Waterway Permitting Manual

Ecology and Waterway Permitting Office

Environmental Services Division

Indiana Department of Transportation

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TABLE OF CONTENTS

Chapter 1 - Introduction to Waterway Permitting *1*

What are Waterway Permits? **1**

1.1 Manual Organization **1**

1.2 INDOT Environmental Services DIvision Organization and Roles **1**

Storm Water: 2

Ecology and Waterway Permitting: 2

1.3 Relevant Environmental Laws, Decisions, and Executive Orders **3**

National Environmental Policy Act (1969) 3

Section 404 Clean Water Act (1972) 4

Tulloch Rule (1993) 5

SWANCC Decision (2001) 5

Rapanos Decision (2006) 6

Endangered Species Act (1973) 7

Section 401 Clean Water Act (1972) 7

Isolated Wetlands in Indiana (2004) 7

Executive Order 11990 (1977) 7

Rivers and Harbors Act (1899) 8

Fish and Wildlife Coordination Act (1936) 8

Flood Control Act (1995) 8

Wild and Scenic Rivers Act (1968) 9

NPDES General Permit Rule Program (1992) 9

Indiana State Drainage Law (1981) 9

Chapter 2 - Waterway Permitting Process *10*

2.1 Project Team Overview **10**

2.2 PERMIT Determinations **11**

2.3 Waterway Permit Applications **12**

2.4 Contract Letting Documents **14**

2.5 Construction **16**

Chapter 3 ..... *18*

United States Environmental Protection Agency (USEPA) *18*

Introduction to USEPA Permitting **18**

3.1 Underground Injection Control **18**

3.2 Sole Source Aquifer **20**

3.3 USEPA Coordination Scenarios **21**

Chapter 4 - United States Army Corps of Engineers (USACE) Permitting *22*

Introduction to USACE Permitting **22**

Section 404 of the Clean Water Act 23

Section 10 of the Rivers and Harbors Act....23
Levee Permit....23

4.1 404 Nationwide Permit (NWP)....24
Background....24
NWP #3 - Maintenance....25
NWP #27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities....25
The 404 NWP #27 is typically used for remediation work within INDOT mitigation sites. Activities that can be permitted under this NWP include removal of accumulated sediments, installation of water control structures, installation of current deflectors or riffle/pool stream structures, modifications of stream beds or banks, and activities to reestablish vegetation. PCN is required for this permit.....25
NWP #33 - Temporary Construction, Access, and Dewatering....26
Application Process....26

4.2 404 Regional General Permit (RGP)....27
Background....27
Application Process....28

4.3 404 Individual Permit (IP)....29
Background....29
Application Process....29

4.4 Section 10 (River and Harbors Act of 1899)....31
Background....31
Application Process....31

4.5 USACE Levee Permits....31
Background....31
Application Process....32

4.6 USACE Permitting Scenarios....32

Chapter 5 - United States Coast Guard (USCG) Permitting....34

Introduction to USCG Permitting....34

5.1 Section 9 Permits....34
Background....34
Application Process....36

5.2 USCG Permitting Scenarios....36

Chapter 6 - Indiana Department of Environmental Management (IDEM) Permitting....37

Introduction to IDEM Permitting....37
401 Water Quality Certification (WQC)....37
Isolated Wetlands....37
Rule 5....38
Section 402....38
Rule 13....38

6.1 401 Nationwide Permit....38
Background....38
Application Process....39

6.2 401 Regional General Permit....39
Background....39
Application Process....39

6.3 401 Individual Permit....41
Background....41

Application Process 41

6.4 Isolated Wetland Permit....42
Background....42
Application Process 43

6.5 Rule 5 Permitting....44
Background....44
Application Process 44

6.6 IDEM Permitting Scenarios....45

Chapter 7 - Indiana Department of Natural Resources (IDNR) Permitting.... 47

Introduction to IDNR Permitting....47
Flood Control Act 47
Navigable Waterways Act 47
Lakes Preservation Act 48
Lowering of Ten Acre Lakes Act 48

7.1 Construction in a Floodway (CIF) Permit....48
Background....48
Rural Bridge Exemption 48
Logjam Removal Exemption 49
Utility Line Crossing Exemption 50
Wetland Restoration Exemption 50
Outfall Exemption....51
Maintenance Memorandum of Understanding....51
Application Process 52

7.2 Navigable Waterways Permit....53
Background....53
Application Process 53

7.3 Lake Preservation Act Permit 54
Background....54
Application Process 54

7.4 Lowering of Ten Acre Lakes Act Permit....54
Background....54
Application Process 54

7.5 IDNR Permitting Scenarios 55

Chapter 8 - County Regulated Drain Permits.... 57

Introduction to Regulated Drain Permitting....57

8.1 County Regulated Drain Permits 57
Background....57
Application Process 57

8.2 County Regulated Drain Permitting Scenarios....58

Appendix A – INDOT Guidance ....A
PE/PS Checklist 1
Permit Determination Checklist 4

Appendix B – USACE Guidance....B
Nationwide Permit Conditions 1
Applicable Indiana Nationwide Permits....5

USACE Form 4345 6
401 / 404 NWP – Nationwide Permit - Checklist 9
401 RGP - Regional General Permit - Conditions 16
401 / 404 RGP – Regional General Permit - Checklist 36
SECTION 10 NAVIGABLE WATERS OF THE U.S. 41

Appendix C – USCG Guidance C
INTRODUCTION TO COAST GUARD BRIDGE PERMITTING 1
Bridge Permit Application Guide 7
GLOSSARY OF BRIDGE TERMS 47

Appendix D – IDEM Guidance ..... D
401 NWP – Nationwide Permit - Conditions 1
401 RGP – Regional General Permit - Conditions 20
401 IDEM RGP Form 51937 33
401 IDEM WQC – Form 51821 38
401 IDEM WQC – Individual Permit - Checklist 47
IDEM Rule 5 – Notice of Intent – Form 47487 56
Rule 5 Guidance for Construction Plan (SWPPP) 58

Appendix E – IDNR Guidance ..... E
IDNR List of Indiana Waterways Declared Navigable 1
IDNR - Public Freshwater Lakes 9
IDNR – Salmonid Streams 17
IDNR - Indiana Scenic Rivers 18
IDNR – List of Outstanding Rivers and Streams 19
IDNR – INDOT Maintenance MOU 21
IDNR – Construction in a Floodway – Checklist 33
IDNR – State Form 42946 39
IDNR – Form N4 – State Form 52086 41
IDNR – Form N2 – State Form 50354 42

Appendix F – Additional Resources ..... F
Additional Resources 1
Calculating Upstream and Downstream Impacts 2
Acronyms 4
Definitions 5

Intended Use of Manual for INDOT and Local Projects

This manual has been written to set expectations for waterway permitting deliverables and review paths for projects developed by the Indiana Department of Transportation (INDOT). Other projects may also benefit from the guidance in this manual. Specifically, preparers of permits for local projects that receive federal funds and which follow INDOT standard specifications are encouraged to use this manual; however, INDOT does not review permits or other related deliverables for local projects.

CHAPTER 1 - INTRODUCTION TO WATERWAY PERMITTING

WHAT ARE WATERWAY PERMITS?

Waterway permits are legal documents authorizing impacts to aquatic resources. These permits are products of environmental laws and are the primary means by which regulatory agencies ensure compliance with environmental regulations. Each permit contains conditions that must be followed in order for the authorization to remain valid.

The Indiana Department of Transportation (INDOT) Ecology and Waterway Permitting Office (EWPO) developed this manual as guidance for project managers and designers. It should be used as a reference when evaluating impacts to water resources and the potential permitting requirements for INDOT projects. This manual summarizes major environmental laws and regulations, describes the permitting programs administered by resource agencies in Indiana, and describes resources subject to the jurisdiction of these agencies.

1.1 MANUAL ORGANIZATION

The INDOT Waterway Permitting Manual has eight chapters. Chapter 1 provides general information on INDOT's organization as well as relevant environmental laws, regulations, and policies. Chapter 2 summarizes the waterway permitting process as it relates to INDOT projects. The remaining chapters focus on the various waterway permitting agencies and is organized to discuss federal regulatory agencies, followed by state regulatory agencies, and finally local regulatory agencies. Chapter 3 provides general information on two areas under the jurisdiction of the U.S. Environmental Protection Agency (USEPA): underground injection control and sole source aquifers. Chapter 4 describes waterway permitting requirements of the U.S. Army Corps of Engineers (USACE). Chapter 5 describes bridge permitting requirements of the United States Coast Guard (USCG). Chapter 6 discusses the Indiana Department of Environmental Management's (IDEM's) permitting requirements related to waterways and erosion and sediment control. Chapter 7 describes the jurisdiction and permit requirements of the Indiana Department of Natural Resources (IDNR). Chapter 8 discuses the process for obtaining a regulated drain permit for the five Indiana counties that require them. Additional reference material is also included in the appendices.

1.2 INDOT ENVIRONMENTAL SERVICES DIVISION ORGANIZATION AND ROLES

The Environmental Services Division (ESD) is a part of INDOT Central Office. ESD is responsible for ensuring that INDOT projects comply with all local, state, and federal environmental laws and regulations during the project development process. ESD also provides technical support for projects under construction. There are three offices within ESD: Cultural Resources, Environmental Policy, and Ecology and Waterway Permitting. Each office provides technical assistance and training to INDOT personnel, consultants, and the public on the environmental requirements that pertain to transportation projects.

The Ecology and Waterway Permitting Office is comprised of the Ecology and Waterway Permitting teams and Storm Water Team. Each staff member within the EWPO is assigned an INDOT district or districts and typically will coordinate on all project needs within their assigned area. A map with the most current staff assignments is available on the INDOT EWPO webpage (http://www.in.gov/indot/2522.htm). The roles and responsibilities of the two teams are:

Storm Water:

- Develop statewide policies, procedures, and standards relating to storm water quality;
- Prepare or review Rule 5 Storm Water Pollution Prevention Plans (SWPPPs);
- Conduct field visits on INDOT projects under construction to verify compliance with Rule 5 and provide technical assistance;
- Coordinate between INDOT and IDEM regarding Rule 5 inspections and violations;
- Coordinate with INDOT district staff tasked with erosion and sediment control compliance; and
- As an MS4 (Municipal Separate Storm Sewer System), develop and implement the INDOT Rule 13 Storm Water Quality Management Plan (SWQMP).

Ecology and Waterway Permitting:

- Prepare or review waters of the U.S. reports or other ecological evaluations;
- Prepare permit determinations (PD);
- Prepare, review, and process waterway permit applications for INDOT projects with impacts to aquatic resources;
- Prepare, review, and process waterway permit amendments and extensions;
- Prepare or review mitigation plans and coordinate on mitigation site selection;
- Conduct field visits on INDOT projects under construction to verify compliance with applicable environmental laws and regulations and provide technical guidance to resolve compliance issues; and
- Prepare or review monitoring reports for INDOT mitigation sites.

The EWPO's role in the project development process begins when a waters of the U.S. investigation is conducted during the preparation of the environmental document(s) for each project. A report is generated as a result of this investigation. In most cases, EWPO staff review reports submitted by INDOT district staff or consultants. In some cases this report will be prepared by a staff member. A waters of the U.S. investigation should identify all water features within and adjacent to the proposed project limits. Water features include, but are not limited to, rivers, streams, creeks, wetlands, ponds, lakes, agricultural ditches and county drains. In addition, non-jurisdictional features, such as roadside ditches that lack an ordinary high water mark (OHWM), should be discussed in the report. The investigation should also provide preliminary data on each resource, such as the OHWM for streams or the delineated wetland boundary for wetlands, as well as the quality of the resource within the study area. For more detailed information on waters of the U.S. investigations, and other ecological evaluations, please refer to the INDOT Ecology Manual located on the ESD webpage (http://www.in.gov/indot/2522.htm).

After the waters investigation is complete, EWPO will conduct a preliminary permit determination (PD). The designer should request a preliminary PD when stage one design (30%) has been reached. Sufficient detail at this stage is present to determine the likely impacts and permits needed for the project. A PD gives the designer and project manager an idea of what waterway permits, if any, may be required for their project. The EWPO preliminary permit determination will include the general timeline for when permit applications should be submitted for INDOT review and processing. Complete applications should be submitted to the EWPO or loaded into ERMS based on the timelines included in Table 2.1 to minimize the risk of not meeting the project's letting schedule.

Waterway permit applications are prepared by the designer or their designated consultant, but in some cases the EWPO will assist with application preparation. Applications will be reviewed by EWPO staff for completeness and accuracy. All waterway permits must be loaded into INDOT's Electronic Records Management System (ERMS) by the designer or access provided through other acceptable means such as

the consultant's File Transfer Protocol (FTP) site. The coordinator will forward them to the appropriate team lead. Smaller applications can be mailed directly to the team lead to start processing sooner.

When the review is complete, the application will be signed by the EWPO Manager or one of the three team leads. *Only designated members of the EWPO office are authorized by the INDOT Commissioner to sign off on waterway permit applications.* Once signed, EWPO staff will submit the application to the appropriate regulatory agency(s) and coordinate on any questions or comments received during regulatory agency review. All waterway permit conditions, including any mitigation requirements, are legal obligations that must be reflected in the construction plans and included in applicable special provisions for implementation during project construction. In addition, waterway permits and other documents, such as the waters determination report that delineated wetlands/waterways within the project area, should be included in the contract letting documents and/or accessible to the construction supervision staff. Permits must be amended if there will be additional permanent or temporary impacts to aquatic resources that were not included in the original permit application.

During construction, EWPO staff will visit projects to verify that they are in compliance with applicable environmental laws and regulations. When issues arise, staff will provide technical expertise to resolve any compliance concerns. EWPO staff will also provide technical guidance and coordinate the responses to regulatory agencies' routine or follow-up inspections.

1.3 RELEVANT ENVIRONMENTAL LAWS, DECISIONS, AND EXECUTIVE ORDERS

National Environmental Policy Act (1969)

The Council on Environmental Quality (CEQ) located within the Executive Office of the President has oversight over the implementation of the National Environmental Policy Act (NEPA) by federal agencies. The purpose of NEPA is to ensure that environmental factors receive equal weight when compared to other factors in the decision making process. It requires all federal agencies and their designees to disclose and consider the environmental implications of proposed actions. To comply with NEPA, INDOT documents the environmental impacts of its transportation projects and, when necessary, provides the opportunity for public input and participation throughout project development. NEPA established three levels of analysis that depend on if the project has "potential to affect the quality of the human environment". These are as follows: Categorical Exclusion (CE), Environmental Assessment (EA), or an Environmental Impact Statement (EIS). A project that qualifies for a CE does not individually or cumulatively have a significant effect on the quality of the human environment. An EA is prepared for projects not eligible for a CE to determine if a proposed action or its alternatives have potentially significant environmental effects. The EA process will conclude with either a Finding of No Significant Impact (FONSI) or a determination that an Environmental Impact Statement must be prepared. An EIS is a detailed written report that provides full and fair discussion on significant environmental impacts and informs decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment.

The Environmental Policy Office is responsible for ensuring all INDOT projects are in compliance with NEPA. Guidance from this office is available online (http://www.in.gov/indot/2523.htm), including the most recent version of the Categorical Exclusion Manual and the procedural manual for preparing environmental studies. NEPA documents include information that is useful when preparing permit applications, including:

- Presence of aquatic resources, including but not limited to floodplains, rivers, streams, wetlands, and ponds;

- Existing aquatic resource quality, including habitat assessments;
- Presence of federal and/or state listed endangered, threatened, or rare species;
- Historical properties subject to Section 106 of the National Historic Preservation Act;
- Presence of environmentally sensitive areas, such as karst resources; and
- Preliminary estimates of aquatic resource impacts and the likely waterway permitting need associated with these impacts.

Section 404 Clean Water Act (1972)

The Clean Water Act (CWA) is the principal federal law protecting our nation's waters, including lakes, rivers, wetlands, and coastal areas. Formerly referred to as the Federal Water Pollution Control Act of 1972, its ultimate goal is to maintain the chemical, physical, and biological integrity of our nation's waters. Its interim goal is to make surface waters usable for drinking water and recreation activities such as fishing and swimming.

Section 404 of the CWA pertains to the discharge of fill materials into waters of the United States. The 404 regulatory program is administered by the U.S. Army Corps of Engineers (USACE) with oversight from the U.S. Environmental Protection Agency (USEPA). Jurisdictional resources include:

- Traditionally navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters where water flow is year round or relatively permanent (typically three months); and
- Wetlands directly adjacent to non-navigable tributaries.

The USACE makes the final ruling on whether or not an aquatic resource is a jurisdictional feature (water of the U.S.) or whether or not a wetland is "*isolated*." An "*isolated*" wetland is not under the USACE's jurisdiction, but falls under the state isolated wetlands program regulated by the Indiana Department of Environmental Management (IDEM).

Wetlands are delineated by using the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* and applicable regional supplements. There are three regional supplements that cover the State of Indiana: Midwest, Eastern Mountains and Piedmont, and Northcentral and Northeast. See the INDOT Ecology Manual for more information on the USACE Regional Supplements.

USACE's approval of discharges of dredged or fill material is contingent upon the project complying with the guidelines of Section 404 (b)(1) of the CWA, as follows:

- There is no practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences (i.e. the Least Environmentally Damaging Practicable Alternative or LEDPA);
- The project must not cause or contribute to violation of state water quality standards or toxic effluent standards;
- The project must not jeopardize the continued existence of federally listed endangered and threatened species or their critical habitats;
- The project must not cause or contribute to significant degradation of the waters of the U.S.; and
- The project must include appropriate and practicable steps to avoid and minimize potential adverse impacts of the discharge on the aquatic ecosystem.

In order to comply with these guidelines, USACE permit applications must demonstrate that INDOT has taken steps to avoid impacts to water resources (where practical), minimize potential impacts to waterways, and provide compensatory mitigation for any remaining unavoidable impacts through activities to restore or create water resources.

To streamline permitting, USACE has a set of general permit programs for projects with low impacts to aquatic resources: the nationwide permit (NWP) program and the regional general permit (RGP) program. The majority of INDOT projects are permitted using these two programs. Any project that exceeds the impacts thresholds of these programs, or cannot comply with one or more of their general conditions, requires a 404 individual permit (IP). Refer to Chapter 4 for more information about these USACE programs.

Tulloch Rule (1993)

The Tulloch Rule, issued in 1993 by USEPA and USACE, revised the definition of "discharge of dredged material" to include the incidental fallback of any excavated materials that occurs during dredging operations. Activities such as mechanized land clearing, ditching, draining, and stream channelization were problematic under the CWA due to confusion over whether or not the excavation and spilling of debris associated with these activities constitutes discharge of materials into waters of the U.S. However, a 1998 court decision found that these agencies lacked authority under the CWA to regulate such activities if conducted in such a manner as to result in only "incidental fallback" (excavated material that falls back to substantially the same place as the initial removal). In May 1999, USEPA and USACE issued a final rule modifying the definition of "discharge of dredged material" in order to respond to the Court's finding and to ensure compliance with the Court decision.

USEPA and USACE proposed further rule revisions that were finalized and went into effect in April 2001. The final rule modifies the definition of "discharge of dredged material" by clarifying what types of activities USEPA and USACE believe typically result in regulated discharges, based on the nature of the equipment and agency experience. Under the rule, these agencies regard the use of mechanized earth moving equipment to conduct land clearing, ditching, channelization, in-stream mining, or other earth-moving activity in waters of the U.S. as resulting in a discharge of dredged material, unless project-specific evidence shows that the activity results in only "incidental fallback."

The Tulloch Rule does not allow for side casting of materials. Any materials removed from a jurisdictional water should be removed from the waterway, placed into a hauling truck (or other secure means of removal), and disposed of at an approved upland location away from aquatic resources subject to waterway permits. INDOT would need project specific evidence showing that the activity only resulted in incidental fallback to apply this rule. The volume and amount of material, as well as the nature and distance of relocation, are relevant in determining whether incidental fallback or a regulated discharge occurred.

SWANCC Decision (2001)

The U.S. Supreme Court made its ruling on *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* on January 9, 2001. SWANCC, a consortium of Chicago municipalities, selected an abandoned sand and gravel pit as a solid waste disposal site. The bottom of this pit contained permanent and seasonal ponds and wetlands. The operation called for filling in some of these aquatic resources. Because of this, SWANCC applied for a Section 404 permit which was subsequently denied by the USACE.

Section 404 of the CWA authorizes the USACE to issue permits for the discharge of dredged or fill material into "navigable waters of the United States." However, the USACE did retain authority over hydrologically isolated wetlands, such as those at the SWANCC site, through its 1986 Migratory Bird Rule, which stated that Section 404 extends to intrastate waters that provide habitat for migratory birds. The SWANCC decision held that USACE exceeded its statutory authority by using the Migratory Bird Rule to assert CWA jurisdiction over isolated wetlands. USACE still regulates isolated wetlands that support interstate commerce, but the SWANCC decision prohibits the Corps from using the Migratory Bird Rule as the sole basis for assertion of regulatory jurisdiction under the CWA in determining the interstate commerce connection.

The SWANCC verdict also extended USACE's authority under Section 404 to all wetlands adjacent to navigable or interstate waters and their tributaries. The decision approved a definition of adjacent as "bordering, contiguous, or neighboring." Thus, wetlands separated from other waters of the U.S. by man-made barriers such as dikes, natural river berms, and beach dunes are adjacent wetlands. Historical connections on U.S. Geological Survey (USGS) topographic maps should be used to determine adequate connection between a wetland and waters of the U.S. The USACE makes the final determination on the jurisdiction of wetlands.

Rapanos Decision (2006)

The U.S. Supreme Court's decision in the case of *Rapanos v. United States* (126 S.Ct. 2208) in 2006 resulted in changes to the jurisdiction of the USACE and USEPA under Section 404 of the Clean Water Act. The U.S government alleged that Rapanos illegally discharged fill material into protected wetlands violating the CWA. Rapanos argued that the disturbed wetlands were not "adjacent" wetlands subject to the CWA because they had only a surface connection to non-navigable waters of the United States. The Supreme Court ruled that the USACE must establish a "significant nexus" on a case by case basis when determining whether or not a water is jurisdictional. The USACE assesses the flow characteristics and functions of the tributary, and the functions performed by wetlands adjacent to the tributary, to determine if they will significantly affect the chemical, physical, and biological integrity of the downstream traditional navigable waters when making a significant nexus assessment. This considers hydrologic and ecologic factors.

As a result of the Supreme Court's ruling, the USACE and USEPA will assert their jurisdiction over the following waters:

- Traditionally navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters where water flow is year round or relatively permanent (typically three months); and
- Wetlands directly adjacent to non-navigable tributaries.

The USACE and EPA will determine jurisdiction using significant nexus for the following waters:

- Non-navigable tributaries without relatively permanent flow;
- Wetlands adjacent to non-navigable tributaries without relatively permanent flow; and
- Wetlands not directly adjacent to waters with a relatively permanent flow.

The USACE and USEPA will not assert jurisdiction over the following features:

- Swales or erosion features; and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water.

The Environmental Law Institute published the Second Edition of the *Clean Water Act Jurisdiction Handbook* in May 2012. Chapter 4 of the handbook provides wetland and stream checklists to help assess clean water act jurisdiction. See additional resources in the appendices for a link to this document.

Endangered Species Act (1973)

The Endangered Species Act (ESA) protects federally listed endangered and threatened species and requires conservation of their critical habitats. All federal agencies must protect these species and preserve their habitats. This act is administered by the U.S. Fish and Wildlife Service (USFWS). INDOT complies with the ESA by performing ecological coordination during the preparation of the project's NEPA document. Refer to the INDOT Ecology Manual for detailed information on Section 7 consultation. INDOT waterway permit applications are required to ensure project compliance with the ESA prior to authorizing waterway permits.

Section 401 Clean Water Act (1972)

The CWA requires each state to establish and evaluate its water quality standards. Under Section 401http://www.epa.gov/OWOW/wetlands/regs/sec401.html, states are required to certify that the discharge of fill will not violate their water quality standards. In Indiana, Section 401 is administered by IDEM. Anyone who wishes to discharge dredged or fill material into waters of the U.S. must obtain a Section 401 Water Quality Certification (WQC) from IDEM. This includes individuals, businesses, and government agencies. The applicant must demonstrate that the proposed project will comply with Indiana's water quality standards.

Because the need for a Section 404 permit from the USACE triggers the need for a Section 401 permit, IDEM works closely with the USACE throughout the application review process. However, there are differences with the authority of each agency which may result in the requirement for different levels of permitting. Chapters 4 and 6 will explore this further. When a USACE 404 permit is required, a Section 401 Water Quality Certification must be obtained from IDEM. IDEM will review the proposed activity to determine if it complies with state water quality standards. A project may not proceed until INDOT has received a certification (or other authorization) from IDEM. If USACE determines that a Section 404 permit is not needed, then another form of authorization from IDEM may be required. This is addressed for "isolated" wetlands where USACE has determined that it has no federal jurisdiction.

Isolated Wetlands in Indiana (2004)

At the time of the SWANCC decision, many states, including Indiana, did not have wetland regulations specifically for isolated wetlands. The general assembly gave IDEM authority to regulate isolated wetlands through rule making and permitting (IC 13-18-22). An isolated wetland is a wetland not subject to regulation under Section 404(a) of the CWA. IC 13-18-22 establishes a wetland classification system, general permits and exemptions, and gives IDEM the authority to regulate the placement of dredged or fill material into non-exempt isolated wetlands. This will be explained further in Section 6.5.

Executive Order 11990 (1977)

Executive Order 11990 requires each federal agency to develop procedures to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands. This order states that each federal agency shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds:

- There is no practicable alternative to such construction; and
- The proposed action includes all practicable measures to minimize impacts to wetlands.

The Federal Highway Administration (FHWA) has adopted policies to implement the requirements of Executive Order 11990. This includes a wetland finding in NEPA documentation for projects impacting wetlands. FHWA policy requires that wetlands be identified, characterized, and evaluated for the extent of impacts through the NEPA and project development process. INDOT is required to evaluate practicable avoidance alternatives to wetland impacts. If avoidance alternatives are not practicable, then practicable measures to minimize harm are considered and included in the project. Note that this order includes isolated wetlands and requires the same avoidance and minimization efforts required for jurisdictional wetlands.

