is excavated from private landowner sources to save on haul distances. The contractor or road authority must inform the Corps of the location of any new, unlicensed borrow sources and the Corps will determine whether additional cultural resources investigation or surveys are necessary.

### 5.4.4 Emergency Situations

Corps Division engineers are authorized to approve special processing procedures in emergency situations. An emergency is a situation that would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process and application under standard procedures (33 CFR part 325). Emergency procedures are rarely used because the Division Engineer for the St. Paul District is located in Vicksburg, MS. It is recommended that an applicant coordinate with the Corps to determine the best course of action, which often is a GP or an after the fact permit.

#### 5.4.5 State and Local Permits/Approvals

Although this document only addresses the Corps permit process, all projects need to also assure compliance with state and local permit processes.

#### 5.4.6 Permanent Type Conversions

When a wetland will be permanently converted to a new type, for instance when a scrub shrub wetland will be converted to a fresh meadow to allow for sight distance improvements, the need must be demonstrated. A wetland mitigation sequencing process should be followed that shows the engineering need for the permanent conversion. See [Appendix C](#).

#### 5.4.7 Historic Properties on Non-Federal Projects

Whenever a Corps permit is required, a Section 106 review under the National Historic Preservation Act will be completed. The Corps will determine, in consultation with the SHPO, if historic or archeological properties are present, or if a survey is needed in order to determine if such properties exist within the project area. The Corps Project Manager should begin the Section 106 review as early as possible to keep the project on schedule. In the event that a property is determined eligible for the National Register of Historic Places, the Corps, as the responsible federal agency, will need to consult with SHPO to determine if the property will be adversely affected and if there is a way to avoid such an effect. If not, mitigation of the adverse effects will be required. Early coordination between the Corps and the project applicant will help in the determination of appropriate studies and coordination required. If a survey is required, the Corps Project Manager will notify the applicant as early as possible. The applicant will then initiate the work and provide findings to the Corps for their consultation with the SHPO.

#### 5.4.8 Endangered Species Coordination

When the project site is located an area of known federally listed species or habitat, the Corps review will include a determination regarding compliance with Section 7 of the ESA before authorizing the activity. Federal agencies are required to consult with the USFWS if any effects may occur as a result of any federal action whether or not federal funds are used. Consultation may determine that there will be “no effect”, which should be documented and maintained in a written record that describes the supporting rationale. If an action is determined to potentially jeopardize a federally listed species, “Reasonable and Prudent Measures” (RPM) to minimize harm will need to be documented in a biological opinion.

The FHWA and the USFWS have a Memorandum of Agreement delegating the review authority from FHWA to State transportation Agencies. For federally funded projects, the MnDOT Office of Environmental Stewardship (OES) has been authorized to act as FHWA’s delegate for review of potential impacts for Section 7 coordination. If a determination of no effect cannot be made, coordination with the USFWS is required and will be done by OES. This coordination is typically sufficient for the Corps to complete their review. For non-federally funded projects, if a biological opinion is required, the Corps will notify the applicant as early as possible so they can initiate the work and provide the report to the Corps Project Manager.

Project proposers should understand that federal or state endangered species regulations may apply whether or not a Corps permit is required.

#### 5.4.9 Tribal Consultation

The Corps is required by the NHPA to consult with Indian tribal governments before issuing a permit which may affect the historic properties of religious or cultural significance to tribes. The Corps is also required under E.O. 13175 and various treaties to work with Indian tribes on a government-to-government basis to address issues concerning tribal self-government, trust resources, treaty and other rights. This government-to-government relationship may take many forms, from notifying a potentially impacted tribe of a proposed project to formal consultation meetings and coordination procedures.

The Corps will make every effort to avoid delays in the permit evaluation, but large or controversial projects may require complicated consultation and extended timeframes. If additional cultural resource investigations result from tribal consultation, the applicant may be required to initiate additional survey work or involve tribal staff in field investigations.

## 6 Summary

### 6.1.1 Summary

This guidance was developed to help an applicant through the Section 404 and Section 10 permit process. It did not address other state or local permits or approvals that may be necessary before a project can be constructed. There are, however, several points that should be re-emphasized here:

- Non-federally funded projects that receive a federal permit must still comply with NEPA.
- Early coordination/communication with the Corps is strongly encouraged.
- Wetland delineations should be completed as early as possible so permit decisions can be based on complete information.
- Wetland delineations can be reviewed and approved in advance of a permit application.
- Permit application packages need to have all required information and be submitted early.
- When the Corps has determined that sufficient information has been submitted, the applicant should be assured of a timely response by the Corps.



## Appendix A: Pre-Application Checklist

**Types of Permits.** The Corps issues General Permits (Programmatic, Regional General, or Nationwide) and Individual Permits (Letter of Permission and standard permits) for proposed work in wetlands or waters. The type of information required for permit applications depends primarily on the magnitude of impacts to wetlands and waters, and the anticipated impacts to other resources (e.g., cultural resources, biological resources etc), and consequently the level of permit evaluation (i.e. general vs. individual permits).

**General Permit Reviews.** General permits in the St. Paul District include the RGP-003-MN (GP) and the Section

10 Nationwide permits (NWP). General permits are issued for activities that are similar in nature and result in only minimal individual and cumulative adverse impacts. Generally, if an activity would permanently impact no more than 1/2 acre or 500 linear feet of waters it can be authorized under a general permit. Additional project information and resource agency coordination may still be required for projects being evaluated under a general permit (i.e., biological/endangered species or cultural resources).

General permits include terms and conditions for compliance and most require a pre-construction notification (PCN). PCN requirements are outlined in the Section 4 of the RGP-003-MN and general condition 31 of the NWP; RGP-003 PCN requirements are also provided in Attachment A to this guidance. The MN joint permit application form can be used in lieu of submitting a PCN as long as it minimally contains all the information listed in

Attachment A. PCN requirements give the Corps the opportunity to evaluate certain proposed general permit activities on a case-by-case basis to ensure that they will have no more than minimal adverse effects, individually and cumulatively. This case-by-case review often results in adding project-specific conditions to the authorization to ensure that the general permit authorizes only activities that result in minimal individual and cumulative effects on the aquatic environment and other public interest review factors. Review of the PCN may also result in the Corps asserting discretionary authority to require a higher level or individual permit review.

**Pre-Application Meetings.** Pre-application meetings can help streamline the permit process by alerting the applicant to potentially time-consuming issues that are likely to arise during the evaluation of their project (e.g., compensatory mitigation requirements, historic properties, or endangered species). While typically not necessary for projects that would be eligible for review under a general permit, we strongly encourage the use of pre-application meetings for projects with greater impacts and/or those that might affect resources of concern. The applicant should bring information about the project to the pre-application meeting so the Corps can make an initial determination regarding the level of permit review, and provide feedback regarding the information required to complete a permit evaluation. This may include the following types of information:

1. A statement of the purpose and need of the proposed project.
2. A detailed vicinity map showing the preferred project location and alternatives considered.
3. A preliminary wetland delineation along with a description of the proposal's likely impacts to wetlands/waters.
4. Preliminary project design or project plans – if available
5. Any preliminary plans for compensatory mitigation.