Rivers and Harbors Act (1899)

Section 9 of the Rivers and Harbors Act prohibits the construction of any dam or dike across any navigable water of the U.S. without USACE authorization. It also prohibits the construction of bridges or causeways in or over commercially navigable waters of the U.S. without authorization by the United States Coast Guard (USCG) through the issuance of a bridge permit or permit amendment. The purpose of the Act is to prevent interference with the navigability of navigable waters by bridges or other obstructions to include controlling horizontal and vertical clearances for commercial navigation.

Section 10 of the Rivers and Harbors Act is administered by the USACE. It prohibits the creation of any obstruction to the navigable capacity of any waters of the U.S. without prior USACE approval. Section 10 requires a permit for all work (other than construction of bridges or causeways) performed in or over navigable waters of the U.S. Activities that would require USACE approval include, but are not limited to, structure construction or the excavation, fill, alteration or modification of jurisdictional waters.

Fish and Wildlife Coordination Act (1936)

The Fish and Wildlife Coordination Act of 1936, and its subsequent amendments, requires federal agencies to consult with the USFWS and the head of the state agency exercising administration over the wildlife resources that will be impacted (Indiana Department of Natural Resources (IDNR)). The goal of the Act is the conservation of wildlife resources. INDOT performs ecological coordination during the preparation of most NEPA documents. Early coordination letters are sent to both USFWS and IDNR and are included in the final NEPA document. Agencies reviewing waterway permit applications will request the results of the coordination (for example: a request from the USACE regarding compliance with the ESA).

Flood Control Act (1995)

The Flood Control Act (IC 14-28-1) regulates various development activities within the 100-year floodway of any Indiana waterway. The intent of this legislation is to prevent loss of lives and property from flooding. Development activities include bank protection, structure work (bridges/culverts), excavations, fills, outfalls, and certain utility work. The IDNR is the regulatory authority for this act and requires permits for any non-exempt work within the floodway.

In addition to reviewing a project's impacts on the floodway's capacity, IDNR will also evaluate the project's environmental impact to the floodway. If the project is found to have "unreasonable detrimental effects upon fish, wildlife, or botanical resources," compensatory mitigation may be required. Refer to Chapter 7 for more information on IDNR Flood Control Act permitting.

Wild and Scenic Rivers Act (1968)

The Wild and Scenic Rivers Act established national rivers which, with their immediate environments, possess outstanding or remarkable scenic, recreational, geological, fish and wildlife, historic, cultural, or other similar values. The act requires that these rivers be preserved in free-flowing condition, and their immediate environments protected for the benefit and enjoyment of present and future generations. A system of National Wild and Scenic Rivers was established to protect selected rivers and their surrounding environment. Indiana currently has no designated National Wild and Scenic Rivers, though the Maumee River (including its tributaries) is designated for potential addition to the National Wild and Scenic Rivers System.

NPDES General Permit Rule Program (1992)

The National Pollution Discharge Elimination System (NPDES) is administered by the USEPA. This agency delegates authority to the states to administer the program. In Indiana, IDEM's Rule 5 general permit program (327-IAC 15-5) focuses on reducing pollutants, especially sediment, associated with construction as well as post construction pollutants.

All projects that disturb soil are required to incorporate appropriate erosion and sediment control measures. In addition, projects disturbing more than one acre of soil are required to submit a formal application to IDEM for approval. A general permit is a permit by rule, and as such it is not "issued" in the same manner as a typical permit. A Rule 5 general permit is called a Notice of Intent (NOI) because the applicant is essentially notifying IDEM of their intent to operate the proposed construction project in a manner consistent with the rule. Refer to Section 6.6 for more information on Rule 5 permitting.

Indiana State Drainage Law (1981)

Indiana state law (IC 36-9-27) grants each county the authority to conduct and regulate activities within designated open drains and tiles for the purposes of maintaining efficient and effective flow through the drains. Each county has a drainage board with jurisdiction over regulated drains. The county's surveyor works with the board to implement drainage laws.

All counties can require the property owner to obtain permission from the board prior to engaging in activities that have the potential to negatively affect the flow conditions of the regulated drain and/or add pollutants to the regulated drain. This includes properties owned by INDOT. State law grants authority to the counties to require permits for activities on regulated drains. INDOT applies for any necessary county regulated drain permits with the county surveyor prior to initiated work in a regulated drain. Refer to Chapter 8 for more information regarding county regulated drain permitting.

CHAPTER 2 - WATERWAY PERMITTING PROCESS

The Ecology and Waterway Permitting Office (EWPO) provides support and coordination throughout the design and construction of INDOT projects. Section 1.3 summarizes the tasks assigned to this office. Ecological investigations (for example waters determinations and wetland delineations), mitigation/ monitoring plans, and mitigation site monitoring are discussed in the Ecology Manual.

2.1 PROJECT TEAM OVERVIEW

The EWPO is a part of a larger project team, which include both INDOT staff and contractors that are involved in project design and construction (Figure 2.1). Some of the activities that occur in the design phase include NEPA compliance, waters and wetland delineations, permit determinations, and permit application preparation. Based on the project scope, these activities may be completed by INDOT district or central office staff or a consultant. EWPO involvement begins with Ecological investigations and continues through project completion. EWPO roles can be in the form of the initiator, reviewer, advisor and/or liaison. During the construction phase, the Project Engineer (PE), Project Supervisor (PS), Area Engineer (AE), and contractor ensure that the project is constructed according to design and that the project stays in compliance with the issued permits. The regulatory agencies (most commonly USACE, IDEM, IDNR, and the USCG) issue the required permits and monitor permit compliance.

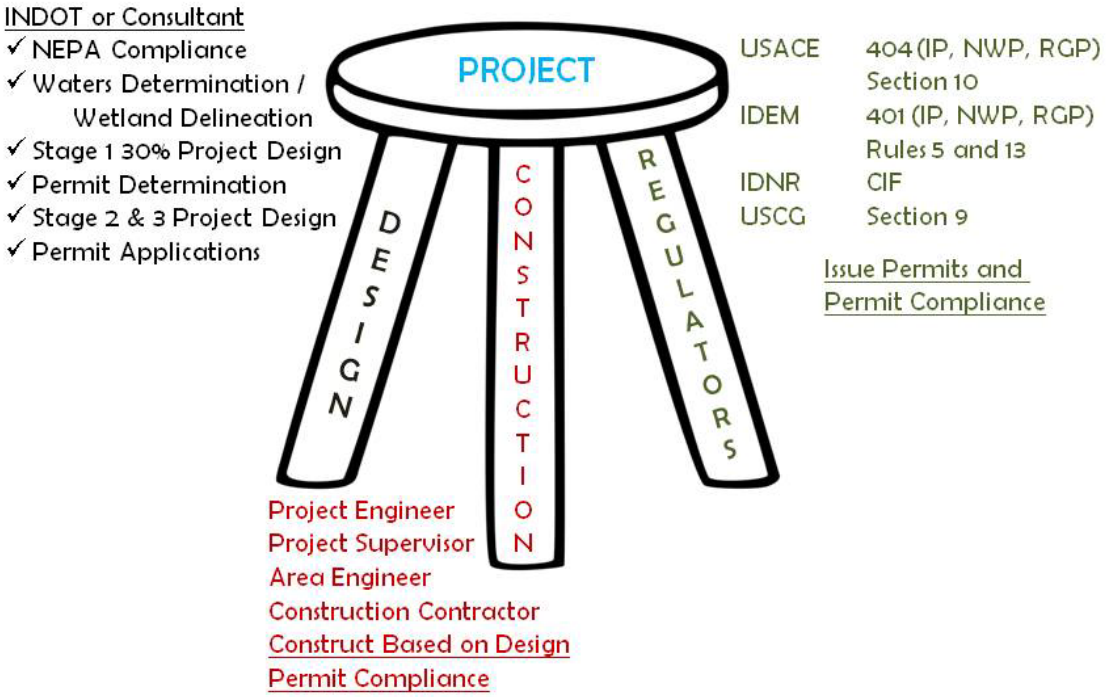


Figure 2.1 Three-Legged Stool

2.2 PERMIT DETERMINATIONS

A permit determination (PD) is an evaluation by the EWPO to determine what waterway permits, if any, are required for INDOT projects as well as the appropriate level of permitting. During the project development process, a PD package should be submitted to Environmental Services Division (ESD) after stage one (30% design) is reached. It is critical that a PD be done early in the design process to ensure that adequate time is set aside to apply for and receive all necessary waterway permits prior to letting.

PDs are usually initiated by the designer or project manager, who should submit the following documents to the EWPO when requesting a PD:

- Scope of the project;
- Plan and profile sheets;
- Structure detail sheets, including the upstream drainage area for each structure;
- Cross sections;
- Waters of the U.S. report (see Ecology Manual);
- Documentation of the presence or absence of federal/state endangered, threatened, or rare species; and
- Impact estimates for waters resources, including linear feet and acres of impact below the ordinary high water mark (OHWM) for streams and acres of impact for wetlands.

The designer should submit these documents electronically to the ecology and waterway permitting specialist and team lead assigned to the area. A map that provides the areas of responsibility for the ecology and waterway permit specialists and the team leads is available online at http://www.in.gov/indot/2522.htm. Uploading the documents into ERMS or on to an FTP site is acceptable and may be required for larger files. A permit determination checklist is available in Appendix A. The appendix also includes a PE/PS Checklist that outlines key activities that should occur prior to and during the PRECON and during construction.

If a PD is not requested from the project manager or designer at stage one, the project's permitting needs will be reviewed when it appears on INDOT's eighteen-month tracking list. This list details project letting schedules by month over an eighteen month period. EWPO staff will initiate coordination for new projects on this list that have not had a PD. A delayed permit determination may cause problems since several permits have an average agency review time of more than 12 months, and if compensatory mitigation is required, it may take over a year to locate and design a suitable mitigation site. As a result, some permits may require up to two years to prepare a complete application and for regulatory agency review.

PDs will include the level of waterway permitting that is likely required as well as identify the need for compensatory mitigation. The type and amount of impacts to regulated aquatic resources as well as compliance with general permit conditions determines the type of permits that will be required. The waterway permits that may be required on INDOT projects and the responsible agencies include:

- **United States Army Corps of Engineers (USACE)**
  - 404 Nationwide Permit (NWP)
  - 404 Regional General Permit (RGP)
  - 404 Individual Permit (IP)
  - Section 10 Permit
  - Levee Permit

- **United States Coast Guard (USCG)**
  - Section 9 Bridge Permit
- **Environmental Protection Agency (EPA)**
  - Class V Injection Well Permits
  - Sole Source Aquifer

- **Indiana Department of Environmental Management (IDEM)**
  - Section 401 Water Quality Certification (WQC)
  - Rule 5
  - Section 402 National Pollutant Discharge Elimination System (NPDES) Point-Source Permit
  - Isolated Wetland Permit

- **Indiana Department of Natural Resources (IDNR)**
  - Construction in a Floodway Permit
  - Navigable Waterways Permit
  - Lake Preservation Act
  - Lowering of Ten Acre Lakes Act

- **County Regulated Drain Permit** (Allen, Elkhart, Hamilton, Lake, and LaPorte counties)

EWPO staff will communicate the waterway permitting need to the designer and project manager based on the submitted project design and the waters impacts. For the majority of INDOT projects, PDs are completed in less than one week if sufficient information regarding impacts to aquatic resources is available. EWPO correspondence will include the timeline for permit submittal to INDOT prior to the ready for contract (RFC) date. Submittal of complete permit applications by this date will minimize project delay due to the lack of a permit.

Permit determinations are revisited when waterway permit applications are submitted to the EWPO. Changes to the project's scope or design since the original PD may change the permitting need. The designer is responsible for notifying the EWPO of changes as soon as possible so that a permit determination can be reevaluated. A determination that a different or additional permits are required at the time of permit application submittal increases the risk that permits will not be received prior to letting. Time and funding can also be saved by not preparing unnecessary permits.

2.3 WATERWAY PERMIT APPLICATIONS

Application Submittal and Timelines

Permit applications should be accurately and completely filled out prior to submission. This includes providing all the information and supplemental material listed on each application form. The permit application should include all permanent impacts to water resources, and any temporary impacts should be quantified in an attachment. Inaccurate or incomplete applications will result in multiple reviews and delay submittal to the agencies. This will put the project at risk for meeting its schedule.

The designer can submit the permit application through INDOT's Electronic Records Management System (ERMS). Alterative submittal methods include hard copy submittal, uploading the application onto an FTP site, or electronically mailing the application directly to the appropriate staff members. A final version of the permit application must be uploaded into ERMS for long-term INDOT storage. ERMS naming conventions should be followed as stipulated in the INDOT Design Manual.

Applications will be reviewed by EWPO staff, who will send any questions or comments to the designer. Once all changes have been made, the completed application will be signed by an authorized signatory (the EWPO manager or a Team Lead). EWPO staff will submit the signed application to the appropriate regulatory agency for review and approval. After a permit has been issued, EWPO staff will notify the project manager and the designer. This notification will include a copy of the permit and a request for its inclusion into the project's contract letting documents.

A common mistake made by designers is to wait to forward applications to the EWPO until late in the design process. INDOT staff must review and approve applications prior to submission. *The permitting agencies have timeframes and tasks mandated by law, and some of these timeframes cannot be accelerated to accommodate a project's schedule.* For example, IDEM must hold a twenty one-day public notice period for each individual 401 Water Quality Certification (WQC). In addition, a 401 individual permit does not become effective until the eighteen day mandated appeal period has passed. Therefore, the minimum IDEM review period is at least 39 days for each 401 individual permit application.

Early application submittal allows additional time to respond to agency comments. This may require design and permit application modification. Table 2.1 describes the average review time for common waterway permit applications. It also includes the number of months prior to a project's RFC date that the application must be submitted to the EWPO office. Failure to submit applications according to these timelines increases the risk of not having a permit by the RFC date. These timeframes assume an accurate and complete permit application is received at the first submittal. The review process will be halted if INDOT or a regulatory agency denies the application, or puts it in abeyance, because of missing or insufficient information.

Table 2.1: Permitting Timeframes

Agency	Permit type	Average Agency Review Time (months)	Number of Months Application Packages Need to be Given to EWPO Prior to RFC
USCG	Section 9	3 months	5 months
USACE	Section 10	2 months	7 months
USACE	404 Individual Permit	12 to 18 months	18 months
USACE	404 Nationwide Permit	4 months	4 months
USACE	404 Regional General Permit	4 months	4 - 6 months
IDEM	401 Individual	2 months	7 months
IDEM	401Nationwide Permit	1 month	4 months
IDEM	401 Regional General Permit	1 month	4 months
IDEM	Rule 5	1 month	4 months
IDEM	Isolated Wetlands	4 months	7 months
IDNR	All Permits	6 months	9 months
County Drain	Regulated Drain Permit	3 months	4 months

Application Fees
INDOT does not pay fees for waterway permit applications with the exception of filing fees associated with Rule 5 Notices of Intent (NOI). The INDOT EWPO will coordinate on the funds transferred to IDEM for Rule 5 applications. The contractor is responsible for paying the filing fees for design build and lump sum erosion control projects. See Chapter 6.6 for more information on the Rule 5 permitting process.

Public Notices
Public notices are required for several permits. In some cases these are issued by the regulatory agencies while in others the applicant (INDOT) is required to issue the public notice. The EWPO will issue the public notice required for Rule 5 and IDNR construction in a floodway applications.

IDEM will issue a public notice for all individual 401 WQCs. This public notice period lasts twenty-one days and is sent to adjacent property owners as well as other resource agencies. IDEM will coordinate with INDOT regarding any relevant comments received as a result of the public notice prior to approving the WQC. IDEM will also follow this process when processing permits under its isolated wetlands program.

The USACE will issue a public notice for all individual 404 and Section 10 permits. The public comment period ranges from fifteen to thirty days. The USCG will issue a public notice under Section 9 with a public comment period of thirty days. Comments resulting from these public notices will be passed along to INDOT for resolution prior to approval of the permit application.

2.4 CONTRACT LETTING DOCUMENTS

Contract Information Book
Contract information books (CIBs) detail contractor responsibilities for each INDOT project. These are available on INDOT's website (http://www.in.gov/dot/div/contracts/letting/index.html). CIBs contain pay items and special provisions associated with the project. The designer is responsible for ensuring that the CIB reflects all of the waterway permits obtained for the project.

The designer should verify that all the acquired permits for the contract are included as well as all of the conditions for each permit. In addition, the pay items need to match the measures required for all waterway permits. The erosion and sediment control measures associated with the Rule 5 permit application should be included as pay items and the quantities verified to determine if adequate amounts are included in the contract. Materials required for wetland or stream mitigation are other pay items that may be required. Change orders during construction could result if necessary pay items, or the appropriate quantities, are not included in the CIB.

Special provisions related to waterway permits may include:

- Instructions on the installation of non-standard pay items, such as those associated with compensatory mitigation site construction or Rule 5 applications;
- Provisions to address unique special conditions included in waterway permits; and
- Provisions to prevent violations, such as marking adjacent wetlands with construction flagging/ fencing.

Project Plans

Contract letting plans should reflect all waterway permits obtained for the project. The designer is responsible for delivering a set of plans free of discrepancies that would result in violations of permits or applicable environmental laws and regulations during construction. In particular, letting plans should include:

- Symbols and labels for all rivers, streams, creeks, ditches, lakes, ponds, etc. using the same nomenclature used in the permit application (USGS topographic name);
- Symbols and labels for the ordinary high water mark (OHWM) elevation on all stream and structure cross sections;
- Marked boundaries for all impacted and adjacent wetlands with labels reflecting the nomenclature used in the permit applications;
- Marked boundaries for the 100-year floodplain;
- Marked boundaries of any other aquatic resource;
- Erosion and sediment control measures that reflect the finalized Rule 5 application; and
- Compensatory mitigation, if required, reflecting the mitigation plan submitted to regulatory agencies.

All of this information is required to minimize the chances for violations of waterway permits. For instance, INDOT construction staff and the contractor will need to link the permitted impacts to the project plans. Without appropriate labeling of waters of the U.S. and the 100-year floodplain, it would be difficult to link impacts listed in 404, 401, and IDNR permits. This could result in additional impacts to these resources and/or difficulty in determining whether or not a permit modification is needed. To assist with clarifying impacts, it is recommended that designers include notation in letting plans on resources that are not to be either wholly (or only partially disturbed) during construction. This could include labels such as “Do Not Disturb” or symbols such as hatching to convey this information to construction. Additionally, if adequate erosion and sediment control measures are not included in the letting plans, there is an increased risk of violating Rule 5 during construction. Finally, if compensatory mitigation is left out of a contract, INDOT will not be able to construct the mitigation within the required regulatory timelines, thereby violating the terms of the projects permits. INDOT may then need to let a separate contract to address this oversight.

Project Commitments

The commitments database conveys important information to designers, project managers, and construction staff. It ensures that important requirements (commitments) on projects are either addressed during the development process or are flagged for construction’s attention after project letting. Requirements covered by INDOT Standard Specifications should not be included in the commitments database. The EWPO will include unique permit conditions in the commitments database if compliance will require special action from construction. For example, if an IDNR Construction in a Floodway (CIF) permit requires that a peregrine falcon expert be brought in to assess a bridge for nests prior to its demolition, a commitment will be entered in the database so construction will be aware of this unique situation. The designer should address this during design by including a special provision in the CIB. Questions regarding an EWPO entered commitment should be coordinated with the EWPO contact.

2.5 CONSTRUCTION

Preconstruction Meeting

A preconstruction (PRECON) meeting is held prior to the start of construction for each INDOT project. The Project Manager, designer, contractor, and project engineer (PE) or project supervisor (PS) in addition to other interested parties (i.e. utility companies or local government entities), will attend this meeting. The PE/PS is responsible for ensuring that waterway permits are available and discussed at the PRECON. A PE/PS checklist for PRECONs and construction is provided in Appendix A-1 - PE/PS Checklist. Items to discuss include:

- Sequencing of erosion/sediment control measures for all phases of construction;
- Any necessary permit modifications, including unpermitted temporary impacts;
- Any necessary waivers (fish spawning season and Indian Bat clearing restriction); and
- Permits needed for utility work (utilities are required to obtain their own permits).

All waterway permits must be posted on the construction site. They are usually posted on a bulletin board located within the project limits. The PE/PS and contractor must be familiar with the general and specific conditions associated with each permit, to include linking permitted impacts to the project plans. Any questions can be directed to the EWPO contact for that district.

Permit Modifications and Extensions

Permit modifications are needed for any deviation that exceeds the level or type of impacts authorized in the permits. All modification requests should be submitted through the EWPO office for processing since INDOT was the permit applicant. Regulatory agencies will typically reject modifications not submitted through INDOT. Additional impacts may result in the requirement for additional compensatory mitigation. As with all impacts to aquatic resources, INDOT must demonstrate that all practical steps have been taken to avoid and minimize impacts.

The PE/PS is responsible for forwarding documentation of the proposed change(s) and the contractor is required to provide the necessary information needed for a permit modification. This includes:

- The scope of the proposed changes to the permitted impacts;
- The reason for the additional impacts and any avoidance/minimization that was considered; and
- Project plans marked with the location of any proposed changes.

Waterway permits have expiration dates and a permit may expire prior to the start or before completion of construction. The Project Manager and/or PE/PS are responsible for ensuring that all permits remain valid. If a permit is set to expire, the EWPO should be notified at least ninety (90) days prior to the permit expiration date so that a permit extension can be requested. The reason for the extension and the expected completion date should be provided so that this can be included with the extension request. Since permit extensions are from the date requested they should not be requested too far in advance to avoid multiple extension requests.

Regulatory Agency Enforcement

A violation occurs when a project is out of compliance with one or more of its permits or when the project has unpermitted impacts to an aquatic resource. The EWPO conducts site inspections to identify noncompliance on active construction projects and provide technical assistance to project construction staff to bring projects back into compliance before formal violations are issued by regulatory agencies.

Regulatory agencies will conduct routine inspections of projects and follow-up on complaints. The agencies issue inspection summaries following their visit, which may include violations that require correction to bring the project back into compliance. EWPO staff will coordinate with construction staff (PE, PS, area engineer, etc.) and the Project Manager on appropriate corrective action. EWPO staff will also coordinate a formal written response to the agency. It is the responsibility of the Project Manager and PE/PS to ensure compliance with all permit conditions and environmental laws and regulations.

CHAPTER 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)

INTRODUCTION TO USEPA PERMITTING

The United States Environmental Protection Agency (USEPA) is the primary regulatory agency for environmental quality in the United States. It administers most environmental protection laws, including the Safe Drinking Water Act (SDWA) and the Clean Water Act (CWA). There are two programs under these acts that may impact INDOT projects: Underground Injection Control and Sole-Source Aquifers.

3.1 UNDERGROUND INJECTION CONTROL

Background

The Underground Injection Control (UIC) program is authorized by the SDWA and protects drinking water quality by regulating the injection of waste fluids into the ground. The waste fluids originate from industries, municipalities, and small businesses during the process of mineral extraction. The purpose of the UIC program is to ensure that the hazardous and non-hazardous fluids are injected safely and cost effectively while fulfilling the mission to protect underground sources of drinking water (USDWs). These drinking water sources are protected from contamination by regulating the location, construction, operation, and closure of injection wells.

An USDW is an aquifer, or portion of an aquifer, that supplies any public water system (or contains a quantity of ground water sufficient to supply a public water system) and currently supplies drinking water for human consumption, or an aquifer that contains fewer than 10,000 mg/L total dissolved solids (TDS) and is not an exempted aquifer. There are five pathways to contamination from injection wells: (1) faulty well construction, (2) nearby wells that allow injected material to escape, (3) faults or fractures in confining strata, (4) direct injection, and (5) displacement of fluids from the injection zone to hydraulically connected USDWs.

There are six classes of injection wells:

- Class I Wells isolate hazardous, industrial, and municipal wastes through deep injection;
- Class II Wells injection wells associated with oil and gas production;
- Class III Wells minimize environmental impacts from solution mining operations;
- Class IV Wells prevent ground water contamination by prohibiting the injection of hazardous or radioactive waste above the lowermost USDW except as part of authorized cleanup activities;
- Class V Wells injection wells not included in Classes I, II, III, IV or VI; and
- Class VI Wells for geologic sequestration of gaseous, liquid or supercritical carbon dioxide (CO_2) stream in subsurface geologic formations.

There are over twenty well subtypes included in the Class V category, the category that applies to some INDOT projects. These wells are typically used for safe injection of non-hazardous fluids through on-site disposal systems such as dry wells, septic systems, leach fields and similar types of drainage wells, and deeper wells (Figure 3.1). Most Class V wells depend on gravity to drain fluids directly below the land surface while others rely on gravity or use pressure systems for fluid injection. A Class V well is defined as any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension, or an

improved sinkhole, or a subsurface fluid distribution system (an infiltration system with piping to enhance infiltration capabilities).

Figure 3.1 Class V Wells

INDOT activities that may fall under the Class V well regulations may include large-capacity septic systems (LCSS) in use at rest areas and for storm water drainage. An LCSS is an on-site method for partially treating and disposing of sanitary wastewater. The UIC regulations include septic systems that have the capacity to serve twenty or more persons-per-day.

Storm water drainage wells are used to remove storm water or urban runoff (includes rainwater and snow melt) from impervious surfaces such as roadways, roofs and other paved surfaces. Storm water drainage wells are primarily bored wells, dug wells, and improved sinkholes. It includes any subsurface drain field that releases fluid underground including French drains, tile drains, infiltration sumps, and percolation areas with vertical drainage. An improved sinkhole (a natural karst depression or open fracture that has been intentionally altered to accept and drain storm water runoff) is also included. EPA regulation over this type of well must be considered when working in the karst region in southern Indiana. See the INDOT Ecology Manual for more information on karst resources. Storm water drainage wells are vulnerable to spills or illicit discharges of hazardous substances due to their close proximity roadways, parking lots and facilities where the substances are handled. In addition, the runoff may be contaminated with sediments, nutrients, metals, salts, fertilizers, pesticides, and microorganisms.

There are two infiltrations systems that are not storm water drainage wells: infiltration trenches and surface impoundments or ditches. An infiltration trench is an excavated trench that is filled with stone to create an underground reservoir. It is usually wider than it is deep and may not contain any piping or drain tiles. A surface impoundment or ditch is an excavated pond, lagoon, or ditch with an open surface. The ditch can either be lined or unlined but it must not contain piping or drainage tile. If either of these systems contained a subsurface fluid distribution system is would be considered a Class V injection well.

<u>Application Process</u>
If the proposed INDOT project includes a Class V injection well, the project designer should verify with the INDOT EWPO what level of coordination is necessary with the USEPA. Storm water drainage wells

are “authorized by rule” (40 CFR 144). No permit is required if they do not endanger USDWs and they comply with the federal UIC program requirements. Endangerment would occur if the storm water contaminant resulted in a violation of drinking water standards or otherwise endangered human health.

3.2 SOLE SOURCE AQUIFER

Background

An aquifer is a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring. The Sole Source Aquifer (SSA) Protection Program is authorized by the SDWA (Section 1424(e)). USEPA defines a sole or principal source aquifer as one which supplies at least fifty (50) percent of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) which could physically, legally, and economically supply all those who depend upon the aquifer for drinking water. All designated sole or principal source aquifers are referred to as "sole source aquifers" (SSA). A SSA is protected by requiring USEPA to review certain proposed projects within the designated area. All proposed INDOT projects receiving federal funds are subject to review to ensure that they do not endanger the water source.

Indiana’s only SSA is located in St. Joseph, Elkhart, LaGrange, Kosciusko, and Noble Counties (Figure 3.2). The St. Joseph Aquifer (53 FR 23682, published 06/23/88) is an unconfined aquifer that is open to contamination from the infiltration of surface water.

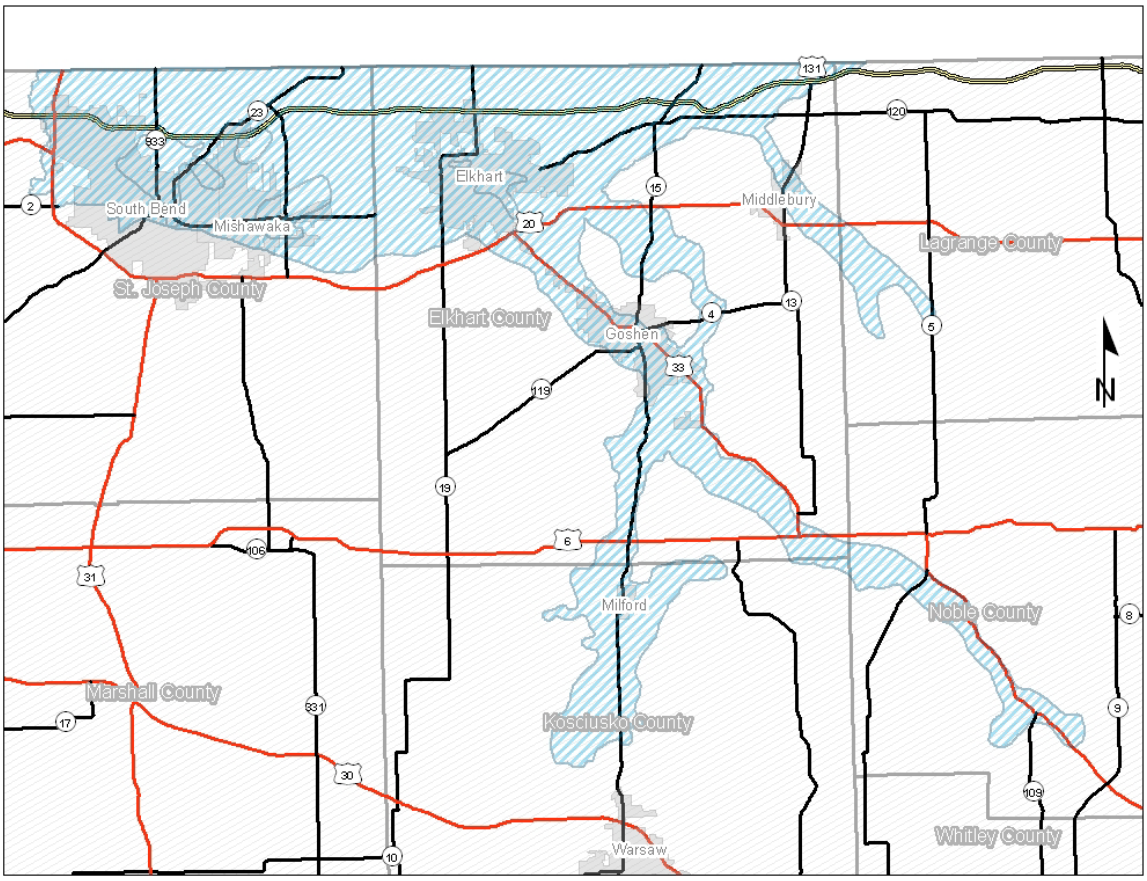


Figure 3.2 St. Joseph Aquifer System

The Memorandum of Understanding (MOU) between the Federal Highway Administration (FHWA), Region 5 and the U.S. Environmental Protection Agency (USEPA), Region 5, signed on April 18, 1989 states that FHWA will not “commit federal financial assistance to any project which EPA determines may

contaminate a sole source aquifer through its recharge zone so as to create a significant hazard to public health." The goal is to ensure that projects in the designated area that receive Federal financial assistance are designed in a manner that will prevent the introduction of contaminants into the aquifer in quantities that may create a significant hazard to public health.

The requirements of the MOU apply to any federally funded highway project that is wholly or partially within a sole source aquifer and to which one or more of the following criteria apply:

- Construction of additional through traffic lanes or interchanges, on existing roadways;
- Construction of a two or more lane highway on new alignment;
- Construction of a rest area or scenic overlooks with on-site sewage disposal facilities;
- Any project involving a new or existing well within a designated sole source aquifer area; and
- Any other project that FHWA, in consultation with USEPA, believes may have a potential to affect the designated aquifer through its recharge zone so as to create a significant hazard to public health.

Application Process

When a project is within a SSA and meets any of the above criteria, INDOT must assure the USEPA that the project will not contaminate the aquifer. The project designer is required to perform this coordination, usually during the preparation of a project's National Environmental Policy Act (NEPA) document. A *Sole Source Aquifer Screening* may be sufficient for the USEPA to prove that a project does not have the potential to adversely affect a sole source aquifer. The USEPA must approve a *Detailed Ground Water Impact Assessment* (GWIA) when they determine that the project has the potential to adversely affect the quality of the groundwater. USEPA may apply special conditions to such projects to assure that no contamination of the SSA occurs.

3.3 USEPA COORDINATION SCENARIOS

The following examples are provided to illustrate where coordination with the USEPA may be required. The final coordination need, and resulting project requirements, are determined by the USEPA.

- INDOT proposes a new rest area in Wayne County. All wastewater generated by this facility will be discharged to a septic tank system. Since this is a Class V injection well, coordination with the USEPA is required.

- INDOT proposes a resurfacing project in St. Joseph County. The project is located within the SSA and is federally funded. Work will be limited to the existing pavement. No coordination is required with the USEPA regarding potential SSA impacts.

- INDOT proposes a road widening project in St. Joseph County. The project is located within the SSA and is federally funded. Work will include added travel lanes and a new interchange. Coordination is required with the USEPA for potential SSA impacts.

CHAPTER 4 - UNITED STATES ARMY CORPS OF ENGINEERS (USACE) PERMITTING

INTRODUCTION TO USACE PERMITTING

The USACE has been involved in regulating certain activities in the nation's waters since 1899. As a result of several laws and judicial decisions (see Chapter 1), their program has evolved from one that focused primarily on navigation to one that considers non-navigable waters and wetlands adjacent to these features. Common permitting programs that are administered by the USACE in Indiana include Section 404, Section 10, and levee permits. There are three USACE districts with jurisdiction in Indiana - Louisville, Detroit, and Chicago (see Figure 4.1).

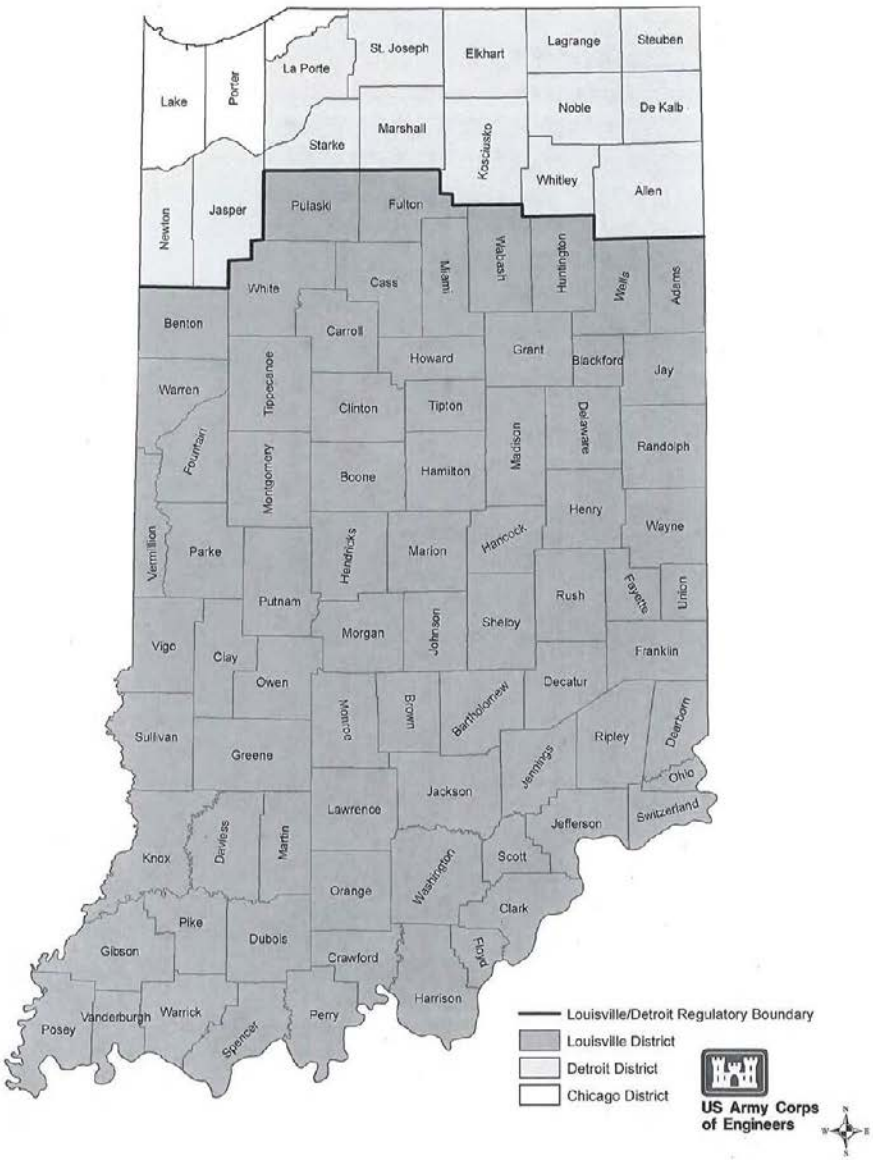


Figure 4.1 U.S. Army Corps of Engineers Districts (Revised 12/16/2013)

Section 404 of the Clean Water Act

The Section 404 permitting program regulates the discharge of dredged or fill material into waters of the U.S. USACE's duties include: jurisdictional determinations for waters (jurisdictional vs. isolated determination), developing polices and guidance, reviewing and approving 404 permit applications, and enforcing permit conditions including compensatory mitigation requirements.

In general, USACE jurisdiction for navigable waters and their tributaries with relatively permanent flow occurs at or below the ordinary high water mark (OHWM). The OHWM is the line on the shore established by fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, water staining, or other appropriate means that consider the characteristics of the surrounding areas (see the INDOT Ecology Manual).

The Corps's jurisdiction for wetlands extends to the wetland/upland boundary. A wetland must meet all three criteria outlined by the *U.S. Army Corps of Engineers Wetland Delineation Manual* (January 1987) and applicable regional supplements. These criteria are hydrophytic vegetation, hydric soils, and hydrology (see the INDOT Ecology Manual).

USACE regulates the 404 permitting process through two basic types of permits: general permits and individual permits (IP). General permits include Regional General Permits (RGP) and Nationwide Permits (NWP) and may be issued if the project activity falls within the constraints and conditions of the general permit program.

Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 requires approval by the USACE for any work in or over navigable waters of the U.S., or which affects the course, location, condition, or capacity of such waters. Federal jurisdiction under Section 10 on traditional navigable waterways is limited to the lateral extent of the OHWM. The Corps reviews applications for projects performed in or over navigable waters of the U.S., including dredging operations and pier construction in these waters. See Figure 4.2 for a comparison of regulatory boundaries of the Section 404 and Section 10 programs.

Levee Permit

A USACE Levee Permit is required when a project affects a levee system owned by the Army Corps of Engineers. A permit from USACE is required before any work can be initiated which may affect the levee. The purpose of this permit program is to ensure continuous levee system integrity. The actual permit form varies depending on the USACE District where work is proposed.

Levees may be owned by a local levee authority (for example: Evansville Levee Authority). If so, the permit application is submitted to the local levee authority for approval of the proposed project. When approved, the local authority forwards the application onto the USACE for final approval. USACE's acceptance and approval of a levee permit application is generally assured once the local levee authority approves the plans.

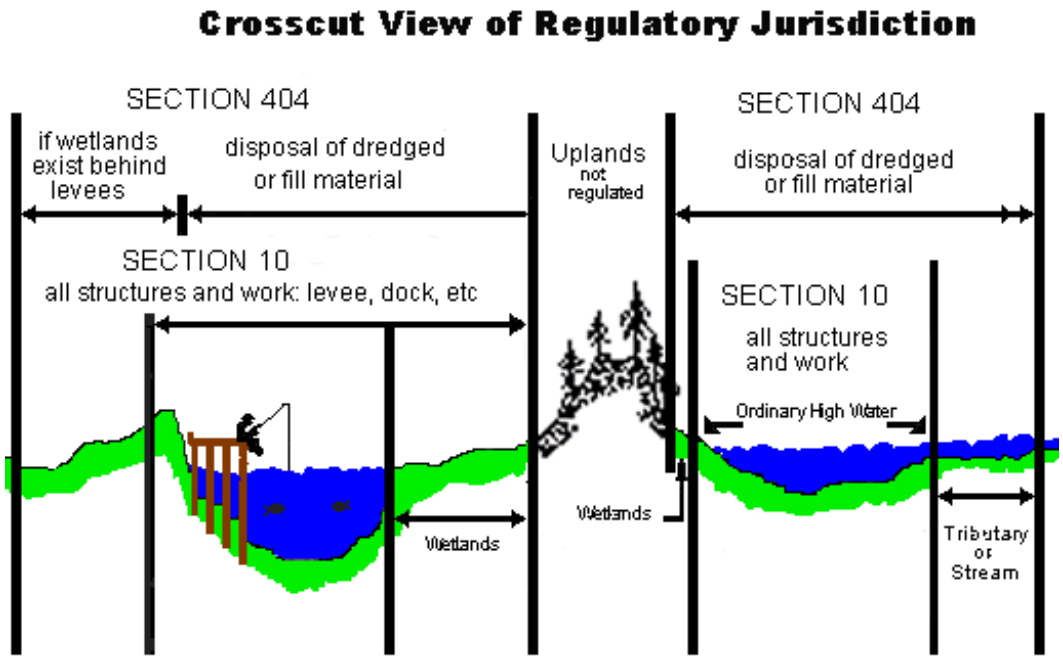


Figure 4.2 Crosscut View of Regulatory Jurisdiction of Section 404 and Section 10

4.1 404 NATIONWIDE PERMIT (NWP)

Background

The Nationwide Permit (NWP) program authorizes activities with minor impacts to waters of the U.S. with the goal of expediting projects which, individually and cumulatively, have little or no adverse effect on the environment. The current Indiana 404 NWP program was authorized on March 19, 2012 and will expire on March 18, 2017.

The NWP program authorizes activities associated with repair, rehabilitation, or replacement of previously authorized structures or fill provided that the fill is not being put to different uses than originally permitted. Requirements of the current authorization of this program include:

- Discharges of dredged or fill material will impact **less than 1.0 acre** of waters of the United States (including wetlands);
- Fill placement in streams is limited to **less than 1,500 feet** of stream channel; and
- All general permit conditions of the NWP program are met (Appendix B-1- Nationwide Permit Conditions).

In general, the USACE will consider each water resource impact separately. For instance, a linear transportation project may cross several waterways and each may meet the thresholds for a separate NWP. However, the USACE can evaluate multiple impacts cumulatively if they occur to the same resource and/or in close proximity to each other. For example, one stream that is crossed and impacted several times may be viewed cumulatively. Additionally, impacted resources in close proximity, such as a stream and its adjacent wetland, may be viewed cumulatively. See Section 4.7 for example projects that would require a 404 NWP.

It is possible for a project to be covered under the 404 NWP while exceeding the thresholds of (or not meeting the general conditions of) the Indiana Department of Environmental Management 401 NWP or RGP. In this case, an individual IDEM 401 Water Quality Certification (WQC) would be required in conjunction with the USACE 404 NWP. Mitigation is required for all projects where impacts exceed 0.1 acres to waters of the U.S. and/or 300 linear feet of stream. However, mitigation is rarely required for INDOT NWP permitted projects. Restoration plans are more commonly associated with these permits, some of which could require monitoring following construction to ensure certain success criteria are met. Refer to INDOT's Ecology Manual for the mitigation requirements associated with 404 permits.

IDEM has denied Section 401 Water Quality Certifications (WQC) for certain 404 NWPs. Because of this, an IDEM 401 Individual Permit is required for work that fits under these categories. For more detail regarding available NWPs see Appendix B-5- Applicable Indiana Nationwide Permits. If a project has impacts outside of that allowed by the available NWPs, a Regional General Permit (RGP) or an Individual Permit (IP) application must be submitted.

INDOT most frequently uses the following Nationwide Permits: NWP #3 - Maintenance, NWP #27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities, and NWP #33 - Temporary Construction, Access, and Dewatering. IDEM has general conditions specific to each of these approved 404 NWPs (see Chapter 6).

NWP #3 - Maintenance

There are three types of 404 NWP #3 permits. **404 NWP #3(a)** authorizes the repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure or fill so long as the structure/fill is not put to uses differing from those specified in the original permit. Minor deviations to the structure's configuration or fill area are allowed including changes due to construction techniques, materials, or current safety standards. No new or additional fill can be placed outside of the original fill footprint. No preconstruction notification (PCN) is required for this permit, although INDOT is still required to follow the conditions of this NWP.

404 NWP #3(b) authorizes the removal of accumulated sediments and debris in the vicinity (and within) existing structures. Sediment removal is limited to the minimum necessary to restore the waterway to the condition that existing when the structure was built and cannot exceed 200 feet from either side of the structure. This NWP also authorizes the placement of new or additional riprap to protect the structure. As with sediment removal, this must be the minimum amount needed to protect the structure. Bank stabilization not associated with the structure is not covered under this NWP. PCN is required for this permit.

404 NWP #3(c) can only be issued in conjunction with either a (a) or (b). It authorizes temporary fill necessary to conduct a maintenance activity. The USACE requires that normal downstream flow be maintained as well as complete restoration of all temporary impacts. Temporary fill examples include but are not limited to cofferdams, dikes, stream crossings, and causeways.

NWP #27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities

The 404 NWP #27 is typically used for remediation work within INDOT mitigation sites. Activities that can be permitted under this NWP include removal of accumulated sediments, installation of water control structures, installation of current deflectors or riffle/pool stream structures, modifications of stream beds or banks, and activities to reestablish vegetation. PCN is required for this permit.

NWP #33 - Temporary Construction, Access, and Dewatering

The 404 NWP #33 authorizes temporary fill discharges necessary for construction activities. This permit requires that the primary activity associated with the construction project be previously authorized by the USACE (i.e. no permanent impacts will be permitted under this NWP). Temporary work includes cofferdams, causeways, stream crossings, and pump-arounds. This NWP is most commonly applied for during project construction when the contractor needs permission to enter jurisdictional wetlands or streams to complete the contracted work. PCN is required for this permit.

Application Process

The USACE requires PCN for some NWPs prior to initiation of construction. The USACE allows the use of Application for Department of Army Permit USACE Form 4345 for PCNs (Appendix B-6 - USACE Form 4345). Louisville and Detroit USACE districts will also accept IDEM Section 401 WQC RGP Notification Form 51937 in lieu of Form 4345 (Appendix D-33 - 401 IDEM RGP Form 51937), but all submittals to the Chicago USACE district must be made on Form 4345. In addition to the application form, PCN should include the following information:

- Waters report with signed preliminary jurisdictional determination form (see the INDOT Ecology Manual);
- Description of the proposed project, its purpose, and impacts to waters of the U.S. (acres and linear feet);
- Project plans labeled with all jurisdictional waters that include cross sections of all fill placement with the flow-line elevation, ordinary high water mark (OHWM) elevation, and wetland boundaries if applicable;
- IDNR Early Coordination/Environmental Assessment (ETR documentation);
- USFWS Section 7 clearance letter;
- IDNR Section 106 state historic preservation office (SHPO) concurrence letter; and
- Restoration plan for all temporary impacts including revegetation of all disturbed soil.

The EWPO office requires designers evaluate and include the most likely measures needed to construct a project. For instance, if a bridge deck will be removed, the contractor will likely need a temporary stream crossing during construction. This should be detailed in the permit application exhibits. Inclusion of this information in the permit application reduces delays during construction from permit modifications. It also reduces permit violations resulting from contractor failure to obtain the necessary permit modifications. Items to include for each temporary measure are the:

- Type of non-erosive fill material;
- Volume (cubic yards) and area (acres) associated with the temporary measures below OHWM;
- Temporary acres of impact to any wetland(s);
- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will be in place;
- Number and dimensions (diameter and length) of pipes required for temporary stream crossings; and
- Restoration plan which includes an appropriate seed mix.

A NWP checklist has been included in Appendix B-9 - 401 / 404 NWP – Nationwide Permit - Checklist to assist the project designer with application preparation. The EWPO will review the designer's submittal and request revisions if needed. The completed PCN will be submitted to the USACE by the EWPO. Refer to Chapter 2 for more detailed information on the INDOT review and

permit application submittal process. The USACE will issue a permit upon their approval of the application.

If a project does not require a PCN to the Corps, and also meets IDEM's 401 NWP conditions, no notification is required to either IDEM or the USACE. The designer will still need to submit a complete PCN to EWPO so this information can be kept on file and provided to either agency upon request. *Only EWPO staff can determine whether or not a project requires no notification.*

The USACE is required to rule on a PCN within 45 days of the receipt of a complete application. They have 30 days to notify the applicant that the PCN is incomplete. If a ruling is not received from USACE within 45 days of the original submittal, or their receipt of additional requested information, then the project is authorized under the requested NWP. However, it is rare not to receive formal approval from the USACE. It is INDOT's policy to consult with the appropriate USACE district office prior to assuming a NWP is authorized.

NWPs authorized through the PCN process by USACE are generally valid for two years from their date of issuance or the expiration of the NWP program, whichever comes first. All work in jurisdictional waters must be completed by the NWP's expiration date. If work will not be completed, the EWPO must be notified so a request can be made, in writing, to the USACE for reissuance of the NWP. If work has already started when the NWP program expires, the USACE typically allows a one-year extension of the expiration date. If work will not be completed within this timeframe, the EWPO must be notified so a request for NWP reissuance can be made.

4.2 404 REGIONAL GENERAL PERMIT (RGP)

Background

The Regional General Permit (RGP) program is the USACE's programmatic approach to issuing permits for activities that are similar in nature and cause minimal environmental impact (both individually and cumulatively). On December 15, 2014 the USACE reissued the RGP for Indiana. This program will expire on December 15, 2019. The RGP authorizes activities associated with the construction or installation of new facilities or structures. Requirements of this program include:

- Discharges of dredged or fill material will impact **less than 1.0 acre** of waters of the United States (including wetlands);
- Fill placement in streams is limited to **less than 1,500 feet** of stream channel; and
- All general permit conditions of the RGP program are met (Appendix B-16 - 401 RGP - Regional General Permit - Conditions).

In general, the USACE will consider each water resource impact separately. For instance, a linear transportation project may cross several waterways and each may meet the thresholds for a separate RGP. However, the USACE can evaluate multiple impacts cumulatively if the impacts occur to the same resource and/or in close proximity to each other. For example, one stream that is crossed and impacted several times may be viewed cumulatively. Additionally, impacted resources in close proximity, such as a stream and its adjacent wetland, may be viewed cumulatively. See Section 3.7 for example projects that would require a 404 RGP.

It is possible for a project to be covered under the 404 RGP while exceeding the thresholds of (or not meeting the general conditions of) the Indiana Department of Environmental Management (IDEM) 401 RGP. In this case, an individual IDEM 401 Water Quality Certification (WQC) would be required in

conjunction with the USACE 404 RGP. Mitigation may be required for projects where impacts exceed 0.1 acres to waters of the U.S. and/or 300 linear feet of stream. Refer to INDOT's Ecology Manual for the mitigation requirements associated with 404 permits.

Application Process

INDOT's policy requires submission of a permit application to the USACE for all projects that appear to qualify for a RGP. USACE Louisville and Detroit Districts will accept either the IDEM Section 401 WQC RGP Notification Form 51937 (or IDEM Application for Authorization to Discharge Dredged or Fill Material to Isolated Wetlands and/or Waters of the State Form 51821) or Application for Department of Army Permit USACE Form 4345. Since IDEM cannot accept the USACE form in lieu of a state form, both must be completed for projects within the Chicago District.

Designers should follow the instructions on each form when preparing 404 permit applications. A complete RGP application will include:

- Waters report with signed preliminary jurisdictional determination form (see the INDOT Ecology Manual for a detailed description of these documents);
- Project impacts, includes acres and linear feet of impact to each water of the U.S. and volume of fill be placed in these resources, presented in a summary table if multiple locations are impacted;
- Project plans showing the proposed impacts to waters of the U.S.
  - Cross sections of all areas where fill will be placed with labels for the wetland boundaries, flow line elevations, and OHWM elevations;
  - All streams, wetlands, and other waters labeled using the same nomenclature as provided in the waters report/wetland delineation and project plans (United States Geological Survey (USGS) name or UNT (unnamed tributary to) USGS named stream);
- Temporary impacts (pump-arounds, stream crossings, coffer dams, causeways, etc.) associated with the proposed project and quantification of these impacts;
- IDNR Early Coordination/Environmental Assessment (ETR documentation);
- USFWS Section 7 clearance letter;
- IDNR Section 106 state historic preservation office (SHPO) concurrence letter; and
- Compensatory mitigation plan following the 2008 USACE Mitigation Rule (if required).