**Individual Permit Reviews.** An Individual permit review is required for proposed work that exceeds the impact thresholds in the general permits. The St. Paul District issues two types of individual permits: Letters of Permission and standard permits. Individual permit evaluations require additional analysis and time to complete as compared to the general permit process.

Permit applicants may, and in many cases will be, required to furnish additional information determined by the Corps to be necessary to make a public interest determination, including, where applicable, a determination of compliance with the Section 404(b)(1) Guidelines. Such additional information may include appropriate and practicable mitigation, analysis of alternatives, or additional impact analyses. The Corps will issue a public notice while waiting for additional information necessary to evaluate the application. While this information is not required for the public notice, it is important that such information be provided to the Corps as early in the permit evaluation as possible. A comprehensive list of the information that may ultimately be needed for a permit evaluation is provided in Attachment B to this guidance.

As part of an individual permit review, the Corps is required to complete an environmental assessment under NEPA; a statement of findings; a compliance determination according to the Section 404(b)(1) guidelines of the Clean Water Act; and a public interest review. Any environmental documents prepared by the applicant or any supporting or funding agent, as well as any letters regarding consultation with USFWS, the SHPO or other state agencies such as the DNR, would aid the Corps in completing the permit evaluation.

### **Attachment A: Information Required for a Complete Application for a GP, NWP, LOP or IP**

The following is a list of information that is needed, at a minimum, for a general permit (GP or NWP) review pursuant to Section 404 of the Clean Water Act. This list is referred to as the pre-construction notification (PCN) requirements. The Corps uses the PCN to ensure that the proposed activity is eligible for GP authorization, and will have no more than minimal adverse effects, individually and cumulatively.

See Attachment B for a comprehensive list of the information that may ultimately be needed to complete a permit evaluation. Attachment C provides supplemental guidance for work in waters associated with transportation projects.

**PCN Information Required for a General Permit Authorization.** The PCN must be in writing and include the following information. The MN joint permit application form can be used as long as it contains all the information listed.

- ☐ Name, address, and telephone numbers of prospective permittee;
- ☐ Location of the proposed project;
- ☐ A description of the proposed project and scope of work;
- ☐ All direct and indirect adverse environmental effects the project would cause;
- ☐ Identification of aquatic resources in the project area (in some cases the Corps may require a delineation of the project area prepared in accordance with the current Corps of Engineers Wetland Delineation Manual);
- ☐ A statement regarding compensatory mitigation (33 CFR 325.1(d)(7));

- ☐ Drawings or sketches should be provided as necessary to show that the activity complies with the terms of the general permit;
- ☐ Any other general or individual permits used or intended to be used to authorize the project.

**Additional Information Necessary for a Complete Application for an LOP or IP.** The following list of additional information should be submitted if an applicant's proposed activity is not eligible for authorization under the GP and must be evaluated under the Letter of Permission (LOP) or Individual Permit

(IP) evaluation process, or if the applicant does not know what type of permit would be required. The MN

joint permit application form can be used as long as it contains all the information listed above and below.

- ☐ Location and dimensions of any adjacent structures to the proposed activity;
- ☐ Purpose and need for the proposed activity;
- ☐ Drawings/plans showing ALL proposed and related activities;
- ☐ Proposed schedule for completion of the activity;
- ☐ Name/address of adjoining property owners;
- ☐ Description of any planned dredging activities and any filling activities, including type, composition, quantity, and locations;
- ☐ List of all authorizations required for the proposed activity, including all approvals received/denied;
- ☐ Applicant signature and date.

## Attachment B: Comprehensive Permit Application Checklist

An application for a Department of the Army Individual permit under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 will be determined to be complete when the U. S. Army Corps of Engineers (Corps) receives sufficient information to issue a public notice. The application should address all activities that the applicant plans to undertake that are reasonably related to the same project and for which a Department of the Army permit would be required. See Attachment A for a list of information that is needed, at a minimum, for a complete application and/or a general permit review. Attachment C provides supplemental guidance for work in waters associated with transportation projects. The following is a comprehensive list of the information that may ultimately be needed for a permit evaluation pursuant to Section 404 of the Clean Water Act.

### Contact Information:

- \_\_\_ Name, address, telephone and email and fax numbers of the applicant.
- \_\_\_ Name, title, address, telephone and fax numbers of the authorized agent, if applicable.

### Project Location:

- \_\_\_ Project street address, municipality, county, and state.
- \_\_\_ Location/Vicinity map indicating project location and driving directions to the site.
- \_\_\_ Legal description of property (Section, Township and Range).
- \_\_\_ USGS Topographical Quadrangle map labeled with quad name and project location.

- \_\_\_ Aerial photos indicating project location
- \_\_\_ Latitude and Longitude in degrees, minutes, and seconds.

**Project Description:**

- \_\_\_ Project name.
- \_\_\_ Project purpose, need, and intended use.
- \_\_\_ Name of nearest waterbody.
- \_\_\_ If a transportation project, the MnDOT S.P or state aid project (S.A.P.) no.
- \_\_\_ The anticipated letting date and/or anticipated date of construction.
- \_\_\_ Description of the existing land use.

**Wetland determination or delineation** report, conducted in accordance with 1987 Corps of Engineers Wetland Delineation Manual and any supplemental guidance, as applicable, including presence/absence and type of wetlands and stream/rivers for the entire project site (Field verification by the Corps of the delineation may be required). If no report has been prepared, include a description of the methods used to identify aquatic resources for the project site.

**Jurisdictional Determination (JD) Form.** The Corps typically uses a preliminary jurisdictional determination when beginning a permit evaluation. Applicants generally receive a preliminary JD form from the Corps as part of the review. Upon receipt we ask that the form be signed and returned to the designated Corps PM. Approved JDs will be completed and provided at the request of the applicant or when the Corps determines that an approved JD is necessary.

**Project narrative** describing all project features and anticipated temporary, permanent, and indirect environmental impacts, including method(s) of construction:

\_\_\_ A complete description of the proposed activity. Include sufficient information concerning the nature of the activity to allow a complete review of potential impacts. The application must include all activities the applicant plans to undertake that are reasonably related to the project and other project related areas within the permit area(s) (examples: fill activities, coffer dams, borrow and disposal sites, access roads, equipment ramps, temporary work or staging areas, dredging, in stream work, ditch maintenance or construction, etc.). Include impacts associated with borrow pits, disposal areas, staging areas, etc. The application must include a description of the type of structures, if any, to be constructed or culverts to be installed or replaced and a description of the type, composition, and quantity of material to be discharged. A description of the proposed work should include such information as the height, width, and length of structures and fills; widths of cleared rights-of-way, location of all impacted waters, and the size and spacing of culverts, bridges and other water crossings.

\_\_\_ Type(s) and amount of fill material (cubic yardage) proposed for discharge into and/or excavated from WOUS including below OHW of streams.

\_\_\_ Surface area of wetlands (by wetland type) or other waters filled in square footage/acreage.