Designers must evaluate and include the most likely measures needed to construct a project. For instance, if a bridge deck will be removed, the contractor will likely need a temporary stream crossing during construction. This should be detailed in the permit application exhibits. Inclusion of this information in the permit application reduces delays during construction from permit modifications. It also reduces permit violations resulting from contractor failure to obtain the necessary permit modifications. Items to include for each temporary measure are the:

- Type of fill material (must be non-erosive);
- Volume (cubic yards) and area (acres) associated with the temporary measures below OHWM;
- Temporary acres of impact to any wetland(s);
- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will be in place;
- Number and dimensions (diameter and length) of pipes required for temporary stream crossings; and
- Restoration plan which includes an appropriate seed mix.

A RGP checklist has been included in Appendix B-36 - 401 / 404 RGP – Regional General Permit - Checklist to assist the project designer with application preparation. The EWPO will review each submittal and request revisions if needed. Once the application is ready, EWPO staff will submit the application to the USACE. Refer to Chapter 2 for more detailed information on the INDOT review and permit application submittal process. The USACE will issue a permit upon their approval of each application.

Typically, the RGPs expiration date is the date of the program's expiration. For the current program the expiration date is December 15, 2014. All work in jurisdictional waters must be completed by the RGP's expiration date. If work has already started when the RGP program expires, the USACE typically allows a one-year extension. If work will not be completed within this timeframe, the EWPO must be notified so a written request can be made to the USACE for reissuance of the permit.

4.3 404 INDIVIDUAL PERMIT (IP)

Background

Section 404 individual permits (IP) are required for all projects that do not qualify for a 404 RGP or NWP. Individual 404 permits authorize projects that have more than a minimal adverse effect on the aquatic environment. Projects may require an IP if they meet the following:

- Impact more than one (1.0) acre of any single waters of the U.S. (or USACE makes a cumulative impact determination for multiple resources);
- Impact more than 1,500 linear feet of any one stream resource (or USACE makes a cumulative impact determination for multiple resources); or
- Project does not meet any general condition of the RGP or NWP programs (Appendix B - Appendix B – USACE Guidance).

In general, 404 IP permits have the longest average agency review time of the waterway permits applied for by INDOT (12-18 months). Projects requiring 404 IPs likely require compensatory stream and/or wetland mitigation which takes time to locate, secure, and design prior to permit application submittal. Because of this, it is critical that the designer determine the need for a 404 IP as early as possible to allow sufficient time to meet the project schedule.

Application Process

As with RGPs and NWPs, 404 IPs are issued through the appropriate USACE district. Pre-application coordination is vital to the IP process. Early and frequent coordination with the Corps on the avoidance, minimization, and ultimately compensatory mitigation of impacts is required. The INDOT Ecology Manual discusses 404 mitigation requirements.

The Application for Department of Army Permit Form 4345 must be used for all IPs regardless of USACE district. The designer should follow the instructions provided on this form to ensure sufficient information is provided to the USACE. A complete IP application includes:

- Waters report with signed preliminary jurisdictional determination form (see the INDOT Ecology Manual for a detailed description of these documents);
- Project impacts, includes acres and linear feet of impact to each water of the U.S. and volume of fill be placed in these resources, presented in a summary table;
- Project plans showing the proposed impacts to waters of the U.S.

    - Cross sections of all areas where fill will be placed with labels for the wetland boundaries, flow line elevations, and OHWM elevations;
    - All streams, wetlands, and other waters labeled using the same nomenclature as provided in the waters report/wetland delineation and project plans (USGS name or UNT (unnamed tributary to) USGS named stream);
- NEPA documentation demonstrating the purpose and need of the proposed project;
- Maps/plans with specific scales for the 404 public notice (coordinate with the USACE reviewer in advance);
- IDNR Early Coordination/Environmental Assessment (ETR documentation);
- USFWS Section 7 clearance letter;
- IDNR Section 106 "no historic properties affected" concurrence letter;
- Temporary impacts (pump-arounds, stream crossings, coffer dams, causeways, etc.) associated with the proposed project and quantification of these impacts; and
- Compensatory mitigation plan following the 2008 USACE Mitigation Rule (if applicable).

The EWPO office requires that designers evaluate and include the most likely measures needed to construct a project. For instance, if a bridge deck will be removed, the contractor will likely need a temporary stream crossing during construction. This should be detailed in the permit application provided to INDOT. Inclusion of this information in the permit application reduces delays during construction when pursuing modifications. It also reduces permit violations when the contractor fails to obtain the necessary permit modifications. Items to include for temporary measures are as follows:

- Type of fill material (must be non-erosive);
- Volume (cubic yards) and area (acres) associated with the temporary measures below OHWM;
- Temporary acres of impact to any wetland(s);
- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will be in place;
- Number and dimensions (diameter and length) of pipes required for temporary stream crossings; and
- Restoration plan which includes an appropriate seed mix.

The INDOT EWPO will review each submittal and request revisions if needed. Once the application is ready, an authorized EWPO signatory will sign the application and submit the application to the USACE. Refer to Chapter 2 for more detailed information on the INDOT review and permit application submittal process.

Once submitted to the USACE, the Corps will review the application for completeness and contact INDOT and the designer with any questions or comments. After these are addressed, the Corps will prepare and issue a public notice (this may be done jointly with IDEM's 401 public notice). The public notice comment period ranges from 15 to 30 days. The public at large, as well as interested Federal, state and local agencies, have an opportunity to comment on the proposed activity. For instance, comments are frequently received from the U.S. Fish and Wildlife Service. The Corps will typically ask INDOT to assist in addressing any public comments or concerns. In some cases, USACE might hold a public hearing if substantial comments are received and comments cannot be resolved informally. In most cases, a permit will be granted unless the project is found to be contrary to the public interest or if sufficient mitigation is not provided by INDOT.

Once the USACE approves the project, a provisional 404 permit will be issued to the applicant (INDOT). The provisional permit contains the proposed terms and conditions of the IP and requires INDOT to agree

to the terms and conditions by signature. The signed provisional permit is returned to the Corps for their signature. *The permit is not in effect until the Corps signs the form.* The final 404 IP is then sent to INDOT and contains special conditions that must be followed during construction.

A proof of permit yellow placard may be sent along with the final permit. If this is provided, it must be displayed publicly on the project site during construction. Otherwise, the signed permit must be displayed. INDOT ESD will forward the placard to the Project Manager, who is responsible for delivering this to the construction project engineer/project supervisor during the preconstruction conference.

4.4 SECTION 10 (RIVER AND HARBORS ACT OF 1899)

Background

Section 10 of the Rivers and Harbors Act of 1899 prohibits the unauthorized obstruction or alternation to the navigable capacity of any waters of the U.S. without authorization. It requires approval from the USACE prior to conducting any work in or over any navigable water of the U.S. which affects the course, location, or condition of the water body. The law applies to construction, dredging or disposal of dredged materials in, over, or under navigable waters, excavation, rechannelization, or any other modification of a navigable water of the United States and applies to all structures. It includes:

- Any weir, wharf, bank protection (e.g. riprap, revetment, bulkhead), jetty, mooring structure, ramp, intake or outfall pipe, aids to navigation, aerial or subaqueous transmission line; and
- Any other permanent or semi-permanent obstacle or obstruction.

Application Process

Section 10 permits are managed by the same USACE district as the 404 permit program. Section 10 and Section 404 permits are typically handled jointly. The approval process for work in a Section 10 water is the same as the application processes described in the 404 RGP, NWP, and IP sections. Any work proposed in Section 10 waters requires notification to the Corps. A listing of Section 10 waters for Indiana is included in Appendix B-41 - SECTION 10 NAVIGABLE WATERS OF THE U.S..

USACE will coordinate Section 10 permits with the USCG, who regulate navigable waterways under Section 9. See Chapter 5 for more information on Section 9 permitting.

Following INDOT EWPO approval of the Section 10 permit application, the permit application will be submitted to the USACE. Their review process will include the publication of a 30-day public notice. The USACE will not issue a permit until completion of this public notice process. Section 10 permits will continue in effect until they automatically expire or are modified, suspended, or revoked.

4.5 USACE LEVEE PERMITS

Background

A levee is an earthen embankment, floodwall, or structure along a water course whose purpose is flood risk reduction or water conveyance. Levees are normally subject to water loading for only a few days of the year and have a base ten times as wide as the height. There is no single agency responsible for levee oversight nationwide. The USACE has specific and limited authorities for approximately 2,000 levees covering over 14,000 miles of the estimated 100,000 miles of levees in the nation. USACE roles and responsibilities come from the Flood Control and Coastal Emergency Act (PL 84-99). The USACE

maintains a National Levee Database that includes the levees within the USACE Levee Safety Program and will continue to integrate information related to levees outside of that program.

There are three types of levees: federally authorized, non-federally authorized, and private or corporation owned. A federally authorized levee is a levee designed and built by the USACE or authorized to be part of the USACE federal program, but locally operated and maintained in accordance with standards established by the Corps. A non-federally authorized levee is one that is designed, built and managed by a non-federal entity. A private or corporate-owned levee is designed and built by a private citizen, company, or other public entity, which is responsible for the operation, maintenance, repair, and replacement of the levee. The Corps has no responsibility for these non-federally authorized or private levees. The Corps partners with local authorities with regards to levee safety, land use planning and development, building codes and operations, maintenance, repair, rehabilitation, and placement of the levee.

Application Process

When a project involves construction on or near a levee, it is the responsibility of the designer to determine who is responsible for operation and maintenance of the levee. The designer should coordinate with the responsible entity to determine the information that they require to review and approve the proposed work. This information may include an application form, design plans, hydraulic analysis, and/or other documentation. Early coordination is necessary to ensure adequate review time. Permit applications must be reviewed by EWPO. They will review, sign, and submit the application to the responsible entity. The designer and EWPO will coordinate regarding additional information or changes that are requested. The responsible entity will issue a permit or provide other documentation of their review and approval of the project. No alteration to an embankment or other structure that is functioning as a levee should occur without prior coordination with the USACE, the responsible entity, and INDOT Hydraulics and Real Estate.

4.6 USACE PERMITTING SCENARIOS

The following are example projects provided to illustrate the types of USACE permits typically encountered by INDOT. This list is not all inclusive. The USACE is responsible for determining the final permit need for each project.

- A maintenance project is proposed on a 65’ long 36” diameter corrugated metal pipe. The scope of work includes replacement of the existing structure with a pipe that has the same dimensions. Riprap outlet protection already exists and will not need to be modified by the project. A pump-around will be used during construction to isolate the work area. INDOT can execute the work using the **404 NWP #3 (a) and (c)** that do not require formal notification to the USACE.

- A maintenance project is proposed on a 65’ long 36” diameter corrugated metal pipe. The scope of work includes inserting a pipe liner 65’ long with a 32” diameter into the existing structure. Due to increased water velocity, additional riprap outlet protection will be placed at the outlet. A pump-around will be used during construction to isolate the work area. INDOT will need to apply for a **404 NWP #3 (b) and (c)** that require formal notification to the USACE.

- A stream mitigation site has bank stability issues and requires the letting of a remediation contract. The scope of work includes the installation of several j-hooks (a mitigation measure constructed out of boulders) to direct water away from the compromised bank. Since fill will be

placed in an existing mitigation site, a **404 NWP #27** will be required. This requires formal notification to the USACE.

- An arch reconstruction project is proposed. All of the structure work will occur above the OHWM. The contractor indicates that a temporary causeway will need to be placed in the stream so that equipment can reach portions of the arch. Because only temporary impacts are occurring below the OHWM, INDOT (or the contractor) will need to apply for a **404 NWP #33**.

- A sight distance correction project will include constructing a new bridge upstream of an existing structure. The new bridge will impact 0.02 acre and 275 linear feet of a jurisdictional stream (piers and riprap scour protection). Construction will also impact a small jurisdictional emergent wetland (0.05 acre) directly adjacent to the stream. The existing bridge will be demolished and banks revegetated without any permanent impacts below OHWM. Cumulative impacts at this crossing total 0.07 acre to waters of the U.S. and are below 300', so INDOT can apply for a **404 RGP**. No mitigation is anticipated.

- A proposed project will construct a bridge on new alignment over the Wabash River. Impacts to the river below the OHWM amount to 0.2 acre (piers and riprap scour protection). The new approach roads will also impact an adjacent forested jurisdictional wetland (0.9 acre). The USACE would likely make a cumulative determination and require a **404 IP** since impacts will total 1.1 acres to waters of the U.S. Mitigation will likely be needed, as well.

- A bridge widening project will have minor impacts to a jurisdictional stream (0.02 acre and 450') and jurisdictional wetland (0.2 acre). As part of the project, the approach roads will be widened, resulting in the taking of a historic barn eligible for listing in the National Register of Historic Places. Neither the 404 NWP or RGP programs allow a project to impact a historic property listed, or property eligible for listing, in the National Register of Historic Places. INDOT cannot demonstrate that the construction activity complies with the National Historic Preservation Act and must submit a **404 IP**.

- A new alignment project includes a proposed interchange that will fill a 1.6 acre jurisdictional pond. A **404 IP** will be required since impacts are greater than 1.0 acre to waters of the U.S. are impacted. Mitigation may be required.

- A new overpass is proposed to carry a county road over a U.S. highway. The approach roads for the overpass will result in the relocation of a county regulated drain for 2,500 linear feet. Since the stream relocation exceeds 1,500 feet a **404 IP** is required. Mitigation will likely be required.

- An existing bridge over the Ohio River will be reconstructed. Work will include demolishing existing piers and deck and installation of the new structure. Since this river is a navigable water, a **Section 10 permit** will be required. A **Section 404** permit will also be required, with the type determined by the level of impacts to the Ohio River.

- As part of a bridge widening project, a Corps levee near the Ohio River will be disturbed. Work on the levee will include expansion of the armored bridge cone and riprap turnouts. Since the levee will be impacted, a **levee permit** will be required.

CHAPTER 5 - UNITED STATES COAST GUARD (USCG) PERMITTING

INTRODUCTION TO USCG PERMITTING

The USCG approves the location and plans for bridges and causeways on navigable waters of the U.S. Federal law prohibits the construction of these structures, or their modifications, without USCG approval.

The majority of Indiana lies within the Eighth Coast Guard District with portions of northern Indiana falling under the jurisdiction of the Ninth Coast Guard District (above the 41st parallel). Figure 5.1 on the following page provides a breakdown of U.S. Coast Guard jurisdiction in Indiana.

Table 5.1 U.S. Coast Guard Sector Offices

U.S. Coast Guard Eighth District New Orleans, Louisiana	**U.S. Coast Guard Ninth District** Cleveland, Ohio
Sector Western Rivers 1222 Spruce Street, Suite 2.102D St. Louis, MO 63103 314-269-2378	**Sector Lake Michigan** 2420 S. Lincoln Memorial Dr Milwaukee, WI 53207 Phone 414-747-7100
	Sector Field Office Grand Haven, MI USCG SFO Grand Haven 650 South Harbor Dr Grand Haven, MI 49417

5.1 SECTION 9 PERMITS

Background

A Section 9 bridge permit is written approval from the USCG for work proposed in a navigable waterway. A permit is needed for any waterway that meets the definition of navigable under 33 CFR 2.36. This includes territorial seas of the U.S., internal waters of the U.S. subject to tidal influence, and internal waters that are (or have been) used for interstate or foreign commerce. The following INDOT projects typically require USCG Section 9 permits:

- New bridge construction across any navigable waters; and
- Bridge maintenance and repair on navigable waters depending on the scope of work and impacts to navigation.

Some maintenance and repair on structures over navigable waterways can be conducted without a Section 9 permit. For example, in many instances, bridge painting will not require a permit even though false work (suspended platforms) is needed to access portions of the structure. The USCG, however, should be

consulted on all maintenance/repair projects on navigable waterways to determine whether or not a permit is needed.

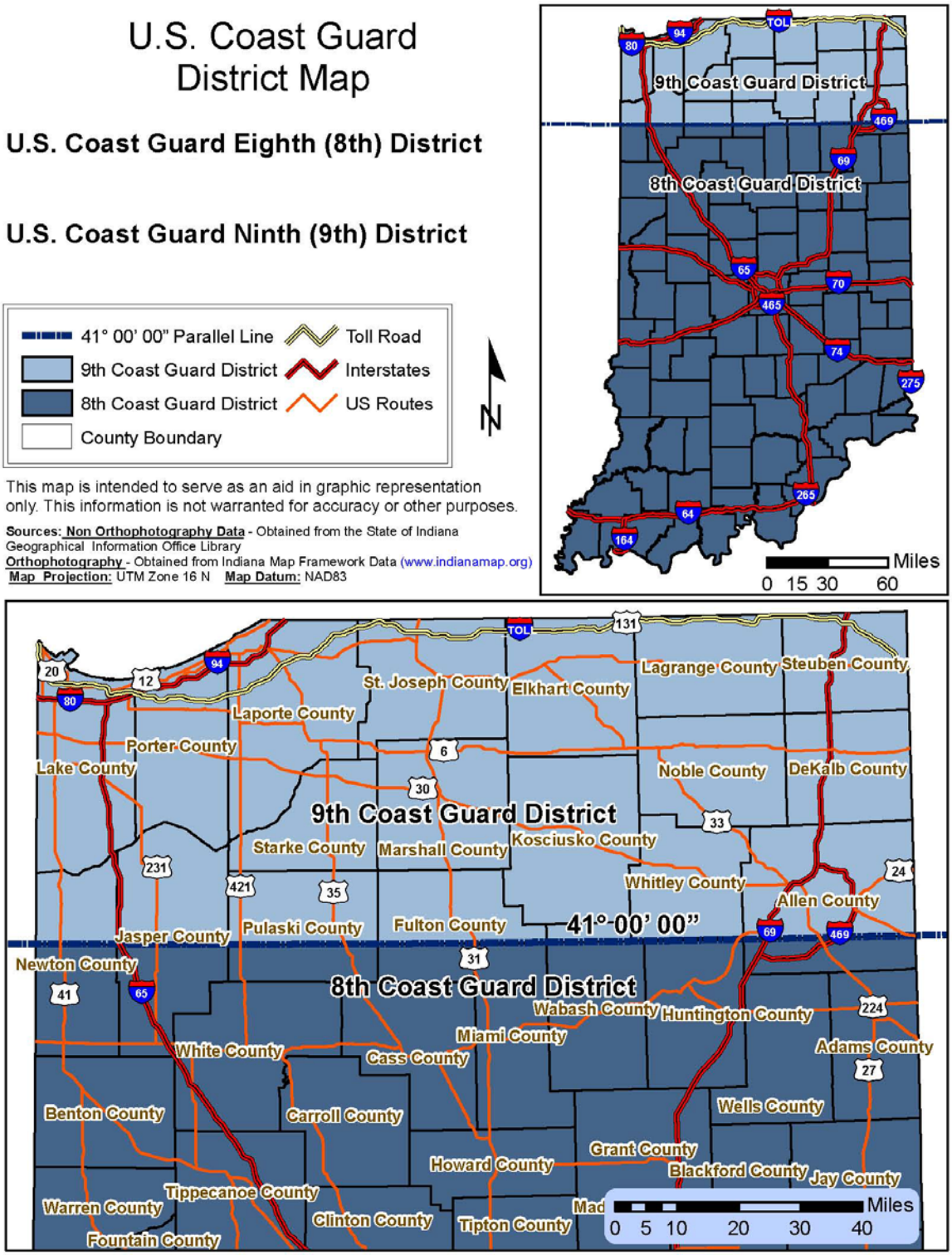


Figure 5.1: U.S. Coast Guard Districts in Indiana

Application Process

The project designer should submit early coordination correspondence to the EWPO for review and eventual submittal to the U.S. Coast Guard for all projects located on navigable waterways. This submittal should include:

- Location maps (topography and aerial) of the proposed project;
- Project plans; and
- Project scope including perceived impacts to navigation (if any).

After review, EWPO staff will submit the early coordination correspondence to the USCG for their permit determination. The USCG will respond with a letter indicating whether or not a Section 9 permit is required. If a permit is not required, the USCG will likely request notification prior to construction initiation. If a Section 9 Permit is required, an application must be prepared and submitted to INDOT for review. See Appendix C-7 - Bridge Permit Application Guide, which includes a checklist of material to include Section 9 applications. After EWPO review and signature the application will be submitted to the USCG.

The USCG publishes the public notice for each Section 9 application. The USCG will not issue a permit until completion of this public notice process. In order to streamline USCG review and authorization of the Section 9 Bridge Permit, it is necessary to have the NEPA document completed and authorized prior to submission of the Section 9 Bridge Permit.

5.2 USCG PERMITTING SCENARIOS

The following are example projects provided to illustrate instances when a Section 9 permit may be required. This list is not all inclusive. The USCG makes the final decision regarding any Section 9 permit need.

- INDOT will be painting an existing interstate highway bridge over the Ohio River. To reach the beams and understory of the structure, falsework will be constructed. No impact to navigation is anticipated. INDOT coordinates with the USCG and receives a ruling that a Section 9 permit will not be required. The USCG does request notification prior to the initiation of work.

- INDOT proposes a bridge rehabilitation of an existing interstate highway bridge over the Ohio River. Work will include the demolition of the existing structure, which will require barges on the river to collect demolition debris. INDOT coordinates with the USCG and receives a ruling that a Section 9 permit will be required.

- INDOT proposes the construction of a new bridge over the Ohio River. INDOT coordinates with the USCG and receives as determination that a Section 9 permit will be required.

CHAPTER 6 - INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) PERMITTING

INTRODUCTION TO IDEM PERMITTING

The Indiana Department of Environmental Management (IDEM) administers several programs that require waterway permits. INDOT projects commonly require Section 401 water quality certifications and Rule 5 permits, and less commonly require isolated wetlands permits and Section 402 permits.

401 Water Quality Certification (WQC)

A 401 WQC is a license under the Indiana Administrative Orders and Procedures Act that contains conditions which INDOt must coply with in order to assure that impacts comply with state water quality standards. Under the 401 program, IDEM regulates activities that impact lakes, rivers, streams, and wetlands to ensure that those activities maintain the chemical, physical, and biological integrity of these waters. Typical activities that require a 401 permit are as follows:

- Filling or excavating in a wetland;
- Mechanical clearing of a wetland;
- Streambank or shoreline stabilization;
- Constructing a roadway crossing in/over a stream;
- Filling or dredging a stream, lake, or river;
- Channelization of any stream, ditch, or river; and
- Construction of any permanent or temporary dam, causeway, or other related structure.

Typically a project that requires a Section 404 permit from the USACE (see Chapter 4) will also require a 401 WQC. IDEM works closely with the Army Corps of Engineers and coordinates the application processes as much as possible. IDEM will review the 401 application and determine whether or not the activities comply with Indiana law, including water quality standards.

There are three types of 401 Waters Quality Certifications (WQC): Nationwide Permit (NWP), Regional General Permit (RGP) and Individual Permit (IP). IDEM evaluates projects for their cumulative impacts. A project with multiple stream and wetland impacts should consider the total impacts when evaluating the level of 401 WQC required. IDEM typically looks at the eight-digit watershed as the boundary when evaluating cumulative impacts. For example, if a linear project has impacts in two separate watersheds the impacts in each watershed should be assessed and a separate application prepared for each watershed. Compensatory mitigation may be required based on the extent of the impacts and must be located within the same watershed.

Isolated Wetlands

In Indiana, wetlands that are not under the federal jurisdiction of the USACE (i.e. isolated wetlands) are regulated by IDEM under the isolated wetland state statute. In order to apply for an isolated wetland permit, the applicant must have a jurisdictional determination from the USACE stating the wetland is not under their jurisdiction. As with the 401 WQC, a permit application is submitted to IDEM for review and approval. One fundamental difference between the 401 program and the isolated wetland program is the mitigation requirements, which include different ratios associated with each wetland type.

Rule 5

IDEM's Rule 5 program (327 IAC 15-5) protects water quality by regulating the discharge of sediment and other construction related pollutants into surface waters. It applies to any construction activity (which includes clearing, grading, excavation and other soil disturbing activities) resulting in the disturbance of one (1.0) or more acre. If the land disturbing activity results in the disturbance of less than 1.0 acre of total land area, but is part of a larger project whose total land area of disturbance is greater than 1.0 acre, it is still subject to Rule 5 permitting. Regardless of the Rule 5 permit requirements, all INDOT projects must incorporate best management practices (BMPs), including erosion and sediment control measures, to prevent pollution discharge during construction and during the post-construction use of the property.

Section 402

The goal of Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System [NPDES]) is to maintain and enhance the quality and integrity of the nation's waters by limiting the discharge of degrading substances to waters of the U.S. The Section 402 program only applies to point sources. In Indiana, USEPA has delegated responsibility for the daily execution of the permit program to IDEM.

Section 402 permits are generally only required for INDOT projects involving rest areas and weigh stations. The EWPO is responsible for obtaining permits for these types of activities. Currently, storm water runoff from mainline pavement, shoulders, ramps, etc. does not fall under jurisdiction of the NPDES 402 permit program.

Due to the rarity of this permit, it is not described in detail within this chapter. The project designer should contact the EWPO if a Section 402 permit may be needed.

Rule 13

Rule 13 is a general storm water permit administered by IDEM that regulates municipal separate storm sewer systems (MS4s). MS4s are defined as a conveyance (or system of conveyances) owned by a state, city, town, or other public entity that discharges to waters of the U.S. and is designed/used for collecting or conveying storm water. Regulated conveyance systems include roads with drains, municipal streets, catch basins, curbs, gutters, storm drains, piping, channels, ditches, tunnels and conduits. These systems do not include combined sewer overflows and publicly owned treatment works. INDOT operates as an MS4. Therefore, it must reapply from time to time for a statewide Rule 13 permit and follow the required permit conditions.