\_\_\_ Surface area of wetlands (by wetland type) cleared and method of clearing. The purpose of the wetland clearing. Will the clearing be a temporary or permanent wetland conversion?

\_\_\_ Information on hydrology or hydraulics.

\_\_\_ Location and description of any dredged material disposal site.

\_\_\_ For activities involving dredging in navigable waters of the United States, a description of the type, composition, and quantity of the material to be dredged, the method of dredging, and the site and plans for disposal of the dredged material.

**Environmental Documentation:**

\_\_\_ For General Permits, provide an impact assessment of the adverse and beneficial effects, both permanent and temporary, of the proposed work and documentation that the work would result in no more than a minimal adverse impact on the aquatic environment.

\_\_\_ For Individual Permits, submit any federal or state environmental analyses that have been prepared to address the proposed work, such as an environmental impact statement, an environmental assessment, a state EAW, or a project memorandum.

\_\_\_ Include any analyses or studies to determine effects, such as hydrology, hydraulics, lateral drainage, effects on

factors such as fish and wildlife values, water flow and circulation, or other public interest factors.

**Project Plans/Drawings**

\_\_\_ Include plans, profiles, and cross-sectional views (8.5 x 11-inch sheets) of all work (fills, excavations, structures, etc.), both permanent and temporary, in, or adjacent to, waters and wetlands. Include bridge and culvert plans. Plan-view drawings must clearly indicate the direction of water flow and must clearly show a delineation/determination of wetlands and water features within the permit area that are potential waters of the United States. Plan-view drawings should show the limits of any temporary or permanent impacts in wetlands and waterways. Cross-section/elevation/profile must show existing and proposed water depths and land elevations relative to the ordinary high water mark when applicable.

**A written statement regarding aquatic resource avoidance and minimization:**

\_\_\_ A written discussion of the alternatives considered and the rationale for selecting the proposed alternative as the least environmentally damaging practicable alternative. Practicable alternatives that do not involve a discharge into a special aquatic site, such as wetlands, are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise. Also include documentation that the amount of area impacted is the minimum necessary to accomplish the project.

\_\_\_ Discuss any alternatives considered that would avoid or have less impact on aquatic resources.

\_\_\_ Discuss measures that will be taken to avoid and/or minimize aquatic resource impacts.

**Compensatory Mitigation**

\_\_\_ Discuss any actions that will be taken to compensate for unavoidable impacts to wetlands or waters.

\_\_\_ A compensatory mitigation concept plan for unavoidable adverse impacts to the aquatic environment may be required. This plan should include a description of proposed appropriate and practicable actions that would restore, enhance, protect, and/or replace the functions and values of the aquatic ecosystem unavoidably lost in the project area because of the proposed work. A mitigation plan or concept should include:

1. Mitigation goals
2. Information related to: mitigation site location; site specific objective; existing conditions relating to soils, hydrology, and vegetation; proposed manipulation of soils, hydrology, vegetation, landscape, and water control structures: proposed construction work, seeding, planting (preliminary design).
3. Delineations of existing conditions
4. Management plans, acquisition plan, site ownership, agreements
5. Plat/Legal description for filing deed restriction/conservation easement (will be required when site is approved)
6. Monitoring proposal

### **Endangered Species Act**

\_\_\_ Provide any information that addresses whether any species listed as endangered or threatened under the Endangered Species Act (ESA) or designated critical habitat might be affected by, or found in the vicinity of the proposed project. Direct coordination with the United States Fish and Wildlife Service (FWS) concerning the potential impact of the entire project on endangered and threatened species is strongly encouraged prior to submitting a permit application. Provide any FWS correspondence concerning any federally listed Threatened and Endangered Species that may be affected by the proposed activity. If the project is funded by a federal agency (e.g., FHWA) provide that agency's documentation of compliance with the ESA. In the absence of other federal agency documentation of compliance or in the case of state or locally funded projects, the Corps may be required to consult with the FWS prior to issuing any authorization.

### **Section 106 of the National Historic Preservation Act**

\_\_\_ Provide any information that documents whether any cultural resources or historic structures, particularly those historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), would be affected by, or are in the vicinity of the proposed project. Include the results of any cultural resource surveys.

\_\_\_ Provide any letters or information from the State Historic Preservation Office (SHPO) indicating whether the project is located on property listed or eligible for listing on the NRHP, and/or the presence of historic or archaeological resources. If the project is funded by a federal agency (e.g., FHWA) provide that agency's documentation of compliance with Section 106 of the National Historic Preservation Act. In the absence of other federal agency documentation of compliance or in the case of state or locally funded projects, the Corps may be required to consult with the SHPO prior to issuing authorization. If the project involves a bridge replacement or improvement and the existing structure is over 50 years old, it is likely that at a minimum, a historic structure evaluation to determine the structure's potential historical significance would be required.

### **Tribal Consultation and Corps Trust Responsibilities**

\_\_\_ Provide any information addressing the potential to affect tribal interests and the needed level of coordination and or consultation with the appropriate Indian Tribal governments.

### **Other information:**

\_\_\_ Copies of previous Federal or State approvals and any other permits applied for, used, or intended to be used to authorize any part of the proposed project or related activity.

\_\_\_ Letters or information from the State agency(s) indicating results of research from the Natural Heritage Database.

\_\_\_ Information regarding compliance with CWA Section 401 water quality certification requirements.

\_\_\_ Project review timelines. Include a discussion of the planned time frame for completing the proposed project. The Corps will compare this time frame to the time required to complete the permit evaluation, based on the applicable permit type (GP or IP), any required noticing, receipt of information requests, the possibility of receiving public comments, timelines for required coordination (106, ESA), any environmental analyses, and provide feedback regarding the permit evaluation time frame.



## Attachment C: Additional Application Guidance for Transportation Projects

**Purpose & Need for the Project** The reason why the project is needed (Check all that apply)

\_\_\_ Infrastructure Deficiency (Structurally deficient bridge, Poor Pavement, etc.):

\_\_\_ Geometric Deficiency (Functionally obsolete or narrow bridge, Inadequate vertical clearance, Narrow shoulders, sidewalks not meeting ADA requirements, etc.):

\_\_\_ Safety (Describe problem or feature contributing to safety issue):

\_\_\_ Inadequate Capacity (Traffic volume exceeds existing capacity):

\_\_\_ Legislative Mandate (Provide copy of the mandate)

\_\_\_ Other (Economic development, Connectivity, Emergency Repair, etc. Describe).

**Proposed Work:** (Check all that apply)

- \_\_\_ Roadway Capacity Expansion ( e.g. from 2 lanes to 4 or 6
- \_\_\_ lanes) New or offset alignment
- \_\_\_ Add/improve shoulders
- \_\_\_ Overlay Pavement repair
- \_\_\_ Vertical horizontal curve corrections
- \_\_\_ Signalization
- \_\_\_ Auxiliary/Turn
- \_\_\_ lanes Sidewalks
- \_\_\_ Bridge replacement
- \_\_\_ Bridge rehabilitation
- \_\_\_ Other (Describe)

**Description of Existing facility (Roadway):**

No. lanes:                      Shoulders:                      /type (Sod, Paved,etc)

Functional classification

Traffic: Present ADT                      Future ADT (20 year Projection)

**Description of Existing facility**

**(Bridge):** Bridge No.:

Location

: Existing Bridge Width:

Name of water body or facility crossed (RR, etc):

Date Bridge was constructed:

Type of bridge:

On MnDOT historic bridge list?

**Description of Proposed Improvement Work**

Proposed Typical:

No of Lanes

Width of Driving Lanes                      ft

Type of Driving Surface (Paved, Gravel,

etc.) Width of Shoulder                      ft

Type of Shoulder (paved, Gravel, Sod,

etc.)

Proposed Bridge:

Proposed Structure                      (Span, RCB, etc.)                      Proposed Bridge Width                      ft



**Project Description:**

PROVIDE A BRIEF DESCRIPTION OF THE PROPOSED WORK (eg. Adding shoulders & turn lanes from Sec Line EW 65 to EW 66 on NS 467, Bridge replacement on EW 67 over Coon Creek, Reconstruction of Rock Creek Road from 2 to 4 lane section from 24th Street to 36th Street, etc.)

## Appendix B: Case Studies/Examples

### Example #1: General Permit (GP, RGP)

The vast majority of proposals are for minor, routine activities that have minor impacts to the aquatic environment. According to the 404 (b) (1) Guidelines, "It is generally not intended or expected that extensive testing, evaluation or analysis will be needed to make findings of compliance in routine cases."

The following is a scenario that has been repeated multiple times over the past several years in an effort to make government more accountable, or to provide an economic stimulus to the economy by providing construction jobs. The project had been scheduled for construction in three years, but due to special federal funding, it must be advanced and construction started within six months.

**Project Description:** Mill and overlay six miles of a two lane roadway with the addition of four right turn lanes.

**Wetland Impacts:** 0.21 acre of various wetland types.

**Project Development:** First, determine the level of wetland delineation that will be required. For many small projects a level one delineation may be sufficient for minor impacts. If delineations have already been completed, plan views of the impact areas should be provided. If not, a close approximation is acceptable. For instance, if a new turn lane is added, an impact estimate could be as simple as computing width times length of a typical lane (12 x 480 = 5760 sf). Determine if final delineations can be completed in time for a permit application or if some of the work must be eliminated in order to deliver the project.

**Project Timeline:** A field review of the project during the growing season should be built into the timeframes listed below to allow the Corps to view the delineated wetlands and other concerns. The following timeline represents the minimum times to allow for public interest review and permit processing. If additional information is requested, permit processing could be delayed and ultimately, project development schedules lengthened. Ideally, all work will be completed as early as possible to prevent any delays to the letting and construction schedule.

6 months prior to bid opening: Make early contact with the Corps project manager to explain compressed schedule, discuss purpose and need and what will be required for a complete application.

5 months prior to bid opening: Complete delineations, submit to Corps for review and begin plan preparation. Assure that the project will stay within the RGP thresholds.

4 months prior to bid opening: Submit permit application. Final impacts will not be known yet, since the design plans haven't been completed, however, close approximations will allow the Corps to begin their review.

2 months prior to bid opening: Contact the Corps project manager with the final impact amounts and confirm that the project will qualify for the RGP. Permit needs to be obtained by the bid opening date, which under normal circumstances is about two months before construction.

Construction: Road authority monitors the construction to assure compliance with the permit conditions.

If impact totals, or minor revisions to the proposal occur late in the process, they can usually be handled with a letter to revise the respective Corps files and the project files.

### Example #2: Letter of Permission (LOP)

A typical LOP project may include the widening of roadway and/or shoulders to meet current design and safety standards. The LOP in Minnesota is a form of an individual permit and will receive commensurate review and require a public notice process.

**Project Description:** Widen an existing road to provide twelve foot lanes and six foot shoulders for a distance of ten miles.

**Wetland Impacts:** Placement of fill in 3.54 acre of wetlands in several wetland complexes.

**Project Development:** It is recommended to allot up to one year to complete the necessary coordination for permitting in Minnesota for a project with this magnitude of impacts. Seasonal limitations (snow) may preclude the performance of wetland delineations until spring. Even during snow covered conditions, however, a close approximation of impacts can be made simply by doing a field review and rough sketch of wetland areas on a scaled map of the project area. Offsite methods (level 1 determination) can also be used to make close approximations. Wetland types, acreage of impact, and general vegetation types can all be determined with acceptable accuracy for environmental documentation. The assumptions made during the preliminary review will then be corroborated by delineations in the spring. With agreement by the Corps project manager, the permit process could potentially begin using the preliminary results.

The proposer needs to be aware that impact amounts can vary during the project development stage while complying with design standards or between preliminary and final delineations. For this reason, the project sponsor needs to be cognizant of permit thresholds which could add to the required time to complete a permit process, i.e. if the project is close to the 5 acre maximum LOP threshold for road projects.

**Project Timeline:** A field review of the project during the growing season should be built into the timeframes listed below to allow the Corps to view the delineated wetlands and other concerns. The following timeline represents the minimum times to allow for public interest review and permit processing. If additional information is requested, permit processing could be delayed and ultimately, project development schedules lengthened. Ideally, all work will be completed as early as possible to prevent any delays to the letting and construction schedule.

12 months prior to bid opening: Make first contact with the Corps project manager to discuss purpose and need and alternatives to be considered. Possibly hold an early joint TEP/Corps meeting to discuss the project and expectations. Complete preliminary investigations to determine potential impacts and confirm applicability of the LOP thresholds. Decide when final wetland delineations need to be completed, taking into account seasonal limitations and the project schedule.

9 months prior to bid opening: Complete delineations and prepare maps of impact areas. Impacts are only estimates at this point since plan preparation hasn't started yet.

7 months prior to bid opening: Road plan preparation begins. Hold another joint TEP/Corps meeting to address any remaining issues if necessary.

6 months prior to bid opening: Permit application should be submitted to the Corps. Final construction limits may not be available at this point, but a very close approximation may be sufficient for submittal.

4 months prior to bid opening: Contact should be made with the Corps project manager to assure that a permit can be issued prior to bid opening. Confirm that a complete application has been received and the Corps has the necessary information to post the public notice.

Construction: Road authority monitors the construction to assure compliance with the permit conditions.

### **Example #3: Individual Permit (IP)**

These are typically major construction projects where a road is reconstructed in place or a new road is constructed on a new alignment. These projects are complicated enough and have substantial enough impacts to warrant a fully comprehensive review and public noticing to ensure that all measures have been taken to assure that the Least Environmentally Damaging Practicable Alternative has been chosen and impacts are limited to only what is necessary to achieve the project purpose and need.

**Project Description:** Regrade four miles of county highway, including deepening and widening ditches, expanding the roadway to twelve foot lanes and eight foot shoulders.

**Wetland Impacts:** 9.69 acre of permanent; 3.30 acres of temporary.

**Project Development:** There will be new right of way acquired, including some farmland. A project of this magnitude will take from one to two years for project development up through permit issuance.