6.1 401 NATIONWIDE PERMIT

Background

A 401 WQC is required for any discharge of dredged or fill material placed below the ordinary high water mark (OHWM) of a stream, river, creek, lake, or other waterway. It is also required for fill placement into a jurisdictional wetland. IDEM reissued its 401 NWP program on April 5, 2012. This program will expire on March 19, 2017. An INDOT project can apply for a 401 NWP if it meets the following requirements:

- Cumulative project impacts total less than 0.1 acre waters of the U.S. (streams, wetlands, ponds, etc.);
- Cumulative project impacts total less than 300 linear feet of impact to waters of the U.S.; and
- Project meets all the general conditions of the 401 NWP (see Appendix D-1 - 401 NWP – Nationwide Permit - Conditions).

Typically NWPs are for maintenance of existing structures and/or fill. Only permanent impacts are counted toward fill impact totals in the application, however, temporary impacts must be included in the permit exhibits.

Application Process

Applicants who apply for a 404 NWP from the USACE and meet all of the terms and conditions of the 401 NWP do not need to apply separately to IDEM for a WQC. Furthermore, a submittal is only required to the USACE when a preconstruction notification is required. See Chapter 4 for additional information on the preconstruction notification requirements for 404 NWPs.

The EWPO will review the information required for a 404 NWP preconstruction notification and verify that all the 401 NWP conditions have been met. If all are met, the EWPO will sign and submit the preconstruction notification to the USACE as outlined in Chapter 4. If one or more of the 401 NWP conditions cannot be met by the project, the EWPO office will ask the project designer to prepare an application for either a 401 RGP or 401 IP.

6.2 401 REGIONAL GENERAL PERMIT

Background

A 401 WQC is required for any discharge of dredged or fill placed below the OHWM of a stream, river, creek, lake, or other waterway. It is also required for fill placement into a jurisdictional wetland. IDEM reissued its 401 RGP program on December 15, 2014. This program will expire on December 15, 2019. An INDOT project can apply for a 401 RGP if it meets the following requirements:

- Cumulative project impacts total less than 0.1 acre waters of the U.S. (streams, wetlands, ponds, etc.);
- Cumulative project impacts total less than 300 linear feet of impact to waters of the U.S.; and
- Project meets all the general conditions of the 401 RGP (see Appendix D-20 - 401 RGP – Regional General Permit - Conditions).

RGPs are typically required for new structures and/or fill placement. Only permanent impacts are counted toward fill impact totals; however, temporary impacts must be included in permit application attachments.

Application Process

INDOT policy requires an application submittal to IDEM for all projects that qualify under the 401 RGP program. The most current State Form 51937, *Section 401 WQC Regional General Permit Notification* should be used (see Appendix D-33 - 401 IDEM RGP Form 51937).

The designer should follow the instructions on the form. It includes the supplemental material required to complete the application. Items required for RGP permit applications include, but are not limited to, the following:

- Waters report with signed preliminary jurisdictional determination form (see the INDOT Ecology Manual);
- Project impacts, includes acres and linear feet of impact to each waters of the U.S. and volume of fill be placed in these resources;
- Project plans showing the existing waters of the U.S.;
- Project plans showing the proposed impacts to waters of the U.S.;
  - Cross sections of all areas where fill will be placed with labels for the wetland boundaries, waterway flow line elevations, and waterway OHWM elevations;
  - All streams, wetlands, and other waters labeled using the same nomenclature as provided in the waters report/wetland delineation and project plans (United States Geological Survey (USGS) name or UNT (unnamed tributary to) USGS named stream); and
- Temporary impacts associated with the proposed project and quantification of these impacts (pump-arounds, stream crossings, coffer dams, causeways, etc.).

The EWPO requires designers evaluate and include the most likely measures needed to construct a project. The contractor may pursue a permit for an alternate method. Inclusion of this information in the permit application reduces delays during construction caused by pursing a new 401 RGP. Modifications to existing RGPs are not allowed. It also reduces permit violations when the contractor fails to obtain a permit for the temporary impacts. Items to include for temporary measures are as follows:

- Type of fill material (must be non-erosive);
- Volume (cubic yards) and area (acres) associated with the temporary measures below OHWM;
- Temporary acres of impact to any wetland(s);
- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will remain in place;
- Number and dimensions (diameter and length) of pipes required for a temporary stream crossing (if applicable); and
- Restoration plan which includes an appropriate seed mix.

Once ready, the designer should submit the application to the appropriate EWPO district contact and team lead. A RGP checklist has been included in Appendix B-16 - 401 RGP - Regional General Permit - Conditions to assist the project designer with application preparation. EWPO staff will review the application for completeness/accuracy and request revisions when necessary. Once all revisions have been made, the EWPO will sign and submit the 401 application. If there are wetland impacts, correspondence on the jurisdictional status of the wetlands from the USACE must be submitted with the application. This requires submittal of the 404 application, or a request for a jurisdictional determination, to the USACE prior to submitting the application to IDEM. The USACE may provide a signed preliminary jurisdictional determination, an approved jurisdictional determination, or an RGP pending letting documenting the jurisdictional status of each wetland. This documentation will be included in the 401 application. When there are no wetlands impacts, the 401 application can be submitted concurrently with a 404 application.

IDEM must take action on all 401 RGPs within 30 days of receipt of a complete application. If IDEM does not respond after thirty days then the project is authorized under the RGP program. If IDEM does respond during the 30 day period, IDEM's review clock pauses. INDOT must address IDEM's comments before the 30 day review window can resume.

Typically, the expiration date for RGPs is set at the date of the program's expiration. Therefore, permits issues shortly after the RGP program is approved will be valid for nearly five years, while permits issued in later years have less time prior to permit expiration. The current RGP program expires on December 15, 2014. All work in jurisdictional waters must be completed by the permit's expiration date. If work has already started when the RGP program expires, IDEM will typically grant a one-year extension. If work has not been completed within this timeframe, the INDOT EWPO must be notified so a written request can be made to IDEM for reissuance of the RGP.

6.3 401 INDIVIDUAL PERMIT

Background

When an INDOT project does not meet the conditions of either the 401 NWP or RGP program, a 401 Individual Permit (IP) is required. IDEM 401 IPs may require compensatory mitigation for the project's impacts to water resources. The INDOT Ecology Manual provides the requirements for compensatory mitigation. INDOT must demonstrate that potential project impacts were avoided and minimized prior to pursuing mitigation for the remaining impacts.

Application Process

For IDEM 401 IP permits, the most current State Form 51821, *Application for Authorization to Discharge Dredged or Fill Material to Isolated Wetlands and/or Waters of the State* should be used (see the IDEM website). The designer should follow the instructions provided on this form to include the required supplemental information. The current version of the form (at time of manual publication) is included in Appendix D-38 - 401 IDEM WQC – Form 51821. Information required for a 401 IP includes:

- Waters report with signed preliminary jurisdictional determination form (see the INDOT Ecology Manual);
- Project impacts, includes acres and linear feet of impact to each water of the U.S. and volume of fill be placed in these resources, presented in a summary table;
- Project plans showing the existing waters of the U.S.;
- Project plans showing the proposed impacts to waters of the U.S.
  - Cross sections of all areas where fill will be placed with labels for the wetland boundaries, flow line elevations, and OHWM elevations;
  - All streams, wetlands, and other waters labeled using the same nomenclature as provided in the waters report/wetland delineation and project plans (United States Geological Survey (USGS) name or UNT (unnamed tributary to) USGS named stream);
- Documentation on avoidance and minimization of impacts;
- Temporary impacts associated with the proposed project and quantification of these impacts (pump-arounds, stream crossings, coffer dams, causeways, etc.); and
- Compensatory mitigation plan following the 2008 USACE Mitigation Rule (if applicable).

The EWPO requires designers to evaluate and include the most likely measures needed to construct a project. Including this information in the permit application reduces delays during construction resulting from the requirement for a modification. It also reduces permit violations when the contractor fails to obtain the necessary permit modifications. Items to include for temporary measures are as follows:

- Type of fill material (must be non-erosive);
- Volume (cubic yards) and area (acres) associated with the temporary measures below OHWM;
- Temporary acres of impact to any wetland(s);

- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will remain in place;
- Number and dimensions (diameter and length) of pipes required for a temporary stream crossing (if applicable); and
- Restoration plan which includes an appropriate seed mix.

An IP checklist has been included in Appendix D-47 - 401 IDEM WQC – Individual Permit - Checklist to assist the project designer with application preparation. EWPO staff will review the designer's application for completeness and request necessary revisions. Once all necessary revisions have been incorporated into the application, EWPO staff will sign and submit the application to IDEM.

Following submittal, IDEM will review the application for completeness and may request additional information. After IDEM has a complete application they will publish a twenty-one (21) day public notice. Once the 21-day public notice period has passed and all comments have been addressed by INDOT, IDEM will issue the permit. This permit will include special conditions that must be followed during construction as well as special conditions regarding any required compensatory mitigation (such as success criteria). 401 IPs are generally valid for two years, as set by one of the special conditions in the issued permit.

6.4 ISOLATED WETLAND PERMIT

Background

An isolated wetland is a wetland that is not subject to regulation under Section 404 of the Clean Water Act. It is a wetland that is not hydrologically connected to a waters of the U.S. and is therefore not under USACE jurisdiction. Isolated wetlands are regulated under Indiana's state isolated wetlands law (IC 13-18-22). Since only the USACE can make a determination on the jurisdictional status of a wetland, the applicant must have a jurisdiction determination from the USACE for each impacted wetland.

There are three types of isolated wetlands defined in the Indiana Administrative Code (327 IAC 17-1-3): Class I, Class II, and Class III. At least fifty percent (50%) of a Class I wetland has been disturbed or affected by human activity or development and it supports only minimal wildlife or aquatic habitat or hydrologic function. A Class III wetland is located in a setting undisturbed or minimally disturbed by human activity or development, and supports more than minimal wildlife or aquatic habitat or function. A Class III wetland is a rare and ecologically important wetland type. A Class II wetland is not a Class I or Class III wetland, or it could be a rare and ecologically important type of wetland but not meet the definition of a Class III wetland.

IDEM can issue one of two permits for isolated wetland impacts: an Isolated Wetland General Permit (IWGP) or an Isolated Wetland Individual Permit (IWIP). Projects that can be authorized under the IWGP include those with:

- Greater than 0.1 acres of impact to regulated Class I wetlands;
- Minimal impacts to Class II regulated wetlands such as:
    - Repair, replacement, or rehabilitation of any previously authorized structure or fill;
    - New construction limited to 0.1 acre or less of impact.

Activities that cannot meet the above criteria will need to apply for an IWIP. An IWIP is required for any impacts to a Class III isolated wetland, regardless of the acreage of the wetland or the proposed acreage of the impacts.

Compensatory mitigation could be required for isolated wetland impacts depending on the size of the wetland, the impacted amount, and the type of wetland. Mitigation ratios differ from those typically associated with 404/401 permits. The Ecology Manual discusses compensatory mitigation requirements for both jurisdictional and isolated wetland impacts.

Some isolated wetlands are exempt from the definition under the Indiana Administrative Code (327 IAC 17-1-3). Exempted isolated wetlands include an isolated wetland that is:

- An incidental feature in a residential, commercial or governmental lawn, agricultural land, roadside or irrigation ditch, or a manmade drainage control feature;
- A fringe wetland associated with a private pond;
- Associated with a manmade body of surface water;
- A Class I wetland with a delineated area of one-half (1/2) acre or less;
- A Class II wetland with a delineated area of one-fourth (1/4) acre or less; and
- An isolated wetland subject to United States Department of Agriculture (USDA) wetland conservation rules (Swampbuster).

Application Process

An isolated wetland permit will be pursued by INDOT when the USACE has made a jurisdictional determination on the wetland (or wetlands) in question and has made an isolated ruling. INDOT may request an approved jurisdictional determination from the USACE to get an isolated ruling. If a preliminary jurisdictional determination is used, INDOT will give jurisdiction of streams and wetlands to the USACE (i.e. no isolated wetland determination will be made). As a result, wetland impacts will be permitted through the 404/401 process.

If an isolated wetland determination has been made, State Form 51821 (Appendix D-38 - 401 IDEM WQC – Form 51821) can be used to apply for an isolated wetland permit. The designer should follow the instructions provided on this form as discussed in Section 6.4 above.

EWPO staff will review the designer's application for completeness and may request revisions. Once an application is complete, EWPO staff will sign and submit the application to IDEM.

Following submittal, IDEM will review the application for completeness and may request additional information. Applications submitted for an IWGP have a review timeframe of 30 days from the date of receipt by IDEM. INDOT will receive a formal letter from IDEM which indicates whether or not the project falls within the scope of the terms and conditions of the IWGP. For IWIPs, IDEM is required to publish a 30-day public notice. Notice is served to adjacent property owners, other state and federal agencies, and any person who has requested to receive public notices for IWIP applications. Any person may request that a public hearing be held to discuss the potential water quality impacts of the project. Public hearings are held at IDEM's discretion. No decision can be made until the 30-day public notice period has expired and all comments have been addressed. IDEM has 120 days from the receipt of a complete IWIP application to make an agency decision (approval or denial). Applicants will receive a formal agency decision through certified mail.

If an isolated wetland is the only aquatic resource to be impacted, an IDEM isolated wetland permit may be issued as a stand-alone permit. However, if there are impacts to jurisdictional streams and/or wetlands in addition to the isolated wetland impacts, a USACE 404 permit and IDEM 401 WQC must also be obtained separately and in addition to the IWIP.

6.5 RULE 5 PERMITTING

Background

Rule 5 is a performance based permit designed to reduce pollutants associated with construction activities. It is a permit-by-rule (i.e. no formal permit is issued by IDEM). The applicant states their intent to comply with 327 IAC 15-5 by submitting a Notice of Intent (NOI). A NOI submittal is required for any construction activity (clearing, grading, excavation, and other soil disturbing activities) that disturbs one (1.0) acre or more of land. If the activity results in the disturbance of less than one acre, but is part of a larger corridor whose total land area of disturbance is greater than one acre, IDEM will view the disturbed soil cumulatively and require a NOI..

Although a formal NOI submittal is required for projects with one acre or more of soil disturbance, erosion and sediment control measures should be included on all INDOT projects with less than one acre of distrubance. Other environmental laws can be violated by the discharge of construction related pollutants off-site. For instance, USACE 404, IDEM 401, and IDNR floodway permits all prohibit the discharge of sediment into streams and wetlands. By incorporating these measures into all INDOT projects there is a reduced risk for violating environmental regulations during construction.

When the estimated exposed soil is close to one acre (0.95 acre or higher), INDOT ESD requires the submittal of a formal application to IDEM. This prevents soil disturbance not anticipated during design, such as contractor staging areas or access, from exceeding the one acre threshold.

Application Process

A Rule 5 application has three components: a Notice of Intent (NOI), a Storm Water Pollution Prevention Plan (SWPPP), and project plans. The NOI should be prepared using State Form 47487, *Rule 5 – Notice of Intent (NOI)*. The current version of the form (at time of manual publication) is included in Appendix D-56 - IDEM Rule 5 – Notice of Intent – Form 47487.

The SWPPP has three components: basic plan elements (A1-A23), construction components (B1-B15), and post construction components (C1-C5). Requirements for each item are available on IDEM's website and in Appendix D-58 - Rule 5 Guidance for Construction Plan (SWPPP). Reviewers in INDOT's EWPO and at IDEM will use this checklist to evaluate the completeness of a project's SWPPP. In addition to sediment, this plan should address other types of pollutants that are associated with construction activities (equipment fuel, sanitary waste, litter, etc.).

Project plans should also be included in each Rule 5 application. The project designer should consult the INDOT Design Manual, INDOT Standard Specifications, and the Indiana Storm Water Quality Manual for details and specifications of erosion and sediment control measures. Considerations for the Rule 5 applications include:

- Local drainage patterns and topography;
- Water volumes entering and leaving the construction site;
- Utility features that may traverse the project;

- Construction clear zone limitations on erosion and sediment control measures; and
- Construction sequencing including necessary measures during different construction phases.

Providing vegetated ground cover is the most effective means of preventing erosion. If possible, the project should be phased to keep the amount of exposed soil to a minimum. Designers and contractors should avoid exposing soil over the entire project as this creates a high potential for off-site movement of sediment. If the existing vegetation must be disturbed, appropriate erosion and sediment control measures should be used.

The designer should submit the Rule 5 application to the EWPO's Storm Water Team. EWPO staff will review the application for completeness and request revisions when necessary. Upon completion of INDOT's review, the EWPO will initiate the two-step application process required by IDEM.

Step one involves the submittal of the first page of the NOI, the SWPPP, and project plans to IDEM. IDEM has 28-days to review this application. IDEM will issue a review letter (or waiver of review letter) to INDOT. Once the items listed as deficient in the review letter are addressed, INDOT will publish a Rule 5 public notice in a local newspaper. The proof of public notice from the newspaper is provided to IDEM in the second step of the Rule 5 application process.

The second step of the application process is initiated when INDOT has addressed the comments received IDEM's review letter and the public notice has been made. The EWPO will submit the Notice of Intent (NOI) package to IDEM. This package contains a signed NOI, the IDEM review letter (or waiver of review letter), a publisher's affidavit, and a payment voucher. In general, INDOT does not pay application fees for waterway permits with the exception, by law, for Rule 5 applications. The Rule 5 permit is valid within forty-eight (48) hours of NOI package submittal.

In response to INDOT's NOI package, IDEM will issue a Notice of Sufficiency (NOS). This document lists the expiration date for the Rule 5 authorization, generally set at five years from the date of NOI submission. It also provides the IDEM permit number, which is used when completing the Notice of Termination (NOT) form upon completion of the project. A Rule 5 permit cannot be extended. INDOT must submit a new NOI, with proof of new public notice and payment voucher, ninety (90) days prior to the original NOI's expiration if additional time is needed during construction.

For projects with Rule 5 permits, the contractor must submit a written construction plan that discusses the sequencing of construction activities to IDEM following the contract award. The approved construction plan must be implemented before, during, and after construction activities occur. A copy of this plan should also be sent to the EWPO Storm Water Team for incorporation into the permit file.

When construction is complete, the EWPO receives a memo from the INDOT district notifying the office that the project has had its final inspection. The district should only send this notification when permanent vegetative stabilization of the site has reached a minimum density of seventy (70) percent. The EWPO then completes a Notice of Termination (NOT) form and submits this to IDEM. Until this density is reached and IDEM approves the NOT, INDOT Construction must continue routine inspections of erosion and sediment control measures as outlined in INDOT Standard Specifications.

6.6 IDEM PERMITTING SCENARIOS

The following examples are provided to illustrate when a permit may be required from IDEM. This list is not all inclusive. The final determination on what permits are required will be made by IDEM.

- The replacement of a corrugated metal pipe under an existing state highway is proposed. The existing structure is a 40’ long 36” diameter pipe and will be replaced with a pipe of the same dimensions. Riprap will be added to the outlet of this structure for an additional 15’ of impact. Total impacts below the OHWM are 55’ and 0.003 acre. Both the structure and riprap comply with IDEM’s NWP general conditions and INDOT will be applying for a 404 NWP#3. Since the project meets all the terms and conditions of the **401 NWP**, no formal submission to IDEM is required.

- A sight distance correction project involves the construction of a new bridge upstream of an existing bridge crossing. The existing bridge will be removed and all bare soil stabilized with vegetation. The new bridge piers and riprap will be placed below the OHWM for a total impact of 250’ and 0.02 acre. In addition, an emergent wetland will be impacted by the new approach road (0.04 acre). Total project impacts to aquatic resources are 250’ and 0.06 acre. Since the project meets all of the RGP general conditions INDOT will apply for a **401 RGP**.

- A small structure replacement project proposes replacement of an existing structure within one on a drastically different skew. This results in a shift in the centerline of the existing stream. Overall project impacts to the stream are low (125’ and 0.03 acre). However, the project cannot comply with the NWP and RGP general conditions due to the stream relocation, which changes the flow path, sinuosity, and velocity of the existing stream. A **401 IP** is required, although stream mitigation will likely not be requested from IDEM due to the project impacts.

- A road widening project is proposed to upgrade a corridor to modern safety standards. Shoulders and travel lanes will both be widened. The project crosses five streams, all of which are in the same eight-digit watershed. Each existing structure will be replaced and extended for a total of 415’ and 0.07 acre below the OHWM. The road will also impact a small forested wetland (0.07 acre). Since cumulative impacts (415’ and 0.14 acre) are above the NWP and RGP thresholds, a **401 IP** will be required. This will likely include compensatory stream and wetland mitigation.

- An intersection improvement project will impact 0.8 acre of wetland. The USACE approved jurisdiction determination, requested during the project development process, states that the wetland is not jurisdictional (isolated). The wetland delineation indicates that the impacted wetland is a Class III isolated wetland. As a result an **Isolated Wetland Individual Permit** is required.

- An interchange modification project is estimated to disturb 0.97 acre of soil. After discussing the project with the EWPO Storm Water Team, INDOT decides to apply for a formal **Rule 5 permit** since the contractor access and staging areas will likely result in a cumulative soil disturbance greater than one acre.

- A slide correction project will disturb approximately 0.7 acre of soil. No Rule 5 is required. However, the designer is still required by INDOT to incorporate adequate erosion/sediment control measures into the project plans/contract.

- A road on a new alignment is proposed and will disturb approximately 40 acres. A formal **Rule 5 permit** will be required.

CHAPTER 7 - INDIANA DEPARTMENT OF NATURAL RESOURCES (IDNR) PERMITTING

INTRODUCTION TO IDNR PERMITTING

The Indiana Department of Natural Resources (IDNR) administers several regulatory programs overseeing construction activities within, over, and/or under state waterways. The goal of these programs is to ensure water resources are used in a prudent manner while minimizing floodway related damages and protecting environmental and cultural resources. Four programs that INDOT typically encounters (from most to least common) are the Flood Control Act, the Navigable Waterways Act, the Lakes Preservation Act, and the Lowering of the Ten Acre Lakes Act.

Flood Control Act

The Flood Control Act (IC 14-28-1) regulates various development activities (i.e. structures, obstructions, deposits, and/or excavations) within the 100-year floodway of any waterway by requiring IDNR approval prior to the beginning of the project. The floodway is defined as the channel of a river or stream and those portions of the floodplain adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream. Note that the floodway is only a portion of the floodplain as shown in Figure 7.1. Many floodways have been mapped through studies for the National Flood Insurance Program. However, floodways exist for all waterways even if they have not been formally mapped.

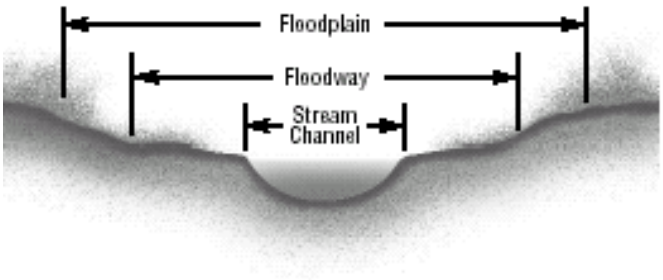


Figure 7.1 Floodplain vs. Floodway Schematic

Regulated activities under this act include, but are not limited to: bank stabilization, bridge construction/ reconstruction, excavations, fills, levee construction/reconstruction, outfalls, and certain utility work. The primary goal of the Flood Control Act is to minimize the extent, height, and violence of flooding. IDNR will also evaluate whether or not the project will cause “unreasonable detrimental effects upon fish, wildlife, or other botanical resources.”

Navigable Waterways Act

The Navigable Waterways Act (IC 14-29-1) regulates development activities associated with navigable waterways by requiring a permit from IDNR prior to the start of construction. Under the Act, a “person” may not (1) place, fill, or erect a permanent structure in, (2) remove water from, or (3) remove material from a navigable waterway without a permit. Activities include, but are not limited to, structure work, water withdrawal, and mineral extraction. A list of navigable waterways (Natural Resources Commission Information Bulletin #3) is included in Appendix E-1 - IDNR List of Indiana Waterways Declared

Navigable. *Note that an IDNR navigable waterway may or may not also be a USCG navigable waterways*.

Lakes Preservation Act

The Lakes Preservation Act (IC 14-26-2) requires approval from IDNR before modifications can be made to the level or shoreline of any public freshwater lake. A "lake" is a reasonably permanent body of water (in existence on or before March 12, 1947) that: (1) is substantially at rest in a depression in the surface of the earth that is naturally created; (2) is of natural origin or part of a watercourse, including a watercourse that has been dammed; and covers an area of at least five (5) acres within the shoreline and waterline. A "public freshwater lake" is a lake that has been used by the public with the acquiescence of a riparian owner. Modifications that may require a permit includes seawalls, dredging, and fill material placement. A listing (not all inclusive) of public freshwater lakes is included in Appendix E-9 - IDNR - Public Freshwater Lakes.

There are three types of activities that require a permit under this act. First, a permit must be obtained to excavate, place fill, or place, modify, or repair a temporary or permanent structure over, along, or lakeward of the shoreline or water line of a public freshwater lake. Second, a permit must be obtained to construct a wall whose lowest point would be below the elevation of the shoreline or water line and within ten (10) feet landward of the shoreline or water line. Finally, a permit must be obtained to change the water level, area, or depth of a public freshwater lake or the location of the shoreline or water line.

Lowering of Ten Acre Lakes Act

The Lowering of Ten Acre Lakes Act (IC 14-26-5) regulates all ditch or drain work that is both located within a half mile of a freshwater lake's shoreline and has a bottom depth lower than the lake's normal water level. A permit from IDNR is required prior to project initiation. Specific work on ditches that would require a permit includes ditch relocation, establishment, construction, reconstruction, repair, or recleaning. The activity will be evaluated to determine if the proposed work will not endanger the legally established water level of a lake, the normal water level of a lake whose water level had not been legally established, or will not result in unreasonably detrimental effects upon fish, wildlife or botanical resources.

7.1 CONSTRUCTION IN A FLOODWAY (CIF) PERMIT

Background

Permits issued under the Flood Control Act are called Construction in a Floodway (CIF) permits. IDNR evaluates projects to protect the floodway from undue restrictions and environmental impacts. A CIF could be required for any waterway with an upstream drainage area equal to or greater than one (1.0) square mile; however there are several exemptions from CIF permitting. IDNR has exemptions for rural bridges, logjam removal projects, utility line crossings, wetland restoration measures, and outfall structures. In addition, INDOT has a Memorandum of Understanding (MOU) with IDNR that exempts certain maintenance activities from CIF permitting requirements. If a project meets the criteria for a specific exemption, it then falls under the general license provided by statute.