**Project Timeline:** A field review of the project during the growing season should be built into the timeframes listed below to allow the Corps to view the delineated wetlands and other concerns. The following timeline represents the minimum times to allow for public interest review and permit processing. If additional information is requested, permit processing could be delayed and ultimately, project development schedules lengthened. Ideally, all work will be completed as early as possible to prevent any delays to the letting and construction schedule.

2 years prior to bid opening: Early coordination is definitely strongly recommended for a project of this magnitude. Hold a joint TEP/Corps meeting. Larger impacts will translate into a more in depth scrutiny of alternatives and the purpose and need. Confirm the need for an individual permit and begin preliminary assessment of wetlands within the corridor. Right of way process begins and preliminary construction limits are computed.

1 year prior to bid opening: Complete wetland delineations at least one summer prior to construction. Prepare maps of the impact areas and supporting documentation. Schedule a Corps field review of delineations during the growing season. This may be a joint meeting with the TEP.

6 months prior to bid opening: Submit permit application at least six months prior to bid opening so the Corps project manager can request any required additional information necessary for the public notice. Public notice should be issued at least 90 days prior to bid opening.

4 months prior to bid opening: Contact the Corps project manager to confirm that all necessary information has been received.

2 months prior to bid opening: A favorable determination letter should be issued by the Corps, indicating that a permit will be issued pending the 401 certification.

1 month prior to bid opening: A final permit should be obtained before bid packages are distributed to contractors.

Construction: Road authority monitors the construction to assure compliance with the permit conditions.

#### **Example #4: Exempt Project**

These projects are typically relatively minor construction activities where the bulk of the work is confined to the roadway surface.

**Project Description:** Mill and inlay six miles of rural highway and repair eight culverts. The culvert repairs include replacing aprons, cleaning and minimal ditch restoration activities. One culvert will be cleaned and a liner placed to extend its life.

**Wetland Impacts:** 0.05 acre of temporary impacts.

**Project Development:** This work should be exempt from Section 404 permitting, however, it is prudent to document the work and have the project reviewed by the Corps project manager for concurrence. Document that the temporary impacts are for the “maintenance of drainage ditches” and repair of “currently serviceable transportation structures” and therefore should not require a permit. Make sure that the maintenance of the ditches only returns the ditch to its original dimensions by removing accumulated sediment. Temporary impacts may be estimated using level 1 delineation procedures. It is possible to self-determine an exempt activity, however Corps staff are available to verify an exempt activity if requested.

**Project Timeline:** Project timelines for these types of projects are highly variable. There may be years of development time or an emergency repair may need to be completed within days or even hours. The best advice is to provide as much information as possible, as early as possible to the Corps so that the exemption can be confirmed and good working relationships are maintained.

### **Appendix C: Types of Impacts**

There are several situations that lead to wetland impacts for road projects. Road improvements often include driving lane and shoulder widening, flattening of inslopes and ditch modifications. In some cases new roads are constructed on new alignments causing impacts. Several types of impacts can occur: Fill, Cut, Temporary, Type conversions, and Lateral effect. Impacts must be minimized to the greatest extent feasible.

The types of impacts are further categorized as direct, secondary or temporary. Direct impacts are the most commonly encountered and must be replaced at standard replacement ratios. Secondary impacts are the result of a related action such as a cut or drainage activity and may be compensated at lower ratios. Temporary impacts usually don't require replacement as long as the area is totally restored within certain time parameters, however, they may contribute to permit impact thresholds. See table below.

**Fill Impacts:** For purposes of reporting wetland fill impacts, calculate the difference between the toe of the proposed inslope to the toe of existing inslope, or the intersection with the existing backslope. In situations where the road is being widened, but the ditch cross section remains the same, fill impact may be the only impact requiring mitigation. Other impacts must still be reported, however. Fill impacts are the most direct and easily measured type of wetland affect and must be mitigated at the standard ratio for the area.

**Cut Impacts:** Cut impacts may actually result in either a conversion to non-wetland or a type conversion (i.e. converting a scrub-shrub community to a shallow marsh). Cut impacts will receive increased scrutiny when ditches are new, deeper than existing or a source of borrow. Increased impacts from ditch construction may require mitigation. Mitigation ratios will be determined by the actual effect of the cut. Cut impacts are generally considered to be direct effects, but secondary drainage impacts may also be a result of cuts.

**Temporary Impacts:** Temporary impacts occur when wetlands are cleared for temporary minor topsoil storage or to allow for equipment movement within the right of way. These impacts must be minimized to the greatest extent possible. Temporary impacts are nearly impossible to quantify accurately but should be estimated. Temporary impacts need to be restored within 6 months to comply with WCA. Typically, replacement is not required but the impacts will contribute to permit threshold limits for fill, cut and clearing. A type conversion (below) can be temporary if the area is allowed to revegetate to its pre-conversion state.

**Type Conversions:** Type conversions occur when one wetland type is changed to a different type permanently. An example would be converting a type 7 wooded wetland to a type 3 shallow marsh. It is essential to demonstrate the necessity of the conversion and minimize the area. Mitigation will be required and the impact will contribute to the permit threshold limits. Type conversions may be either direct impacts (vegetation removal for sight corners) or secondary (a change in vegetation type as the result of partial drainage). Temporary type conversions (see above) will not require replacement as long as the area is allowed or encouraged to revert to the pre-impact condition.

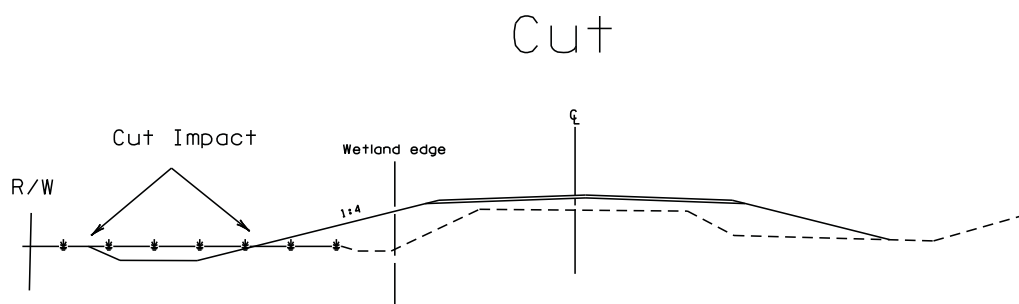
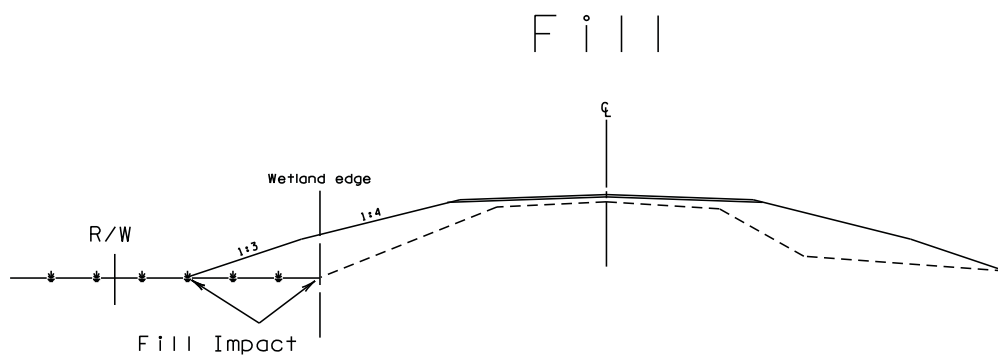
**Lateral Drainage Effect:** There are a variety of methods used to calculate lateral effect. Use of lateral effect is only one piece of information used to determine the impacts of ditches. The lateral effect calculation must be corroborated with a field visit after construction. Calculations should not be used exclusively to determine impacts- it must be verified either by observation of altered hydrology or by changes in vegetation. The actual drained area will require replacement, but the amount may need to be determined after the fact. Lateral effect is considered a secondary wetland impact.

**Other Issues:** There are impacts that could require additional review. Borrow sites that are new or expanded require clearance from the SHPO prior to disturbance. The Corps must be notified. Disposal of excess material in wetlands can trigger Federal and State review. Any soil that leaves a job site must not be disposed of in wetlands without a permit.

Nature of Activity	Contributes to permit threshold?	Replacement required?
Wetland fill (permanent)	Yes	Yes- standard ratio
Cut impact that converts to non-wetland (permanent)	Yes	Yes- standard ratio
Cut Impact that converts type (permanent)	Yes	Yes- reduced ratio
Cut impact that causes lateral effect (permanent)	Yes	Yes- standard ratio for totally drained areas, but reduced ratio for partially drained

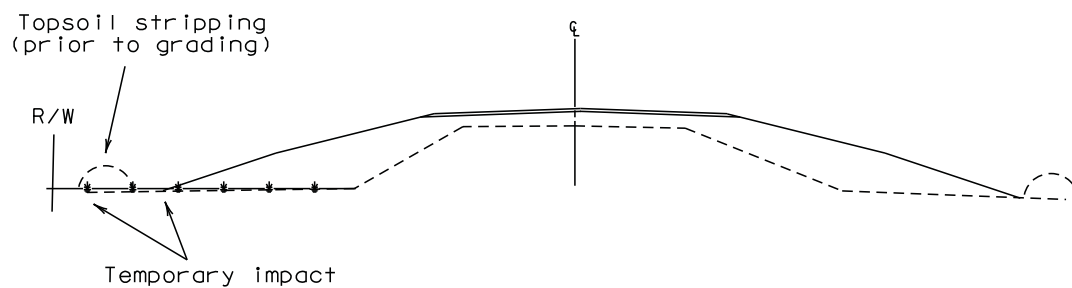
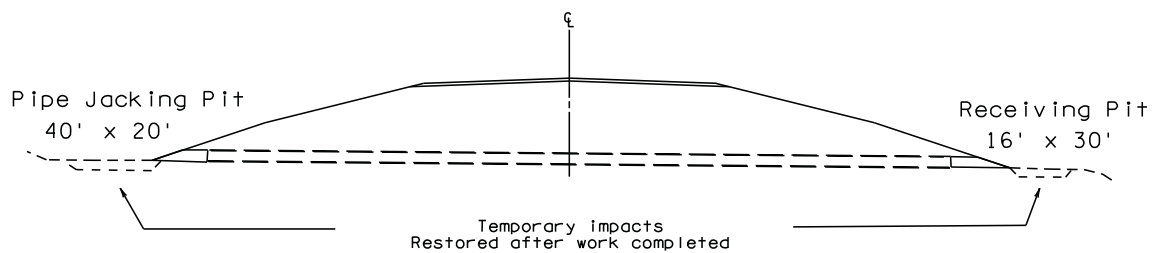
Clearing and grubbing/removing root system- type conversion (permanent)	Yes	Yes- reduced ratio
Clearing/cutting or removing vegetation above ground with stumps and roots remaining (temporary)	No	No
Topsoil storage (temporary)	Yes for LOP & IP	No
Minor excavation, i.e. culvert repair/replacement where area is restored to pre-project conditions (temporary)	Yes for LOP & IP	No
Silt fence installation/removal (temporary)	No	No
Equipment movement (temporary)	No	No

- This is a guideline, individual circumstances may alter final replacement ratios.

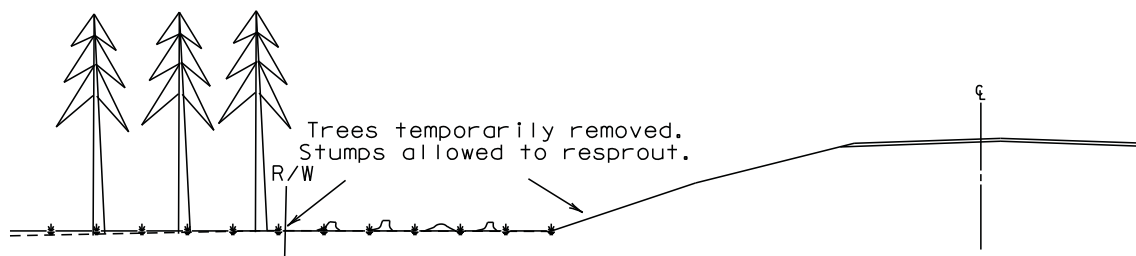




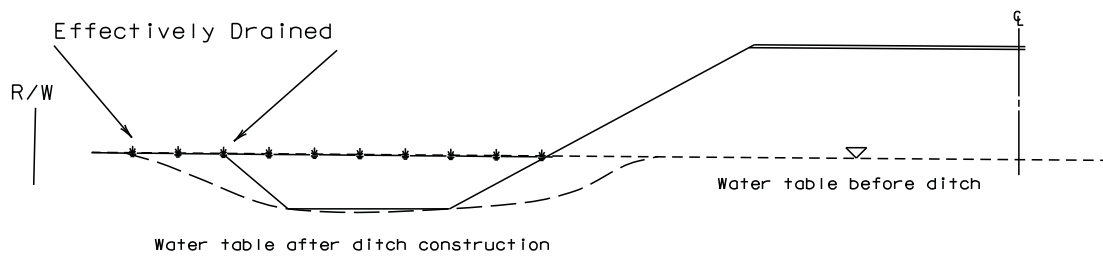
## Temporary Impacts



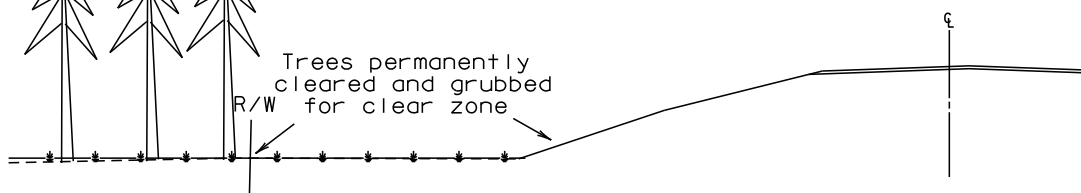
Nearly impossible to measure accurately.  
Used as erosion control BMP.