Rural Bridge Exemption

In order for a project to qualify for the rural bridge exemption, all of following criteria must be met. The project must:

- Be an INDOT or county highway department funded project;

- Be a bridge project (IDNR's bridge definition includes small structures such as culverts and pipes);
- Be located in a rural area where the:
    - Lowest floor elevation (including basement) of any residential, commercial, or industrial building impacted by the project is above the 100 year flood elevation;
    - Project is located outside the corporate boundaries of a consolidated or an incorporated city or town; and
    - Project is located outside of the territorial authority for comprehensive planning defined as the contiguous unincorporated area within two (2) miles from the corporate boundaries of a municipality.
- Cross a stream having an upstream drainage area of less than or equal to fifty (50) square miles (drainage area includes all land area contributing to runoff above the project site and is determined from the United States Geological Survey 7.5 minute series quadrangle maps).

The designer must provided documentation to the EWPO that each of these criteria has been met. If challenged, the designer will be responsible for providing justification that supports the claim that all exemption criteria have been satisfied.

Logjam Removal Exemption

In order for a project to qualify for the logjam removal exemption, all of the following criteria must be met:

- The logjam must be at least partially within the bridge right-of-way;
- Equipment must be operated from the bridge or bank within the right-of-way;
- No equipment can be placed in the river or stream, and access for the equipment cannot extend beyond fifty (50) feet from the right-of-way;
- Work is not proposed within a salmonid stream (Appendix E-17 - IDNR – Salmonid Streams);
- Work is not proposed in a natural, scenic, or recreational river (Appendix E-18 - IDNR - Indiana Scenic Rivers);
- Logs that are crossways in the channel will be cut, relocated, and removed from the floodplain;
- Logs maintained in the floodway will be properly anchored/secured to resist dislodging by flow of water and will not be placed in a wetland;
- Logs must be removed and secured with minimum damage to vegetation;
- Isolated or single logs that are embedded/lodged in the channel and do not span the channel must not be removed unless they are in close proximity to larger obstructions or pose a hazard to navigation;
- Leaning or damaged trees that are in immediate danger for falling into the waterway may be cut and removed if the trees are in close proximity to the obstruction, but the root system must be left in place;
- Construction access roads must be minimized with no change to the elevation of the floodplain;
- Work must exclusively be performed from one side of the waterway and crossing the waterway is prohibited;
- Appropriate erosion/sediment control measures should be installed to prevent sediment laden waters from entering the waterway; and
- All disturbed areas must be revegetated within 15 days without the use of tall fescue.

Utility Line Crossing Exemption

In order for a project to qualify for the utility line crossing exemption, all of the following criteria must be met:

- Tree and brush clearing are contained and minimized within the utility crossing area with no more than one (1.0) acre of trees removed from the floodway;
- Construction activities within the waterway between April 1 and June 30 (fish spawning season) will not exceed two calendar days;
- Best management practices will be used during construction to minimize erosion and sedimentation and disturbed areas will be revegetated following construction;
- Disturbed areas with 3:1 slopes or steeper will be stabilized with erosion control blankets or suitable structural armament;
- No pesticides will be used on the banks;
- If the utility line transports a substance that may cause water pollution (IC 13-11-2-260) it must be equipped with an emergency closure system;
- Meets the cover requirements for utilities placed below the bed of a river or stream as defined in Indiana Code (312 IAC 10-5-4);
- Meets the clearance requirements for lines placed above the stream bed as defined by Indiana Code (312 IAC 10-5-4); and
- The utility line is not placed in a dam or levee.

The utility line exemption must be coordinated with the IDNR by the affected utility company. *INDOT may not request application of the exemption on behalf of the utility company.*

Wetland Restoration Exemption

In order for a project to qualify for the wetland restoration exemption, all of the following criteria must be met:

- The measure does not obstruct more than five (5) percent of the cross section of the floodplain during a regulatory flood;
- The measure will not remove more than one (1.0) acre of forest;
- Following completion of construction, disturbed areas are revegetated;
- Any excavation that blocks a drain tile does not permanently alter the natural ground elevation;
- The streamward toe of a constructed berm or levee is at least one hundred (100) feet landward from the top of the bank of waterway;
- The construction of a berm or level is limited to one side of the waterway, and there is not another berm/levee within two-thousand (2000) feet of the same waterway; and
- The elevation of a berm or levee is no more than two (2.0) feet higher than the natural ground surface measured at the lowest point along the berm/levee.

In order for a wetland restoration project to be considered under this exemption, INDOT must provide written notification to the IDNR. The notification must contain information of a sufficient detail to determine if the proposed activity meets the criteria listed in the exemption. IDNR will respond within ten (10) business of the receipt of the notice. If the department does not raise any objections, the proposed activity is deemed qualified for the exemption. If an objection is raised, INDOT must apply for a CIF permit.

Outfall Exemption

An outfall is a closed conduit used for the transport and discharge of surface runoff or treated effluent to a waterway or swale. This includes all appurtenant channels, supply lines, energy dissipaters, and erosion control measures. The term does not include a system where the conduit is placed beneath the bed. In order for a project to apply for the outfall exemption, all of the following criteria must be met:

- Work is not proposed in a river or stream on the Outstanding Rivers List (Appendix E-19 - IDNR – List of Outstanding Rivers and Streams);
- Work is not proposed in a salmonid stream (Appendix E-17 - IDNR – Salmonid Streams);
- Work is not proposed below the ordinary high water mark of a navigable waterway (Appendix E-1 - IDNR List of Indiana Waterways Declared Navigable);
- The project does not require an individual Section 404 permit from the USACE;
- Tree removal and clearing will be minimized around the outfall area and less than one (1.0) acre of trees will be removed from the floodway;
- Construction activities within the waterway between April 1 and June 30 (fish spawning season) will not exceed two (2) calendar days;
- Best management practices will be used during construction to minimize erosion and sedimentation and disturbed areas will be revegetated following construction;
- Disturbed areas with 3:1 or steeper slopes will be stabilized with erosion control blankets or suitable structural armament;
- Any riprap must have an average diameter of six (6) inches and extend below the normal water level;
- The size of the outfall shall not exceed:
    - Ten (10) square feet in cross section flow area;
    - Five (5) feet deep (difference between lowest bank elevation and bottom of outfall);
    - An area of disturbance thirty (30) feet wide.
- Within the project area, the post construction ground surface elevation shall be less than six (6) inches above the preconstruction elevation;
- The outlet structure shall be:
    - Supported by a headwall, slopewall, or anchored end section; and
    - Conform to the bank of the waterway.
- A closure mechanism is provided if flow passes through the outfall in the reverse direction; and
- Construction debris and material not used as backfill shall be removed from the floodway.

No IDNR notification is required if the project qualifies for the exemption by meeting all of the listed criteria.

Maintenance Memorandum of Understanding

INDOT and IDNR also have a Maintenance Memorandum of Understanding (MOU) that exempts some projects from IDNR permitting (Appendix E-21 - IDNR – INDOT Maintenance MOU). Exempted projects include bridge deck patching, minor bridge repair, roadside maintenance (machine mowing, brush cutting, herbicide treatment, seeding or fertilizing, stump removal, etc.), slide repair, drainage ditch maintenance, and pipe lining. A project with work located under the hundred year flood elevation subject to IDNR permitting cannot apply the Maintenance MOU if the elevation of the roadway will be increased more than three (3) inches. The critical design consideration is whether the proposed work will change the original structure waterway opening. This can be evaluated and documented using the Bridge Replacement-in-Kind Worksheet. If the permanent impacts fall under the maintenance MOU the required temporary impacts will also be covered.

If a project does not meet the criteria listed in an exemption, an INDR CIF permit will be required. Typical INDOT projects which could require CIF permits include, but are not limited to:

- Bridge and/or culvert construction or widening;
- Stream bank stabilization;
- Channel modification and/or relocation;
- Temporary runaround structure construction, including approaches;
- Construction of access bridges and/or causeways; and
- Borrow pit excavation (this permit is generally applied for by the contractor).

Application Process

For all IDNR CIF permits, the most current State Form 42946, *Permit Application for Construction*, should be used (see Appendix E-39 - IDNR – State Form 42946). Instructions for completing this document are included on the form. IDNR also provides an Application Assistance Manual (http://www.in.gov/dnr/water/4953.htm) with detailed information on the submittal requirements. The IDNR uses this form for all IDNR permits discussed in this chapter.

An IDNR CIF checklist has been included in Appendix E-33 - IDNR – Construction in a Floodway – Checklist to assist the project designer with application preparation. In general, IDNR applications will require the following information:

- Project plans including:
  - Labels for streams, wetlands, existing vegetation, and boundary of 100-year floodway;
  - Property limits (including property owner names);
  - Existing and proposed structures;
  - Existing and proposed approach roads;
  - Construction limits;
  - Limits of channel work;
  - Vertical benchmarks for structures (Q100 elevation, flow-line elevation, bottom of structure elevation, and top of structure elevation) shown on cross sections; and
  - Hydraulic data table.
- IDNR early coordination letter from NEPA document;
- Photographs;
- Maps (location map and photo-orientation map);
- Public notice documents (State Forms 52086 and 50354);
- Hydraulic modeling and modeling checklist (if necessary);
- Mitigation and monitoring plan, if necessary (see INDOT Ecology Manual for IDNR mitigation requirements); and
- Description of temporary impacts associated with the project (stream crossings, pump-arounds, cofferdams, etc.).

INDOT-EWPO requires that designers evaluate and include the most likely measures needed to construct a project. Inclusion of this information in the permit application reduces delays during construction when pursuing modifications to IDNR permits. It also reduces permit violations when the contractor fails to obtain the necessary permit modifications. Items to include for temporary measures are:

- Type of fill material (must be non-erosive);
- Volume (cubic yards) and area (acres) associated with the temporary measures below Q100;
- Temporary acres of impact to any wetland(s);

- Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
- Expected amount of time the temporary measures will remain in place;
- Number and dimensions (diameter and length) of pipes required for a temporary stream crossing (if applicable); and
- Restoration plan which include an appropriate seed mix.

A separate IDNR CIF application should be prepared for each floodway that is impacted by the project. Therefore, if a project impacts two separate 100-year floodways, it will require two floodway permits.

Following the designer's submittal of the completed application to the EWPO, they will review the document and ask for any necessary revisions. Once all revisions have been incorporated into the application, EWPO staff will sign and submit it to IDNR. No filing fee is required for INDOT application submittals. IDNR processing time is dependent upon the magnitude of the project and the completeness of the submittal. Typically, six to nine months from the date of submittal is required. This includes a mandatory twenty-one (21) day public notice that the INDOT EWPO will initiate and complete. For the public notice, the project designer should submit IDNR – Form N4 – State Form 52086 and IDNR – Form N2 – State Form 50354 to the EWPO (see Appendix E-41), who will process these once IDNR has issued a project number.

For federally funded INDOT projects, the CIF permit will be valid for five (5) years from the date of issuance. For state funded INDOT projects, the CIF will be valid for two (2) years. A one-time permit renewal may be issued for a period not to exceed two(2) years if requested prior to the expiration of the initial permit.

7.2 NAVIGABLE WATERWAYS PERMIT

Background

Navigable Waterways Act permits are issued by IDNR for development activities in navigable waterways. The limit of IDNR jurisdiction on a navigable waterway is the ordinary high water mark (OHWM). Refer to the INDOT Ecology Manual for more information on the OHWM.

Typical INDOT projects requiring IDNR approval include, but are not be limited to the following:

- Channel modification and/or relocation;
- Bridge and/or culvert construction or widening;
- Stream bank stabilization;
- Temporary runaround construction; and
- Construction of access bridges and/or causeways.

An IDNR CIF permit can be combined with the Navigable Waterways permit. However, exemptions from the CIF permit do not exempt INDOT from obtaining a Navigable Waterways permit.

Application Process

Refer to the application process discussion in Section 7.2.

7.3 LAKE PRESERVATION ACT PERMIT

Background

Lake Preservation Act permits are issued by IDNR for development activities which occur at or lakeward of a public freshwater lakes' average normal shoreline. Typical work included in INDOT projects that may require permits under this act include:

- Dredging;
- Construction of seawalls;
- Re-facing of seawalls in public freshwater lakes; and
- Permanent fill material viewed as degrading the integrity of the resource.

The following water bodies are exempt from the requirements of the Act:

- Lake Michigan;
- Wolf Lake and Lake George in Hammond;
- Lake Shafer and Lake Freeman;
- Lakes created by or used for surface mining;
- Off-stream, privately-owned water impoundments constructed for the reduction of pollutants before discharge to public waters; and
- Public water supply reservoirs.

An IDNR CIF permit can be combined with a Lake Preservation Act permit. However, exemptions from the CIF permit do not exempt INDOT from obtaining a Lake Preservation Act permit.

Application Process

Refer to the application process discussion in Section 7.2.

7.4 LOWERING OF TEN ACRE LAKES ACT PERMIT

Background

IDNR issues permits under the Lowering of Ten Acre Lakes Act to provide safeguards against the lowering of a freshwater lake's water level as the result of a ditch and/or drain activity. Typical INDOT activities that may require a permit under the Lowering of the Ten Acre Lakes Act include:

- Ditch construction;
- Ditch reconstruction/maintenance;
- Tile drain installation; and
- Tile drain repair.

An IDNR CIF permit can be combined with a Lowering of the Ten Acre Lakes Act permit. However, exemptions from the CIF permit do not exempt INDOT from obtaining a Lowering of the Ten Acre Lakes Act permit.

Application Process

Refer to the application process discussion in Section 7.2.

7.5 IDNR PERMITTING SCENARIOS

The following examples are provided to illustrate when a permit may be required from IDNR. This list is not all inclusive. The final determination on what permits are required will be made by the IDNR.

- The replacement of a corrugated metal pipe (36” diameter and 60’ long) under an existing state road is proposed. The upstream drainage area from this structure is 0.85 square mile. No public lakes are located within a half mile radius. No IDNR permitting is required since the drainage area is less than one (1) square mile, there is no navigable waterway, no lake impacts, and no public lake within close proximity.

- A culvert replacement project on a state road is proposed. The existing box culvert (80’L x 8’W x 5’H) will be replaced with a box culvert (90’L x 10’W x 5’H). The approach roads will not change from their existing configuration. The location meets the rural definition requirements from IDNR. The upstream drainage area from the structure is 27 square miles. No public lakes are located within a half mile radius of the project. This work is not covered under the INDOT-IDNR Maintenance MOU. This project meets the rural bridge exemption and will therefore not require a CIF permit. Since there is no navigable waterway, lake impacts, and/or public lake within close proximity, no other IDNR permits are required.

- INDOT proposes a culvert replacement project on a state road. The existing box culvert (8’ wide, 5’ tall, and 80’ long) will be replaced with a new box culvert (10’ wide, 5’ tall, and 90’ long). The approach roads will not change from their existing configuration. The location is within the city limits of Bloomington, Indiana. The upstream drainage area from the structure is 27 square miles. No public lakes are located within a half mile radius of the project. In addition, this work is not covered under the INDOT-IDNR Maintenance MOU. This project will require a **CIF permit** since it does not meet the rural bridge exemption. Lack of a navigable waterway, lake impact, and close proximity of a public lake rules out other IDNR permitting needs.

- A road widening project on a state road is proposed. Shoulder and lane widening will result in the replacement of an existing box culvert (80’L x 8’W x 5’H) with a new box culvert (150’L x 10’W x 5’H). The approach roads will be widened resulting in additional floodway impacts, including tree clearing and the relocation of a captured stream located within the existing roadside ditch. The location meets IDNR’s rural definition. The upstream drainage area is 27 square miles. No lake impacts will occur and no public freshwater lakes are located within a half mile radius of the project. All of the project’s floodway impacts cannot fit under the rural bridge exemption, which only covers structure work and not the approach widening and stream relocation. In addition, this work is not covered under the INDOT-IDNR Maintenance MOU. Because of this, an **IDNR CIF** permit will be required. Since there are no navigable waterway, lake impacts, and or public lake within close proximity, no other IDNR permits are required.

- A pipe-liner project within the city limits of Indianapolis is proposed. The drainage area upstream from the structure is 4 square miles. No lake impacts will occur and the project is not located within a half mile radius of any public freshwater lake. No IDNR CIF exemptions apply. However, this work is covered by the INDOT-IDNR Maintenance MOU, so no CIF will be required. Since there is no navigable waterway, lake impacts, and or public lake within close proximity, no other IDNR permits are required.

- A new bridge over the Ohio River is proposed. Work in the floodway will include the placement of piers within the river as well as the construction of approach roads. The upstream drainage area

from the new bridge is 2,500 square miles. The project is located in an area that meets the IDNR rural definition. No lake impacts will occur and no public freshwater lake is within a half mile radius. This project will require an **IDNR CIF** permit and a **Navigable Waterways Act** permit. It does not meet any of the exemptions or the maintenance MOU.

- A road widening project is proposed directly adjacent to a public freshwater lake. Work will include road widening and the installation of a sea wall at the toe of slope. No roadside ditches will be constructed within a half mile of the lake. No work will be conducted in a 100-year floodway. A **Lake Preservation Act** permit will be required due to the project's lake impacts. The absence of a floodway, navigable waterway, and roadside ditch construction (or other scoped work) that would lower the lake level rules out other IDNR permitting needs.

- A reconstruction project is proposed along an existing U.S. highway. Work will include replacement of the pavement and construction of new roadside ditches along both sides of the highway to improve drainage. No 100-year floodway will be impacted by this project. However, a public freshwater lake is located within a quarter mile from the ditch construction and the ditches will be below the lakes normal water level. A **Lowering of the Ten Acre Lakes Act** permit will be required. The absence of a floodway, navigable waterway, and lake impact rules out other IDNR permitting needs.

- A bridge rehabilitation project is proposed along an existing state highway. Work will include the repair of the bridge and approach slabs, end bents, joints, and railing. In addition, riprap for scour protection will be added along the piers below the existing flow line. The bridge is located in an urban area and the upstream drainage area is 232 square feet. The bridge rehabilitation project does not qualify for the Rural Bridge Exemption. The Bridge Replacement-in-Kind Non-modeling Worksheet indicates that the original structure waterway opening will be maintained. The permanent impacts fall under the Maintenance MOU. In addition, any temporary impacts required will also fall under the MOU.

CHAPTER 8 - COUNTY REGULATED DRAIN PERMITS

INTRODUCTION TO REGULATED DRAIN PERMITTING

County regulated drains are established by state drainage law (IC 36-9-27). Each county has its own regulations, and not all counties require formal permits prior to conducting work within a regulated drain. Each county has an elected surveyor who administers the county's drainage code and oversees maintenance of legal drains. INDOT is required to notify county surveyors of any proposed construction that impacts a regulated drain and conduct any necessary permit coordination prior to the start of construction.

8.1 COUNTY REGULATED DRAIN PERMITS

Background

On all INDOT projects where work is proposed in (or associated with) a regulated drain, regardless of county, the designer should conduct early coordination with the county surveyor. A permit may be required for work that may not directly impact a regulated drain, such as structure replacement. For instance, some counties also require permitting for outletting drainage to a regulated drain. The surveyor should be sent a copy of the plan set as well as an invitation to the preliminary field check for the project. The designer should incorporate feedback from the surveyor into the final project design. Feedback that cannot be incorporated into the final design should be coordinated with INDOT (Project Manager, INDOT Hydraulics, and EWPO).

There are five counties in Indiana that require formal county regulated drain permits as of the date of this manual: Allen, Elkhart, Hamilton, Lake, and LaPorte. The designer should determine early in project design if impacts are proposed to county regulated drains in one of these five counties, and if so coordinate with the surveyor on application requirements. Note that the surveyor will coordinate with the county drainage board for ultimate approval of the work following INDOT's permit application submittal. Drainage board meetings are held infrequently (monthly or bi-weekly) and may delay approval of the permit.

Drainage code allows surveyors to clear and maintain legal drains and all land within 75' of each stream bank. This often makes it difficult to use a county regulated drain for compensatory mitigation tied to waterway permits. In rare cases, a maintenance agreement has been worked out with a surveyor in advance for mitigation construction on a regulated drain. The designer should coordinate with INDOT's EWPO early in project development if mitigation is targeted on a regulated drain in any Indiana county.

Application Process

Each county has unique application requirements for county regulated drain permits. In general, each submittal will include a permit application form, scope of work, and the project plan set. It may also include hydraulic modeling if requested from the surveyor. Copies of application forms for Allen, Elkhart, Lake, Hamilton, and LaPorte counties may be obtained by contacting that county's surveyor's office. Some of these are available online.

The designer should submit the application documents to the EWPO for review. Once the EWPO has a complete application, EWPO staff will sign and submit it to the county surveyor. The surveyor will

coordinate with the county drainage board and arrange to have the project discussed at an upcoming meeting. Application deadlines vary but are typically ten days in advance of the monthly or bi-monthly board meeting. Application submission should consider the meeting time constraints and the fact that revisions may be required to the proposed project prior to approval. Once issued, regulated drain permits typically do not have an expiration date. Most, however, do request notification from INDOT prior to the initiation of construction.

8.2 COUNTY REGULATED DRAIN PERMITTING SCENARIOS

The following are example projects provided to illustrate instances when a permit may be required from a county surveyor. The final determination on what permits are required will be made by the county.

- INDOT proposes a small structure replacement project on Sugar Creek in Benton County. The project designer researches the project location with the county surveyor and determines that this creek is not a county regulated drain. No county regulated drain permit will be required.

- INDOT proposes a small structure replacement project on an Unnamed Tributary (UNT) to Pine Creek in Benton County. The project designer researches the project location with the county surveyor and determines that this creek is a county regulated drain. No county regulated drain permit will be required; however, early coordination on the project's design with the surveyor is required.

- INDOT proposes a small structure replacement project on an Unnamed Tributary (UNT) to Buck Creek in Hamilton County. The project designer researches the project location with the county surveyor and determines that this creek is a county regulated drain. A **county regulated drain permit** will be required.

- INDOT proposes an interchange modification project in LaPorte County. As part of the project, new roadside drainage will be cut and allowed to outlet to a county regulated drain located at the terminus of the proposed project. No direct impacts are anticipated to the drain itself. This project will likely require a **county regulated drain permit**.

APPENDIX A – INDOT GUIDANCE

PE/PS CHECKLIST

Project: _____
Contract #: _____
Location: _____
Date: _____
Presenter(s): _____

- **Before PRECON**
  - ☐ *PE/PS initial permit review*
    - ☐ Locate project specific permits online
    - ☐ Print permits and review conditions that must be followed during construction
    - ☐ Link all permitted impacts to project plans and contact INDOT-ESD with any questions/ concerns
    - ☐ Forward to contractor for review
  - ☐ *Permit modifications/waivers*
    - ☐ Contractor reviews permits for any modifications/waivers

    Includes: temporary impacts (i.e. stream crossings, causeways, pump-arounds, dewatering devices), waivers (i.e. fish spawning, IN Bat tree clearing, bird nesting season), additional impacts outside of construction limits, Rule 5 NOI amendment, etc.

- **PRECON**
  - ☐ *Discussion of necessary permit modifications/waivers*
    - ☐ Communicate need to INDOT-ESD (only applicant can modify permits)
    - ☐ Allow time for processing at INDOT-ESD and regulatory agencies (several weeks or longer)
  - ☐ *Discussion of expectations for permit compliance*
    - ☐ Compliance with all permit conditions during construction
    - ☐ Off-site movement of sediment violates multiple waterway permit conditions
  - ☐ *Post all permits onsite prior to the start of construction*
  - ☐ *Utility companies responsible for permitting impacts related to their work*

- **Construction**
  - ☐ *Initial operations (clearing/demolition)*
    - ☐ Perimeter control measures installed prior to land disturbing activities
    - ☐ Temporary erosion control measures installed following clearing/demolition (temporary seed/mulch)
  - ☐ *Avoiding non-permitted impacts*
    - ☐ Knowledge of all permit conditions and the stream/wetland/habitat impacts that are permitted/not permitted
    - ☐ Permitted activities/impacts are not exceeded or modified without consultation with INDOT-ESD
    - ☐ Off-site borrow/disposal forms prepared by contractor and spot checked by PE/PS
    - ☐ Compliance with IN Bat tree clearing restrictions **IF REQUIRED** (no clearing April 1 - September 30)
    - ☐ Compliance with fish spawning season restrictions **IF REQUIRED** (no in-stream work April 1 - June 30)
    - ☐ Compliance with nesting season restrictions **IF REQUIRED** (no work May 7 – September 7)
    - ☐ Questions/concerns during construction should be directed to INDOT-ESD
  - ☐ *Erosion/sediment control*

- ☐ Perimeter control measures installed prior to land-disturbing activities
- ☐ Focus on erosion control measures (sediment control measures should be a secondary focus)
- ☐ Weekly/rain event inspections reports provided by contractor and spot checked for accuracy by PE/PS
- ☐ Slopes properly tracked per 203.09 of INDOT Standard Specifications
- ☐ Measures correctly installed and maintained per INDOT Standard Specifications
- ☐ Modify as needed for field conditions

☐ *Permit violation response*

- ☐ Coordinate with INDOT-ESD
- ☐ Formal response detailing corrective action prepared by contractor and PE/PS for all Rule 5 violations

☐ *Mitigation site construction*

- ☐ Constructed per project plans or changes to plans coordinated with INDOT-ESD
- ☐ Questions/concerns during construction should be directed to INDOT-ESD for resolution

Resources:

- **IDEM Emergency Response # 1-888-233-7745** (http://www.in.gov/idem/files/er_quickref.pdf)

- **IDEM Waterways Permitting Handbook**
  (http://www.in.gov/idem/files/wetlands_waterways_booklet.pdf)
  Description: IDEM publication that provides general information concerning the legal requirements that apply when persons wish to engage in activities that will impact or affect wetlands or other regulated waters, including lakes, rivers, streams, and ponds.

- **Indiana Storm Water Quality Manual**
  (http://www.in.gov/idem/4899.htm)
  Chapter 7: Storm Water Quality Measures: Construction and Land-Disturbing Activities
  Description: IDEM publication that provides the purpose, specifications, installation guidelines, and maintenance guidelines for each erosion and sediment control measure. This chapter also includes information on stabilized construction entrances, secure concrete washouts, and stream crossings.