## Lateral Effect



## Type Conversion



## Appendix D: Process Flow Charts

Process Flow Charts for different levels of actions.

### General Permit

#### Applicant Timeline

#### Corps Timeline

Establish Project Scope (1-2 yrs before construction)	
Early Contact with Corps and DNR Prepare Environmental Documentation (fed funded)	Early coordination
Project Surveys	
Site Visit	
<b>Wetland Delineations</b>	
Plans Preparation	
<b>Compute Impacts</b>	
<b>Prepare permit attachments (need, sequencing)</b>	
Permit Application	Determine Type of Permit Required (RGP, GP1, NWP)
	Review Application for Completeness If formal SHPO consultation is required, initiate (local funding)
	Public Notice & Comment Period (LOP, IP)
	401 Certification or Waiver (IP)
	Prepare Decision Document (LOP, IP)
Award of Contract	Issue Permit or Deny
Construction	

## Letter of Permission/Individual Permit

### Applicant Timeline

### Corps Timeline

Develop Statement of Purpose and Need	
Scoping Process	Pre-Application Consultation Meeting (joint with Technical Evaluation Panel)
Select Alternatives	Determine level of permit required (LOP, IP)
Start Environmental Document (If federal funding) <b>(wetland determinations or Level 1 delineations)</b>	
Select Preferred Alternative	
<b>(Wetland Delineations completed)</b>	Alternatives Analysis
Finalize Environmental Document	Minimization Discussion
Detail Design and Right of Way Acquisition begins <b>(Final impact computations, possibly hold joint TEP/Corps meeting)</b>	Final Pre-Application Meeting
Permit Application	
	Review Application for Completeness
	Public Notice & 30 day comment period
	If formal SHPO consultation is required, initiate (local funding)
	Assessment of comments
	Public Hearing (if required)
	401 certification or waiver
	Prepare decision document
	Issue permit or deny
Project Letting	
Construction	

#### Cautionary Notes:

1. Not all projects will require a Corps permit.
2. Project timelines are controlled by the scope of work (mill, reconstruction, bridge replacement, etc), physical location (lakes, streams, cultural resources, rare species, etc) and the project time frame (funding source, seasonal restrictions, etc).
3. The level of environmental document does not necessarily correspond with the level of permit, i.e. an EIS may qualify for a general permit and a CATEX could require an IP.
4. The permit application should be submitted as early as possible in the project development process. For individual permits, the goal should be a minimum of six months prior to letting.

## Appendix E: Regional Differences

Extensive drainage ditches throughout large portions of the bed of Glacial Lake Agassiz in northwest Minnesota made NWI mapping an inexact science at best. Many areas were partially but not completely drained. The same issue affects most of the former Prairie Parkland agricultural areas or Aspen Parkland in the western edge of the state. Wooded areas, especially aspen dominated portions of the Laurentian Mixed Forest in the northeast and central parts of the state did not adequately depict wetlands under the tree canopy, due to the aerial photography methods used to produce the NWI. Agriculture has also contributed to complicating the effectiveness of the NWI by ignoring most seasonal wetland basins in farmland. There are also many areas especially in the northeast where shallow bedrock and exposed bedrock have little or no soil to meet the wetland criteria. Another factor complicating delineations is the predominance of soil associations that are partially hydric that aren't well described in the local soil survey.

These regional differences reinforce the fact that NWI maps are not to be used to determine regulatory jurisdiction or the actual extent or presence of wetlands in a project area. When used as one of the many tools available, they are a starting point that must be verified in the field with data collection. Wetland delineators, whether staff or consultant need to be aware of these regional differences and take them into account when completing their field data collection.

Ecological Province	General Location	Issues
Laurentian Mixed Forest	Northeast third of MN	Wooded areas (aspen). Aerial mapping missed wetlands under tree canopy. Shallow bedrock/exposed bedrock – little or no soils
Eastern Broadleaf Forest	Central and Southeast MN	Missed wetlands under tree canopy. Seasonally dry basins missed
Tallgrass Aspen Parklands	Northwest	Glacial Lake Agassiz. Extensive drainage ditches. Incomplete drainage by ditches
Prairie Parklands	Western and Southwest MN	Agricultural areas. Incomplete drainage by ditches. Farmed wetlands (seasonal wetland basins) missed/ignored.

## Appendix F: Useful Links

### Clean Water Act (CWA) (33 U.S.C. 1251 et seq)

Originally passed in 1972 as the Water Pollution Control Act, and later amended by the Clean Water Act of 1977 and the Water Quality Act of 1987, this is the major federal law governing water pollution in the US. It regulates both point source and non-point source discharges to “navigable waters” and waters that have a “significant nexus” to navigable waters.

### Section 10 of the River and Harbors Act (33 U.S.C. 403)

Requires that regulated activities conducted below the Ordinary High (OHW) elevation of navigable waters of the United States be approved or permitted by the Corps.

### Corps Regulatory Program Regulations

33 CFR Part 320 through Part 332.

Sections of particular interest:

33 CFR Part 320, General Regulatory Policies

33 CFR Part 323, Permits for Discharges of Dredged or Fill Material Into Waters of the US

33 CFR Part 325, Processing of Department of the Army Permits

33 CFR Part 328, Definition of Waters of the United States

33 CFR Part 332, Compensatory Mitigation for Losses of Aquatic Resources

Other:

33 CFR Part 230, Procedures for Implementing NEPA

[http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr230\\_main\\_02.tpl](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title33/33cfr230_main_02.tpl)

### Section 404(b) (1) Guidelines (40 CFR 230)

These guidelines for Specification of Disposal Sites for Dredged or Fill Material form the basis for all wetland fill and dredge permit decisions.

### National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4347)

NEPA requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions. NEPA must be followed whenever an action is funded, sponsored, permitted or approved by a federal agency.

### Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.)

The ESA was designed to protect critically imperiled species from extinction. It is administered by two federal agencies, The United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA). ESA must be considered on any project requiring a Corps Section 404 permit.

### Section 106 of the National Historic Preservation Act

[http://www.dot.state.mn.us/culturalresources/programmatic/fhwa\\_shpo2\\_1\\_05.pdf](http://www.dot.state.mn.us/culturalresources/programmatic/fhwa_shpo2_1_05.pdf)

Programmatic agreement for section 106 used for federally funded projects

### **The Importance of Purpose and Need in Environmental Documents**

FHWA guidance letter 1990

### **Protection of Wetlands, Presidential Executive Order 11990** (EO)

Signed in 1977 by President Jimmy Carter, the EO directs federal agencies to avoid, to the extent possible, the long and short term impacts to wetlands. Agencies are directed to avoid new construction in wetlands wherever there is a practicable alternative.

### **Corps of Engineers Wetlands Delineation Manual** (1987 Manual)

The accepted delineation guidance document, and along with the appropriate Regional Supplements for Minnesota, provides the accepted methodology for completing wetland edge determinations (delineations).