- **IDNR Permit Application Assistance Manual**
  (http://www.in.gov/dnr/water/4953.htm)
  Description: IDNR publication that assists individuals with the preparation and submission of permit applications and minimize the time spent in the DNR's review process.

- **USGS Topographic Maps**
  (http://inmap.indiana.edu/viewer.htm)
  Description: Online resource for USGS maps which can be used when evaluating an area for potential streams (solid or dashed blue-lines). Open the "*Contours, Imagery, and Oth*er" folder on right side of screen and check the box next to the line listed "*Topo Map USGS 1:24000*." Zoom in on the map to the location in question.

- **INDOT Links**
  - Project Specific Permits:
    (http://www.in.gov/dot/div/contracts/letting/index.html)
    Description: The above link connects to a database that lists permits for every INDOT project. Click "*View or Download Contract Letting Documents*." Select "*Permits*" for the document type and enter the project's contract number.

- INDOT Standard Specifications (2012):
  (http://www.in.gov/dot/div/contracts/standards/book/sep11/sep.htm)

- INDOT Recurring Special Provisions:
  (http://www.in.gov/dot/div/contracts/standards/rsp/sep11/sep11.htm)
  RSP 108-C-192 Rule 5 Storm Water Pollution Prevention Plan

- INDOT Request for Approval of Borrow or Disposal Site (*IC 203 R3 11/09*)
  (http://www.in.gov/dot/div/contracts/standards/forms/IC-203.pdf)
  Description: The contractor is required to complete this form for any off-site borrow or disposal site. It includes what permits, if any, have been obtained by the contractor and whether or not the site has been cleared of wetlands and archaeological resources.

- INDOT Standard Drawings:
  (http://www.in.gov/dot/div/contracts/standards/drawings/sep11/sep.htm)
  Description: The above link connects to standard drawings for riprap check dams, straw bale check dams, sediment traps, inlet protection, silt fence, and slope drains. All erosion and sediment control measures should be installed to INDOT standards.

- General Instructions to Field Employees (GIFE) *Updated 2/24/10*
  3.1 Erosion and Sediment Control
  (http://www.in.gov/dot/div/contracts/standards/GIFE_Interim09/SECTION%2003.pdf)
  Description*:* Provides a summary of PE/PS responsibilities in regards to erosion and sediment control.

- INDOT, Environmental Services Division (ESD)
  Ecology and Waterway Permitting Office (http://www.in.gov/indot/2675.htm)
  Description: The tasks assigned to this section are summarized on this webpage.

INDOT-ESD Contacts:

- Nathan Saxe, Manager, Ecology and Waterway Permitting Office: (317) 232-0240; nsaxe@indot.in.gov
- _____, Ecology and Waterway Permitting Specialist: (317) 23__-_____; _____@indot.in.gov
- _____, Storm Water Specialist: (317) 23__-_____; _____@indot.in.gov
- Marlene Mathas, Hazmat Specialist: (317) 232-5113; mmathas@indot.in.gov

PERMIT DETERMINATION CHECKLIST

1. PROJECT SPECIFIC INFORMATION	**Date:**
Project Route/Type	
INDOT Des. Number	Contract #
County	
Letting Date	RFC Date
2. Reviewer/Contact #	
3. Materials Used	☐ Waters Determination ☐ Scope of Work ☐Project Plans ☐ NEPA Documents ☐ Project Data ☐_____ ☐ USGS Indiana StreamStats ☐ IndianaMAP ☐_____
Other Resources	Waterway Permit Manual, agency guidance

4. 401 WQC (IDEM)/ 404 (USACE)

a. Are there jurisdictional streams, wetlands and/or ponds within the project area?
☐ Yes – Type: ☐ Stream(s) ☐ Wetland(s) ☐ Pond(s) ☐ No [NPR]
b. If yes, what are the total impacts to the resources (reference the waters report)?

Wetlands	**TOTAL ON-SITE**	**IMPACTED**
type(s)		
total acres		
jurisdictional status		
Streams		
LF below OHWM		
acres below OHWM		
LF stream relocation		
net gain/loss		
Ponds		
total acres		
jurisdictional status		

c. Determine the appropriate permit application.

- **Use State Form 51937 (Louisville or Detroit Districts)**
  - ☐ Cumulative impacts are ☐ <300' ☐ <0.1 ac and/or ☐ <150' encapsulation
  - ☐ There **is no** stream relocation.
  - ☐ What permit (NWP or RGP) does the project qualify for? Are the permit conditions met? See the Waterway Permit Manual chapters 4 and 6 for the submittal requirements.
- **Use State Form 51821 (Louisville or Detroit Districts)**
  - ☐ Cumulative impacts are ☐ >300' ☐ >0.1 ac and/or ☐ >150' encapsulation
  - ☐ There **is** stream relocation.
  - ☐ NWP and/or RGP conditions are violated.
- **Use USACE Form 4345**
  - ☐ **404 IP –** a single wetland or stream is impacted that is >1.0 acre or > 1,500'

☐ USACE Chicago District (Lake, Porter, & LaPorte [above I-94] counties) permit applications.

DATE DRAFT DUE TO ES 401 ____ - ___/___/_____ 404 ____ - ___/___/_____
(401/404 NWP/RGP (6 m pre-RFC), 404 IP (20 m pre-RFC), 401 IP (4 m pre-RFC))

5. Construction in a Floodway (CIF)(IDNR)

a. Is any stream's individual drainage area ≥ 1 mile^2? ☐ Yes ☐ No [NPR]
Each project location that will impact a DNR jurisdictional floodway will require a permit.

b. Does the impacted stream qualify under an IDNR exemption? ☐ Yes [NPR] ☐ No
Exemption Type - ☐ Logjam ☐ Wetland Restoration ☐ Outfall
☐ Bridge - Project must meet the following five requirements.
☐ Construction/reconstruction project of a state highway bridge funded by INDOT.
☐ Upstream drainage area of the waterway is less than or equal to 50 square miles (does not exceed 50 square miles).
☐ Project is located in a rural area (outside the incorporated limits of a city/town as well as their urban planning zone).
☐ Project is limited to a bridge or culvert (bank stabilization, roadway repair, and stream relocation are not exempt activities.)
☐ Each building impacted by the project is higher than the regulatory flood elevation (lowest elevation in the structure including the basement.)

c. Does the INDOT-IDNR-MOU (maintenance) exemption apply? ☐ Yes [NPR] ☐ No
Qualified work types may include: pipe liner installation, roadside mowing, herbicide treatments, tree removal/trimming, slide repair to the original slope configuration, replacement of original riprap, scour protection and cleaning roadside ditches to original grade. The original structure waterway opening must be maintained.

d. If an IDNR CIF permit is required, will mitigation be required? See NRC Information Bulletin #17 – Floodway Habitat Mitigation. Mitigation unit is acres and is based on habitat restoration.
☐ No mitigation is required.
☐ Palustrine Emergent Wetland Habitat, 2:1 mitigation ratio.
☐ Palustrine Shrub-Shrub Wetland Habitat, 3:1 mitigation ratio.
☐ Palustrine Forested Wetland Habitat, 4:1 mitigation ratio.
☐ Nonwetland forest (at least one acre of disturbance), 2:1 mitigation ratio.
☐ Nonwetland forest (less than one acre of disturbance in a rural area), 1:1 mitigation ratio.
☐ Nonwetland forest (less than one acre of disturbance in an urban area), 5:1 based on trees at least 10" DBH.

e. Use State Form 42946. **DATE DRAFT DUE TO ES** (9 m pre-RFC) ___/___/_____

6. Rule 5

a. Will > 1 acre of soil be disturbed? ☐ Yes ☐ No [NPR]

b. Will there be < 1 acre but >0.90 acres or more of soil be disturbed? ☐ No ☐ Yes
[Coordination with INDOT-ES Storm Water Team is required.]

DATE DRAFT DUE TO ES (5 m pre-RFC) ___/___/_____

7. County Regulated Drains

a. Is the project located on a regulated drain? ☐ Yes ☐ No [NPR]

b. Is the project located in Allen, Elkhart, Hamilton, Lake or LaPorte counties?
☐ Yes ☐ No [NPR]

NOTE - Designation as a regulated drain may prevent construction of on-site mitigation.

DATE DRAFT DUE TO ES (4 m pre-RFC) ___/___/_____

8. Section 9 (USCG) and Section 10 (USACE)

Does the project impact a navigable waterway? See Waterway Permit Manual.

☐ Yes ☐ No [NPR]

DATE DRAFT DUE TO ES Section 9 (5 m pre-RFC) ___/___/_____

Section 10 (7 m pre-RFC) ___/___/_____

9. Levee

Does the project impact a levee? See Waterway Permitting Manual Ch. 4.6.

☐ Yes ☐ No [NPR]

10. Additional Considerations

☐ Fish Spawning Waiver (April 1 – June 30)
☐ Tree Clearing Waiver (April 1 – September 30)
☐ Wildlife Concerns---Swallows, Wildlife Crossing….
☐ Adjacent project that may be looked at cumulatively for impacts/mitigation
☐ ETR – Endangered, Threatened or Rare Species

If marked, notify the project manager in your permit determination response of these conflicts.

11. Follow-up Required

Email to: PM _____ Designer _____
Storm Water _____
cc: Team Lead _____ Other _____

In email, describe what documents were reviewed, what permits are required and why. For preliminary permit determinations include statement "A final permit determination will be done at the time of permit application submittal and/or any change to the scope of the project."

Date sent: _____ Update: ☐ Milestones ☐ EWPS ☐ ProjectWise (file PD email)

Revision – 7/30/2014

APPENDIX B – USACE GUIDANCE

NATIONWIDE PERMIT CONDITIONS

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US.

(c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps.

(d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.noaa.gov/fisheries.html respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA is complete.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.

(2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a PCN as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the US expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(4) The PCN must include a delineation of wetlands, other special aquatic sites, and waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP activities that require PCN notification and result in the loss of greater than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the PCN notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each PCN notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

APPLICABLE INDIANA NATIONWIDE PERMITS

The Louisville, Detroit, and Chicago Districts of the U.S. Army Corps of Engineers developed the existing Indiana Regional General Permit No. 1 (RGP #1) to replace several NWPs. As a consequence of this action, the following NWPs have been, and will continue to be suspended for the State of Indiana and do not require Section 401 Water Quality Certification:

NWP 7 Outfall Structures and Associated Intake Structures
NWP 11 Temporary Recreational Structures
NWP 13 Bank Stabilization
NWP 14 Linear Transportation Projects
NWP 15 U.S. Coast Guard Approved Bridges
NWP 18 Minor Discharges
NWP 19 Minor Dredging
NWP 25 Structural Discharges
NWP 29 Residential Developments
NWP 36 Boat Ramps
NWP 39 Commercial and Institutional Developments
NWP 40 Agricultural Activities
NWP 41 Reshaping Existing Drainage Ditches
NWP 42 Recreational Facilities
NWP 43 Stormwater Management Facilities
NWP 44 Mining Activities

It is the judgment of this office that NWPs 1, 2, 3, 4, 5, 6, 9, 10, 12, 21, 22, 24, 27, 28, 30, 33, 37, 45, 46, 49, 50, 51, 52 will comply with applicable provisions of state law (including 327 IAC 2) and Sections 301, 302, 303, 306, and 307 of the Clean Water Act subject to the conditions set forth in this Certification. IDEM hereby grants Section 401 Water Quality Certification for these NWPs with the following General Conditions and Nationwide Permit Specific conditions:

USACE FORM 4345

U.S. ARMY CORPS OF ENGINEERS
APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
33 CFR 325. The proponent agency is CECW-CO-R.

OMB APPROVAL NO. 0710-0003
EXPIRES: 28 FEBRUARY 2013

Public reporting for this collection of information is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters, Executive Services and Communications Directorate, Information Management Division and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Middle - Last - Company - E-mail Address -	8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Middle - Last - Company - E-mail Address -
6. APPLICANT'S ADDRESS: Address- City - State - Zip - Country -	9. AGENT'S ADDRESS: Address- City - State - Zip - Country -
7. APPLICANT'S PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax	10. AGENTS PHONE NOs. w/AREA CODE a. Residence b. Business c. Fax

STATEMENT OF AUTHORIZATION

11. I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ SIGNATURE OF APPLICANT _____ DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)	
13. NAME OF WATERBODY, IF KNOWN (if applicable)	14. PROJECT STREET ADDRESS (if applicable) Address City - State- Zip-
15. LOCATION OF PROJECT Latitude: °N Longitude: °W	
16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) State Tax Parcel ID Municipality Section - Township - Range -	

ENG FORM 4345, OCT 2012 PREVIOUS EDITIONS ARE OBSOLETE. Page 1 of 3

17. DIRECTIONS TO THE SITE

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

ENG FORM 4345, OCT 2012

Page 2 of 3

24. Is Any Portion of the Work Already Complete? ☐ Yes ☐ No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - State - Zip -

b. Address-

City - State - Zip -

c. Address-

City - State - Zip -

d. Address-

City - State - Zip -

e. Address-

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

ENG FORM 4345, OCT 2012 Page 3 of 3

401 / 404 NWP – NATIONWIDE PERMIT - CHECKLIST

401/404 Nationwide Permit (NWP) Checklist | 2013

INDOT *Environmental* Services (ES), Ecology and Waterway Permitting Office (EWPO)

1. PROJECT SPECIFIC INFORMATION	
Project Route/Type	
INDOT Des. Number	
County	
Letting Date	

2. PROJECT BACKGROUND			
Designer/Firm			
Submittal Date		**Submittal Number**	
ES Reviewer/Contact Info.			
Review Date			

Review columns are abbreviated as follows: Sufficient (S), Deficient (D), and Not Applicable (NA). All items marked deficient require resolution from the designer prior to INDOT acceptance of the application.

3. NWP Expiration Date

S	D	NA	I. Program Expiration*
			A) The current NWP program expires March 18, 2017. A project must be under construction (already gone to letting) in order to receive an automatic one year extension (expiration 3/18/18). If the proposed project will not be under construction by this date (3/18/17) or finished by the extension deadline (3/18/18) if already started, consider applying for a Regional General Permit (RGP) to avoid permit expiration prior to the project letting. *Reviewer Notes:*

***If this table is marked deficient, a different level of permitting should be investigated for the proposed project.**

4. NWP #3 Maintenance

S	D	NA	I. Verification**
			A) Project must involve the repair, rehabilitation, or replacement of an *existing* structure or fill. *Reviewer Notes:*
			B) Project impacts are less than 0.1 acres and equal to or less than 300' to jurisdictional waters (rivers, streams, wetlands, lakes, ponds, etc.). Total cumulative impacts should be considered for "*single and complete projects*." These are typically projects that will be under construction during the same period of time in the same 8-digit watershed. *Reviewer Notes:*
			C) Is the waters report and/or wetland delineation less than five years old? If not, a follow-up investigation is warranted to verify findings are still accurate. *Reviewer Notes:*
			D) The project will not impact any waters designated as salmonid or Outstanding State and/or National Resource Waters. The project will also not impact any critical wetland or critical special aquatic sites. *Reviewer Notes:*
			E) No state endangered, threatened, or rare (ETR) species are documented within a ½ mile radius of the proposed project as documented by the Indiana Department of Natural Resources (IDNR) Division of Nature Preserves. If an ETR species is present, documentation must be obtained from Nature Preserves indicated that the proposed activities will not constitute a violation of state laws protecting these species. *Reviewer Notes:*
			F) The proposed project will not permanently change the sinuosity, flow path, velocity, cross sectional area under the ordinary high water mark (OHWM), or the slope of any stream. Stream relocations are not authorized under the NWP program.

			Reviewer Notes:
			G) All discharges of riprap into streams are flush with the upstream and downstream bank as well as, stream channel elevations and grades. *Reviewer Notes:*
			H) For the replacement of stream encapsulation activities the following requirements must be met:
			☐ The replacement will not reduce the cross sectional area under bank full elevation;
			☐ The replacement will not increase the length of the encapsulation to over 150 linear feet;
			☐ The replacement will have the same slope as the existing encapsulation or will more closely match the slope immediately upstream and downstream of the encapsulation;
			☐ The type of replacement encapsulation is the same as the existing type of encapsulation;
			☐ Bank stabilization and channel bottom stabilization do not exceed either one bank full width upstream and downstream of the replacement encapsulation or ten linear feet (whichever is greater);
			☐ Any channel bottom stabilization is flush with the existing grade of the stream bottom;
			☐ Existing encapsulations over 150 ft may be replaced as long as the structure length does not change more than 20 ft upstream and 20 ft downstream (not additive to one end). *Reviewer Notes:*
			I) For lining existing structures:
			☐ The activity is reviewed and approved by INDOT Office of Hydraulics and the liner size is the largest size listed on the hydraulics memo;
			☐ Riprap scour protection is flush with the upstream and downstream banks as well as, stream channel elevations and grades. *Reviewer Notes:*
			J) For all other maintenance activities:
			☐ The activity will permanently affect 0.1 acre or less of waters of the U.S.;
			☐ The activity will permanently affect 300 linear ft or less of stream channel, streambank, or lake shoreline;
			☐ For bank stabilization activities, the proposed project must demonstrate that the existing bank or shoreline in question is unstable;
			☐ The activity cannot result in a permanent secondary effect to a waters for the U.S. (for example: dredging, excavation, damming, creation of in channel pools, etc.) that when combined with the primary effect exceeds 0.1 acres and 300' of impacts;
			☐ Any channel bottom stabilization is flush with the existing grade of the stream bottom. *Reviewer Notes:*
			K) No unsuitable fill material (trash, debris, asphalt, etc.) will be placed below the OHWM. *Reviewer Notes:*
			L) The activity does not take place in close proximity to a public water supply intake (except if the purpose of the project is for repair/improvement of the intake structure). *Reviewer Notes:*
			M) Heavy equipment working in wetlands must be placed on mats, or other measures are taken to minimize soil disturbance. Adequate erosion/sediment control measures are incorporated into the project to prevent sediment discharge to jurisdictional waters. *Reviewer Notes:*
			N) Project does not affect a property listed, or eligible for listing, in the National Register of Historic Places (i.e. Section 106 must be satisfied). *Reviewer Notes:*

****If any of the above requirements are <u>not</u> met, the NWP #3 will not apply and a different level of permitting will be required. Refer to the other 404/401 checklists to determine the correct level of permitting for this project.**

[2]

If the project applies under the general NWP #3 conditions (Table I), use Table II to determine the type of NWP permit.

S	D	NA	II. NWP #3 Type (a, b, or c)
			A) The project must meet the following requirements for a **404 NWP #3 (a)** to apply:
			☐ Project involves the repair, rehabilitation, or replacement of previously authorized and currently serviceable fills and/or structures;
			☐ The proposed project represents only a minor deviation from the existing conditions for maintenance purposes (minor deviations include changes in materials, construction techniques, construction codes or safety standards, etc.);
			☐ Structure and/or fill will not be put to uses differing from those specified or contemplated for it in the original permit;
			☐ No placement of new or additional riprap outside of the existing riprap footprint (i.e. maintenance of existing riprap fill is allowed).
			A Pre-Construction Notification (PCN) **is NOT required** for a 404 NWP#3 (a).
			Reviewer Notes:
			B) The project must meet the following requirements for a **404 NWP #3 (b)** to apply:
			☐ Removal of accumulated sediments and/or debris (**not** riprap) in the vicinity of and within the existing structure that does not exceed 200' in any direction from the structure;
			☐ Placement of new or additional riprap only to protect a structure (i.e. bank stabilization not associated with a structure requires a separate authorization under the RGP program).
			A Pre-Construction Notification (PCN) **is required** for all 404 NWP#3 (b) activities.
			Reviewer Notes:
			C) The project must meet the following requirements for a **404 NWP #3 (c)** to apply:
			☐ Temporary structures, fills, and work necessary to conduct a maintenance activity;
			☐ Appropriate measures are taken to maintain normal downstream flows and minimize flooding;
			☐ Temporary fill is non-erosive;
			☐ Temporary fill will be removed in the entirety and affected areas returned to pre-construction elevations;
			☐ Disturbed areas must be revegetated.
			A Pre-Construction Notification (PCN) **is NOT required** for 404 NWP #3 (c) activities. Note that this type of NWP#3 is issued in conjunction with type (a) and (b). If the project only involves temporary impacts, the NWP#33 should be used instead.
			Reviewer Notes:

After determining the type of NWP #3 required, use Table III to determine its notification requirements.

S	D	NA	III. Notification Requirements
			A) If the project qualifies for a **404 NWP #3 (a)**, a formal PCN is <u>not</u> required. Take the following action:
			☐ Create a hard-copy file for the project and include the documentation provided by the project designer demonstrating compliance with all the conditions of the NWP;
			☐ Include a copy of this checklist in the file as documentation that all the requirements of the NWP program were evaluated;
			☐ Notify the project manager and designer that the NWP applies and provide them a copy of the *applicable conditions* for inclusion in the contract letting documents.
			Reviewer Notes:
			B) If the project qualifies for a **404 NWP #3 (b)**, a formal PCN is required. The following should be submitted to the USACE:

[3]

			☐ Copy of the waters report with signed pre-JD form from either the preparer of the report or a member of INDOT-ES (this should include a wetland delineation if any wetlands will be impacted by the proposed work);
			☐ Cover letter;
			☐ A description of the proposed project, its purpose, and impacts associated with the project (acres and linear feet) (Note: the preparer can use Corps Form 4345 or State Form 51937 to ensure that all necessary information is submitted);
			☐ Project plans labeled with all jurisdictional waters that include cross sections of all fill placement with the flow-line elevation and ordinary high water mark (OHWM elevation) and existing versus proposed conditions. *Reviewer Notes:*
			C) If the project qualifies for a **404 NWP #3 (c)**, a formal PCN is <u>not</u> required. Take the following action:
			☐ Create a hard-copy file for the project and include the documentation provided by the project designer demonstrating compliance with all the conditions of the NWP;
			☐ Include a copy of this checklist in the file as documentation that all the requirements of the NWP program were evaluated;
			☐ Notify the project manager and designer that the NWP applies and provide them a copy of the *applicable conditions* for inclusion in the contract letting documents. *Reviewer Notes:*

Comments:_____

5. NWP #33 Temporary Construction, Access, and Dewatering			
S	**D**	**NA**	**I: Verification*** **
			A) Project impacts are less than 0.1 acres and equal to or less than 300' to jurisdictional waters (rivers, streams, wetlands, lakes, ponds, etc.). Total cumulative impacts should be considered for "*single and complete projects*." These are typically projects that will be under construction during the same period of time in the same 8-digit watershed. *Reviewer Notes:*
			B) Is the waters report and/or wetland delineation less than five years old? If not, a follow-up investigation is warranted to verify findings are still accurate. *Reviewer Notes:*
			C) The project will not impact any waters designated as salmonid or Outstanding State and/or National Resource Waters. The project will also not impact any critical wetland or critical special aquatic sites. *Reviewer Notes:*
			D) No state endangered, threatened, or rare (ETR) species are documented within a ½ mile radius of the proposed project as documented by the Indiana Department of Natural Resources (IDNR) Division of Nature Preserves. If an ETR species is present, documentation must be obtained from Nature Preserves indicated that the proposed activities will not constitute a violation of state laws protecting these species. *Reviewer Notes:*
			E) The proposed project will not permanently change the sinuosity, flow path, velocity, cross sectional area under the ordinary high water mark (OHWM), or the slope of any stream. Stream relocations are not authorized under the NWP program. *Reviewer Notes:*
			F) All impacts associated with the proposed project are *temporary* in nature. No permanent impacts

[4]

			are included in the proposed project. *Reviewer Notes:*
			G) No unsuitable fill material (trash, debris, asphalt, etc.) will be placed below the OHWM. *Reviewer Notes:*
			H) The activity does not take place in close proximity to a public water supply intake (except if the purpose of the project is for repair/improvement of the intake structure). *Reviewer Notes:*
			I) Heavy equipment working in wetlands must be placed on mats, or other measures are taken to minimize soil disturbance. Adequate erosion/sediment control measures are incorporated into the project to prevent sediment discharge to jurisdictional waters. *Reviewer Notes:*

*****If any of the above requirements are not met, the NWP #33 program will not apply and a different level of permitting will be required. Refer to the other 404/401 checklists to determine the correct level of permitting for this project.**

S	D	NA	II. Notification Requirements
			A) If the project qualifies for a **404 NWP #33**, a formal PCN **is required**. The following should be included in this notification:
			☐ Copy of the waters report with signed pre-JD form from either the preparer of the report of a member of INDOT-ES (this should include a wetland delineation if any wetlands will be impacted by the proposed work);
			☐ Cover letter;
			☐ A description of the proposed project, its purpose, and impacts associated with the project (acres and linear feet) (Note : preparer can use Corps Form 4345 or State Form 51937 to ensure that all necessary information is submitted to their attention);
			☐ Project plans labeled with all jurisdictional waters that include cross sections of all fill placement with the flow-line elevation and ordinary high water mark (OHWM elevation) and existing versus proposed conditions;
			☐ Restoration plan for all temporary impacts including an appropriate seed mix to revegetate all bare areas. *Reviewer Notes:*

Comments:_____

6. NWP #27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities

S	D	NA	I: Verification****
			A) Project impacts are less than 0.1 acres and equal to or less than 300' to jurisdictional waters (rivers, streams, wetlands, lakes, ponds, etc.). Total cumulative impacts should be considered for "*single and complete projects*." These are typically projects that will be under construction during the same period of time in the same 8-digit watershed. *Reviewer Notes:*
			B) Is the waters report and/or wetland delineation less than five years old? If not, a follow-up investigation is warranted to verify findings are still accurate. *Reviewer Notes:*
			C) The project will not impact any waters designated as salmonid or Outstanding State and/or National Resource Waters. The project will also not impact any critical wetland or critical special aquatic sites. *Reviewer Notes:*
			D) No state endangered, threatened, or rare (ETR) species are documented within a ½ mile radius of the proposed project as documented by the Indiana Department of Natural Resources (IDNR) Division

[5]

			of Nature Preserves. If an ETR species is present, documentation must be obtained from Nature Preserves indicated that the proposed activities will not constitute a violation of state laws protecting these species. *Reviewer Notes:*
			E) The proposed project will not permanently change the sinuosity, flow path, velocity, cross sectional area under the ordinary high water mark (OHWM), or the slope of any stream. Stream relocations are not authorized under the NWP program. *Reviewer Notes:*
			F) The proposed activities are part of a restoration program previously approved by IDEM and the USACE. Activities authorized by this NWP include, but are not limited to, installation/removal of water control structures, establishment of riffle/pool stream structure, placement of in-stream habitat structure, *Reviewer Notes:*
			G) The activity cannot result in a permanent secondary effect to a waters for the U.S. (for example: dredging, excavation, damming, creation of in channel pools, etc.) that when combined with the primary effect exceeds 0.1 acres and 300' of impacts. *Reviewer Notes:*
			H) No unsuitable fill material (trash, debris, asphalt, etc.) will be placed below the OHWM. *Reviewer Notes:*
			I) The activity does not take place in close proximity to a public water supply intake (except if the purpose of the project is for repair/improvement of the intake structure). *Reviewer Notes:*
			J) Heavy equipment working in wetlands must be placed on mats, or other measures are taken to minimize soil disturbance. Adequate erosion/sediment control measures are incorporated into the project to prevent sediment discharge to jurisdictional waters. *Reviewer Notes:*

******If any of the above requirements are not met, the NWP #27 will not apply and a different level of permitting will be required. Refer to the other 404/401 checklists to determine the correct level of permitting for this project.**

S	D	NA	II. Notification Requirements
			A) If the project qualifies for a **404 NWP #27**, a formal PCN **is required**. The following should be included in this notification:
			☐ Copy of the waters report with signed pre-JD form from either the preparer of the report of a member of INDOT-ES (this should include a wetland delineation if any wetlands will be impacted by the proposed work);
			☐ Cover letter;
			☐ A description of the proposed project, its purpose, and impacts associated with the project (acres and linear feet) (Note : preparer can use Corps Form 4345 or State Form 51937 to ensure that all necessary information is submitted to their attention);
			☐ Project plans labeled with all jurisdictional waters that include cross sections of all fill placement with the flow-line elevation and ordinary high water mark (OHWM elevation) and existing versus proposed conditions. *Reviewer Notes:*

Comments:_____

[6]

7. DOCUMENTATION			
S	D	NA	I: INDOT-ES Internal Databases
			A) Update the following databases to reflect the type of NWP obtained for the project:
			☐ EWPS;
			☐ Milestones;
			☐ PSCS;
			☐ Projectwise.
			Reviewer Notes:

Version: 20130524

[7]

US Army Corps of Engineers

Detroit District
Louisville District
Chicago District

Joint Public Notice

In Reply Refer To: File No. LRE-2014-00571-100
LRL-2014-00648
LRC-2014-00586

Date: Dec. 15, 2014
Expires: Dec. 15, 2019

REISSUANCE OF INDIANA REGIONAL GENERAL PERMIT NO. 001

1. In accordance with Title 33 CFR 325.5(b)(2), and 325.5(c)(1), as published in the Federal Register, Volume 51, No. 219, the U.S. Army Corps of Engineers Districts of Louisville, Detroit and Chicago (the Districts), have reissued a Regional General Permit (RGP) for certain activities in waters of the United States within the State of Indiana under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (CWA).