### **Regional Supplements**

Regional supplements to the 1987 Manual provide technical guidance and address regional wetland characteristics to improve the accuracy and efficiency of wetland delineation procedures. Three supplements apply to Minnesota.

### **Executive Order 03-04 Providing for the Continuation of Certain Executive Orders**

This is the State executive order that extended order 00-02 to follow a "No Net Loss" policy in regard to wetlands.

### **Guidelines for Submitting Jurisdictional Determination (JD) requests to the St. Paul District Corps of Engineers, March 2008**

Regulatory Guidance letter 08-02, 26 June 2008, Jurisdictional Determinations

[http://www.epa.gov/owow\\_keep/wetlands/wetlandsmitigation/index.html](http://www.epa.gov/owow_keep/wetlands/wetlandsmitigation/index.html) 2008 compensatory mitigation rule

### **Final St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota**

January 23, 2009, refer to: 2007-1101-SDE

### **Interagency Memorandum of Understanding (MOU), Wetland Mitigation Guidelines, May 2007**

This MOU is between the Corps and BWSR to increase consistency between state and federal mitigation strategies.

### **Wetland Conservation Act Technical Interpretation Paper, March 2010**

Choosing an Appropriate Wetland Delineation Method

### **Order DOT 5660.1A**

This order (August 24, 1978) describes U.S. Department of Transportation (DOT) policy that transportation facilities and projects should be planned, constructed, and operated to assure the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable. It also established procedures for implementation of the policy.



## FHWA Technical Advisory T6640.8A

This document presents guidelines for preparing environmental documents, especially EISs. There is also a section devoted to wetland impacts detailing the FHWA requirements for inclusion in environmental documentation. The discussion includes a requirement for an “Only Practicable Alternative Finding”.

### [Applying the Section 404 \(b\) \(1\) Guidelines in Transportation Project Decision-Making](#)

AASHTO Practitioner’s Handbook published by the American Association of State Highway Engineers.

<http://www.mvp.usace.army.mil/> St. Paul District US Army Corps of Engineers

<http://www.bwsr.state.mn.us/> Minnesota Board of Water and Soil Resources

<http://www.bwsr.state.mn.us/wetlands/wca/index.html> Permit Application Forms

<http://www.bwsr.state.mn.us/wetlands/delineation/index.html> List of Certified Wetland Delineators in Minnesota

## Appendix G: Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
BWSR	Minnesota Board of Water and Soil Resources
CSAH	County State Aid Highway
CATEX	Categorical Exclusion
CFR	Code of Federal Regulations
Corps or COE	U.S. Army Corps of Engineers, also USACE
CRU	MnDOT Cultural Resources Unit
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
DNR	Also MNDNR, Minnesota Department of Natural Resources
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Also USEPA, Environmental Protection Agency
EQB	Minnesota Environmental Quality Board
ESA	Endangered Species Act

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FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GP	General Permit
IP	Individual Permit
JD	Jurisdictional Determination
LEDPA	Least Environmentally Damaging Practicable Alternative
LOP	Letter of Permission
LGU	Local Government Unit (WCA)
Mn/DOT	Minnesota Department of Transportation
MNDNR	Minnesota Department of Natural Resources, also DNR
MOA	Memorandum of Agreement
MSAS	Municipal State Aid Street
MPCA	Minnesota Pollution Control Agency
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OES	MnDOT Office of Environmental Stewardship
PCN	Pre-construction Notification
RGP	Regional General Permit
RHA	Rivers and Harbors Act of 1899
ROD	Record of Decision
PI	Point of Intersection, where the road surface intersects the inslope
SAP	State Aid Project
SHPO	State Historic Preservation Officer
SWCD	Soil and Water Conservation District
TEP	Technical Evaluation Panel (WCA)
USACE	U.S. Army Corps of Engineers, also Corps or COE

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USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WCA	Wetland Conservation Act
WD	Watershed District
WMO	Watershed Management Organization

## APPENDIX H: GLOSSARY

CATEX – Categorical exclusion level of federal project that is “categorically excluded” from intense environmental review.

Delineated wetlands – Wetlands whose boundaries have been identified by an experience delineator using standard delineation methodology evaluating soils, vegetation and hydrology.

Early coordination – Contact between an applicant and the Corps prior to the submittal of an application. Provides for informal discussions concerning the viability of a proposal.

EQB Monitor – The Minnesota Environmental Quality Board Monitor is a bi-weekly publication announcing environmental documents, public comment periods and other actions of the EQB.

Federal nexus – A connection or link to a federal permit, regulation, action or funding.

Hydrology – The science that studies the occurrence, properties, and movement of water on the earth. It includes water found in oceans, lakes, wetlands, streams and rivers as well as in upland areas, above and below ground, and in the atmosphere.

Jurisdictional wetlands – All wetlands determined by current case law, and other laws, rules and guidance to be under the regulation of the USACE.

Navigable waters – Those waters that are subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce. Section 10 and/or Section 404 permits are required for construction activities in these waters.

Non-jurisdictional wetlands – Wetlands determined by current case law and other laws, rules and guidance to be exempt from regulation by the USACE.

Pre-application conference – One or more meetings between members of the Corps staff and an applicant or the applicant’s agent. A pre-application conference is usually related to a larger project and may involve the discussion of alternatives, environmental documents, NEPA compliance and permit requirements. This is a more formal process than early coordination.

Waters of the United States – Essentially all surface waters such as all navigable waters and their tributaries, all interstate waters and their tributaries, all wetlands adjacent to these waters, and all impoundments of these waters.

Wetland - Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetland mitigation - The practice of compensating for the destruction or degradation of wetlands in one location by creating or restoring wetlands in another location with the goal of a no net loss of wetland functions.

## **APPENDIX I: AGENCY CONTACTS**

### **Corps Project Managers, Minnesota**

<http://www.mvp.usace.army.mil/regulatory/default.asp?pageid=1716>

### **MnDOT Wetland Contacts**

[http://www.bwsr.state.mn.us/maps/mndot\\_district\\_wetland\\_contacts.pdf](http://www.bwsr.state.mn.us/maps/mndot_district_wetland_contacts.pdf)

### **DNR Area Hydrologists**

<http://www.dnr.state.mn.us/waters/contacts.html>

### **BWSR Wetland Specialists**

[http://www.bwsr.state.mn.us/contact/WCA\\_areas.pdf](http://www.bwsr.state.mn.us/contact/WCA_areas.pdf)

### **Watershed Districts**

[http://www.bwsr.state.mn.us/publications/WD\\_Guidebook/index.html](http://www.bwsr.state.mn.us/publications/WD_Guidebook/index.html)

### **State Aid for Local Transportation**

<http://www.dot.state.mn.us/stateaid/environmental-forms.html>

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**“To request this document in an alternative format, call Bruce Lattu at 651-366-4718 or 1-800-657-3774 (Greater Minnesota); 711 or 1-800-627-3529 (Minnesota Relay). You may also send an e-mail to [bruce.lattu@state.mn.us](mailto:bruce.lattu@state.mn.us). (Please request at least one week in advance).”**