2. The RGP affords the Districts a means to authorize, on a regional basis, categories of activities that are similar in nature and cause minimal individual and cumulative impacts to the aquatic environment while eliminating unnecessary duplication of regulatory control. In this case, the Districts have been effective in reducing duplication with the Indiana Department of Environmental Management (IDEM) Section 401 Water Quality Certification (WQC) process.

This RGP suspends several Nationwide Permits (NWPs) (see Suspensions section of this document). The RGP has simplified and enhanced the effective regulation of waters and wetlands in Indiana and would further assure that only those activities that have minimal individual and cumulative impacts would be authorized by this RGP.

Structures and/or work in or affecting the course, location, condition, or capacity of a navigable water that does not involve the discharge of dredged or fill material requires authorization under Section 10 of the Rivers and Harbors Act and no WQC is required. In this case, the Districts would continue to evaluate the Section 10 activity proposed and authorize only those activities under the RGP that have minimal individual and cumulative impacts.

Certain activities that impact 1 acre or less of waters of the United States and have a valid WQC would be eligible for this RGP. Under the RGP, the Districts will continue to coordinate proposed activities with the U.S. Fish and Wildlife Service (USFWS) to satisfy the requirements of the Endangered Species Act and the Indiana State Historic Preservation Officer (SHPO) to satisfy the requirements of the National Historic Preservation Act.

December 15, 2014

Effective Date: December 15, 2014

Duration: The RGP will be effective for five (5) years, expiring on December 15, 2019.

Activities Covered by the Regional General Permit:

This RGP authorizes activities associated with the construction or installation of facilities or structures, and/or work that are detailed in the "Activity Categories and Conditions" section of this document, and have been granted a WQC from IDEM, if required.

SUSPENSIONS:

The following Nationwide Permits are proposed for suspension in Indiana. The proposed RGP would be used to authorize activities in place of suspended Nationwide Permits:

13 Bank Stabilization
14 Linear Transportation Projects
18 Minor Discharges
29 Residential Developments
36 Boat Ramps
39 Commercial and Institutional Developments
40 Agricultural Activities
41 Reshaping Existing Drainage Ditches
42 Recreational Facilities
43 Stormwater Management Facilities
44 Mining Activities

The NWPs that would not be suspended and would be used in lieu of the RGP are:

1 Aids to Navigation
2 Structures in Artificial Canals
3 Maintenance
4 Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
5 Scientific Measurement Devices
6 Survey Activities
7 Outfall Structures and Associated Intake Structures
8 Oil and Gas Structures on the Outer Continental Shelf
9 Structures in Fleeting and Anchorage Areas
10 Mooring Buoys
11 Temporary Recreational Structures
12 Utility Line Activities
15 U.S. Coast Guard Approved Bridges
16 Return Water from Upland Contained Disposal Areas

17 Hydropower Projects
19 Minor Dredging
20 Oil Spill Cleanup
21 Surface Coal Mining Operations
22 Removal of Vessels
23 Approved Categorical Exclusions
24 Indian Tribe or State Administered Section 404 Programs
25 Structural Discharges
27 Aquatic Habitat Restoration, Establishment, and Enhancement Activities
28 Modifications of Existing Marinas
30 Moist Soil Management for Wildlife
31 Maintenance of Existing Flood Control Facilities
32 Completed Enforcement Actions
33 Temporary Construction, Access and Dewatering
34 Cranberry Production Activities
35 Maintenance Dredging of Existing Basins
37 Emergency Watershed Protection and Rehabilitation
38 Cleanup of Hazardous and Toxic Waste
45 Repair of Uplands Damaged by Discrete Events
46 Discharges in Ditches
47 Pipeline Safety Program Designated Time Sensitive Inspections and Repairs
48 Existing Commercial Shellfish Aquaculture Activities
49 Coal Re-Mining Activities
50 Underground Coal Mining Activities
51 Land-Based Renewable Energy Generation Facilities
52 Water-Based Renewable Energy Generation Pilot Projects

The Corps will determine the appropriate permit type for authorizing proposed activities.

MAXIMUM LIMITATIONS:

The following impact limitations apply to all activities authorized by the RGP, with the exception of bank stabilization and agricultural activities. For impact limitations pertaining to these activities, see the "Activity Categories and Conditions" section of this document for further discussion regarding maximum limitations.

1. Loss of waters of the United States (U.S.), including wetlands, is limited to 1.0 acre or less;

2. Loss of waters of the U.S. is limited to 1,500 linear feet of stream channel, not to exceed 1.0 acre;

3. Dredging in navigable waters is limited to 10,000 cubic yards;

4. Structures and fills for docking and mooring are limited to similar permitted structures and fills in the vicinity;

5. "Piecemealing" of projects in order to meet these thresholds will not be allowed.

RESTRICTIONS: The work authorized by this RGP would also be subject to the attached General Conditions and any other Special Conditions necessary to reduce impacts to the minimum level.

MITIGATION REQUIREMENTS

The District Engineer may determine that the adverse effects of the proposed activity are minimal, and require no mitigation. Otherwise, mitigation will be required as follows, with the exception of bank stabilization, minor discharges, excavation, and agricultural activities (see "Activity Categories and Conditions" section of this document for further discussion regarding mitigation requirements).

1. Impacts resulting from the loss of waters by relocation, encapsulation, or channelization of greater than 300 linear feet of ephemeral, intermittent or perennial stream shall require mitigation;

2. The loss of greater than 0.10 acre of special aquatic sites (including wetlands) and/or loss of waters of the U.S. causing more than minimal effects shall require mitigation;

3. Other work or structures in waters of the United States will be evaluated on a case-by-case basis and may include mitigation to reduce the impacts to minimal levels;

4. Any required compensatory mitigation must meet the standards set forth in Title 33 CFR Parts 325 and 332, Compensatory Mitigation for Losses of Aquatic Resources, as published April 10, 2008 in the Federal Register, Vol. 73, No. 70, and any district guidance.

AGENCY NOTIFICATION:

Applicants are required to submit the IDEM RGP Notification Form when notification is required to the Corps or applying for authorization under the RGP. See "Appendix" for the district boundaries map.

Louisville District - If the proposed loss of jurisdictional waters is more than 0.1 acre or work involves more than 300 linear feet of stream channel or shoreline impact, then an application must be submitted. No application/notification is required if the work is under these thresholds, and no jurisdictional determination of any kind is required. Notification is required for work in navigable waters. Contact the Louisville District Regulatory Branch here:

December 15, 2014

U.S. Army Corps of Engineers
Louisville District
ATTN: CELRL-OPF-N
P.O. Box 59
Louisville, Kentucky 40201-0059
Phone: (502) 315-6733
Website: http://www.lrl.usace.army.mil/Missions/Regulatory.aspx

Detroit District - If there are proposed impacts to jurisdictional waters, then an application must be submitted. Contact the Detroit District Regulatory Branch here:

U.S. Army Corps of Engineers
Regulatory Michiana Branch
2422 Viridian Drive, Suite #200
South Bend, IN 46628-3561
Phone: (574) 232-1952
Website: http://www.lre.usace.army.mil/Missions/RegulatoryProgramandPermits.aspx

Chicago District - If there are proposed impacts to jurisdictional waters, then an application must be submitted. Submit applications to:
chicagorequests@usace.army.mil
Contact the Chicago District Regulatory Branch here:

U.S. Army Corps of Engineers
Chicago District Regulatory Branch
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604
Phone: (312) 846-5529
Website: http://www.lrc.usace.army.mil/Missions/Regulatory.aspx

Indiana Department of Environmental Management - If there are proposed impacts to any waters, then an application must be submitted.

> The applicant must submit a Section 401 WQC Regional General Permit Notification Form (State Form 51937) for proposed waters impacts 0.10 acre or less, bank stabilization activities 300 linear feet or less on stream banks or lake shorelines, encapsulation activities 150 linear feet or less, or any activity that does not comply with the Section 401 Water Quality Certification which authorizes the use of the RGP in the state of Indiana.
>
> The applicant must submit an Application for Authorization to Discharge Dredged or Fill material to Isolated Wetlands and/or Waters of the State (Form 51821) for proposed waters impacts greater than 0.10 acre, for bank stabilization impacts greater than 300 linear feet on stream banks and lake shorelines, and for encapsulation activities greater than 150 feet.

December 15, 2014

Note: Certain construction activities in waters of the U.S. within the State of Indiana under Section 404 of the Clean Water Act that are also regulated by the IDNR as public freshwater lakes will be covered under the Programmatic General Permit (PGP) dated December 15, 2012, and will not be covered under this RGP.

Contact the Indiana Department of Environmental Management here:

Indiana Department of Environmental Management
Section 401 WQC Program
100 North Senate Avenue
MC 65-42 WQS IGCN 1255
Indianapolis, Indiana 46204

INFORMATION REQUIREMENTS:

Any request for authorization under the RGP must provide the following information:

1. Name, address, and phone number of the applicant;

2. Location of the proposed work to include Section, Township, Range, latitude and longitude or UTM;

3. A detailed description of the project, its purpose, the dimensions including the size of the structure or the fill area, fill quantity and type of fill being used. Please include a discussion of any temporary construction activities such as access roads or cofferdams if included as part of the scope of work;

4. Drawings on 8 1/2 x 11-inch paper must include a location map, plan and cross-section drawings illustrating all the work to be done. The application drawings must provide a scale and/or the exact dimensions given;

5. Legible and reproducible construction drawings on 8 1/2 x 11-inch paper showing all aspects of the proposed activity, including existing and proposed contours, utilities, the location of wetlands/waters of the U.S. to be impacted and not impacted (marked appropriately for identification purposes), the Ordinary High Water Mark (OHWM) of all waters and the observed outermost boundary of all wetlands. In addition, the drawings shall include a detailed plan and profile view of all structures AND/OR FILL to be installed in jurisdictional areas. The application drawings must provide a scale and/or exact dimensions given;

6. Submittal of photographs representing the existing site conditions;

7. Submittal of a mitigation and monitoring plan, if applicable.

8. For any project that impacts jurisdictional wetlands, a wetland delineation report is required and must conform to the Corps of Engineers' 1987 Wetland Delineation Manual, Technical Report Y-87-1, and the appropriate regional supplement for the proposed review area. The regional supplements in Indiana are the Midwest Regional Supplement to the Corps 1987 Wetland Delineation Manual, the Northcentral and Northeastern Regional Supplement to the Corps 1987 Wetland Delineation Manual, or the Eastern Mountains and Piedmont Regional Supplement to the Corps 1987 Wetland Delineation Manual.

IMPLEMENTATION PROCEDURES:

1. Applicants proposing to conduct work or discharge dredged and/or fill material into all waters of the U.S., including wetlands, must submit the application or notification form to the IDEM and the Corps as described in the "Agency Notification" section above.

2. The Districts will review all applications for project compliance with the terms, maximum limitations, and general conditions identified in the attachment. The conditions have been adapted from the Corps' present standard permit conditions and the nationwide permit program. Any individual project that fails to comply with all conditions cannot be authorized under the RGP procedures. The Districts will also review the proposal to determine the coordination requirements with the USFWS in accordance with the Endangered Species Act and with the SHPO in accordance with the National Historic Preservation Act (see general condition numbers 11 and 12). Applicants will be notified if additional information or project modification were necessary to comply with these requirements.

3. The applicant must immediately provide a copy of the Section 401 WQC to the appropriate Corps District. Typically, the District will respond in writing to all requests within 60 days of the District's receipt of a complete application. However, any work conducted under the RGP must comply with all the terms of the Section 401 WQC as well as the RGP general conditions and any other special conditions that may be necessary to reduce the impacts to the minimal level, and to satisfy other environmental concerns and regulatory requirements.

4. The Districts may, at their discretion, determine that the RGP is not appropriate and require an individual permit review of the proposal.

5. The Districts may, at their discretion, insert additional special conditions to the RGP to ensure that only activities that have minimal individual and cumulative impacts on the aquatic environment are authorized.

December 15, 2014

EXCLUDED ACTIVITIES:

1. Activities that are denied any required local, State or Federal authorization.

2. Activities that the Districts determine to have the potential to cause unacceptable adverse impacts on aquatic resources or other public interest factors. The Districts may, on a case-by-case basis, require an Individual Department of the Army (DA) permit. The Districts will notify the applicant that the project does not qualify for the RGP and instruct the applicant on the procedures to seek authorization under a standard Individual DA permit. The Districts may also require an Individual DA permit for any After-the-Fact application and/or any unauthorized activity regardless of whether or not the loss of waters meets the upper threshold limitation of 1.0 acre of impacts to wetlands or 1,500 linear feet (not to exceed 1.0 acre) of stream impacts threshold limitation.

ACTIVITY CATEGORIES AND CONDITIONS:

BANK STABILIZATION ACTIVITIES

This activity includes bank stabilization necessary for erosion prevention. The District Engineer may require mitigation for this activity on a case-by-case basis.

1. The proposed bank stabilization activity shall be justified based on a demonstrated need for erosion prevention. This category does not include maintenance activities.

2. The district engineer may waive the RGP linear foot limitation by making a written determination concluding that the discharge will result in minimal adverse effects on the aquatic environment. IDEM will be notified by the Corps that the RGP linear foot limitation has been waived.

3. The District Engineer will decide, on a case-by-case basis, if projects involving the use of vegetative and biotechnical practices will be subject to length restrictions. Biotechnical practices are defined as bank stabilization practices that benefit the aquatic environment by incorporating organic materials to produce functional structures, provide wildlife habitat, and provide areas for revegetation. Examples of biotechnical practices include, but are not limited to: a) adequately sized riprap or A-Jack structures keyed into the toe of the slope with native plantings on the banks above; b) vegetated geogrids; c) coconut fiber (coir) logs; d) live, woody vegetative cuttings, fascines or stumps; e) brush layering; and f) soil lifts.

4. Riprap shall not be placed at a steeper slope than 2:1 (2 horizontal to 1 vertical) for dumped riprap, and 1.5:1 for hand placed riprap.

5. No more than two (2) cubic yards per running foot of material shall be used as backfill behind structures.

6. Bank stabilization shall be constructed using clean fill materials. The following materials may be used: rock, quarry stone, fieldstone, clay, granular fill, broken concrete, steel or vinyl sheet piling, cellular blocks, fabric formed concrete, concrete filled fabric mats, gabion baskets, rock and wire mattresses, sand/cement filled bags, geotechnical fabric materials, non-invasive vegetation, and treated timber. If broken concrete is used, it must be free from asphalt and oils, in addition all protruding material such as reinforced rods shall be cut flush with the surface of the concrete and removed from the construction area.

7. All material utilized shall be properly sized or anchored to resist anticipated forces of wave action.

TRANSPORTATION PROJECTS

This activity includes the construction, expansion, modification or improvement of linear transportation projects. Temporary structures, fills, and work necessary to construct linear transportation projects are also included.

1. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, INDUSTRIAL AND RECREATIONAL DEVELOPMENTS

Activities include the construction or expansion of a single residence, a multiple unit residential development, a residential subdivision, commercial and institutional buildings, and recreational facilities. Attendant features may include but are not limited to roads, parking lots, garages, yards, infrastructure and utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, golf courses, hiking trails, bike paths, horse paths, nature centers and campgrounds. The maximum impact limitations will be applied on a cumulative basis for activities that are part of a larger common plan of development or sale.

BOAT RAMPS

Activities required for the construction of boat ramps.

1. The boat ramp does not exceed 60 feet in width, unless the district engineer waives this criterion by making a written determination concluding the discharge will result in

minimal adverse effects.

MINOR DISCHARGES AND EXCAVATION ACTIVITIES

Activities include minor discharges of dredged or fill material into all waters of the U.S. and reshaping of existing drainage ditches. The District Engineer may require mitigation for this activity on a case-by-case basis.

1. Projects involving the grading or reshaping of existing drainage ditches may not increase the slope of the ditch banks, the drainage capacity, nor can they expand the area drained by the ditch (as originally constructed).

2. All dredged/excavated materials will be disposed of in upland location(s) landward of the OHWM with no placement in, or return to, any waterway or wetland. Any excess material that cannot be accommodated on the permittee's upland property shall be placed in an upland location without any return to a waterway or wetland.

AGRICULTURAL ACTIVITIES

Agricultural activities including the construction of building pads for farm buildings; installation, placement or construction of drainage tiles, ditches or levees; the relocation of existing serviceable drainage ditches constructed in waters of the U.S.; and similar activities. The District Engineer may require mitigation on a case-by-case basis, and may waive the RGP linear foot limitation by making a written determination concluding that the discharge will result in minimal adverse effects on the aquatic environment. IDEM will be notified by the Corps that the RGP linear foot limitation has been waived. This RGP does not affect those agricultural activities that are exempt in accordance with 33 CFR Part 323.4, or are exempt under CWA Section 404(f)(1)(A).

MINING ACTIVITIES

Mining activities are authorized under this category, except for coal mining activities. This RGP does not affect those mining activities that are exempt in accordance with 33 CFR Part 323.4.

1. If reclamation is required by other statutes, a copy of the reclamation plan must be submitted with the permit application.

DEFINITIONS

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR Part 60).

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a

waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for the RGP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation (pertaining to compensatory mitigation): The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: reestablishment and rehabilitation.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Waterbody: For purposes of the RGP, a waterbody is a jurisdictional water of the United States. If a jurisdictional wetland is adjacent - meaning bordering, contiguous, or neighboring - to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)–(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

GENERAL CONDITIONS

1. *Navigation:* (a) No activity authorized by the RGP may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army, or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. *Aquatic Life:* No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be

suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

3. *Spawning Areas:* Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. *Migratory Bird Breeding Areas:* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. *Shellfish Beds:* No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to an authorized shellfish harvesting activity, or is a shellfish seeding or habitat restoration activity.

6. *Suitable Materials:* No activity, including structures and work in waters of the U.S. or discharges of dredged or fill material, may use unsuitable material, including auto bodies, tires, garbage or debris, scrap lumber, metal refuse, roofing materials, asphalt or other bituminous material, broken concrete containing asphalt, or any material which would cause water pollution as defined by the Indiana Department of Environmental Management.

7. *Water Supply Intakes:* The permittee shall not perform any work under the RGP where the discharge of dredged and/or fill material will occur in the proximity of a public water supply intake except where the activity is for the repair or improvement of the public water supply intake structures or adjacent bank stabilization.

8. *Safety of Impoundment Structures:* To ensure that all impoundment structures are safely designed, the District Engineer may require non-federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons, i.e., a licensed engineer. The District Engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

9. Adverse Effects from Impoundments: If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

10. *Management of Water Flows:* To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or

manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

11. *Fills Within 100-Year Floodplains:* The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

12. *Equipment:* All construction equipment shall be refueled and maintained on an upland site away from existing streams, drainage ways and wetland areas. Heavy equipment working in wetlands must be placed on mats, or other measures taken to minimize soil disturbance.

13. *Soil Erosion and Sedimentation Controls:* Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

14. *Removal of Temporary Fills:* Temporary fills must be removed in their entirety and the affected areas returned to pre-construction conditions (i.e., elevation, contours, re-establishment of vegetation, etc.).

15. *Proper Maintenance:* Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable general conditions, as well as any activity-specific conditions added by the District Engineer to an RGP authorization.

16. *Single and Complete Project:* The activity must be a single and complete project. The same RGP cannot be used more than once for the same single and complete project.

17. *Endangered Species:* (a) No activity is authorized under the RGP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under the RGP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the RGP activity, or whether additional ESA consultation is necessary.

20. *Historic Properties:* The permittee shall not perform any activity under the RGP which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The permittee must notify the District Engineer if the activity authorized by the RGP may affect any historic properties listed, determined to be eligible or which the permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin construction until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the IDNR, Division of Historic Preservation and Archaeology.

If the permittee discovers any previously unknown historic or archaeological remains while accomplishing the activity authorized by the RGP, work must be immediately stopped and the Corps immediately notified. The District will initiate the Federal, tribal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

21. *Discovery of Previously Unknown Remains and Artifacts:* If you discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the District Engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The District Engineer will initiate the federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. *Mitigation:* The permittee shall provide a mitigation/monitoring plan for any activity where the adverse impact (i.e., loss of waters) on special aquatic sites (including wetlands) exceeds 0.10 acre (4,356 sq. ft.) or is determined to be more than minimal impact. The permittee shall also provide a mitigation/monitoring plan for any channelization, encapsulation, or relocation of greater than 300 linear feet of stream, unless there is no net loss of function, in which case the District Engineer will determine, on a case-by-case basis, if mitigation is required. All mitigation plans will include a minimum 50-foot wide buffer between the edge of the mitigation project site and the waters and/or wetlands to be affected unless a shorter distance has been specifically approved under the RGP. If a shorter distance is approved, it is incumbent on the applicant to demonstrate that no practicable alternatives are available in meeting the required buffer widths. If mitigation is required, the permittee shall develop the mitigation site concurrently with permitted impacts. The mitigation proposal must be in compliance with Title 33 CFR Parts 325 and 332, Compensatory Mitigation for Losses of Aquatic Resources, as published April 10, 2008 in the Federal Register, Vol. 73, No. 70.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work. The District Engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-federal applicant of the Corps determination within 45-days of receipt of a complete pre-construction notification. In cases where the non-federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the USFWS the District Engineer may add species-specific regional endangered species conditions to the RGP.

(e) Authorization of an activity under the RGP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS Service, the ESA prohibits any person subject to the jurisdiction of the United States to take listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS or their webpages on the Internet.

18. *Migratory Birds and Bald and Golden Eagles:* The permittee is responsible for obtaining any "take" permits required under the USFWS' regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

19. *Migratory Bird Breeding Areas:* Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

20. *Historic Properties:* The permittee shall not perform any activity under the RGP which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The permittee must notify the District Engineer if the activity authorized by the RGP may affect any historic properties listed, determined to be eligible or which the permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin construction until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the IDNR, Division of Historic Preservation and Archaeology.

If the permittee discovers any previously unknown historic or archaeological remains while accomplishing the activity authorized by the RGP, work must be immediately stopped and the Corps immediately notified. The District will initiate the Federal, tribal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

21. *Discovery of Previously Unknown Remains and Artifacts:* If you discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the District Engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The District Engineer will initiate the federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. *Mitigation:* The permittee shall provide a mitigation/monitoring plan for any activity where the adverse impact (i.e., loss of waters) on special aquatic sites (including wetlands) exceeds 0.10 acre (4,356 sq. ft.) or is determined to be more than minimal impact. The permittee shall also provide a mitigation/monitoring plan for any channelization, encapsulation, or relocation of greater than 300 linear feet of stream, unless there is no net loss of function, in which case the District Engineer will determine, on a case-by-case basis, if mitigation is required. All mitigation plans will include a minimum 50-foot wide buffer between the edge of the mitigation project site and the waters and/or wetlands to be affected unless a shorter distance has been specifically approved under the RGP. If a shorter distance is approved, it is incumbent on the applicant to demonstrate that no practicable alternatives are available in meeting the required buffer widths. If mitigation is required, the permittee shall develop the mitigation site concurrently with permitted impacts. The mitigation proposal must be in compliance with Title 33 CFR Parts 325 and 332, Compensatory Mitigation for Losses of Aquatic Resources, as published April 10, 2008 in the Federal Register, Vol. 73, No. 70.

23. *Water Quality:* If an individual 401 WQC is required, the permittee must provide a copy of it to the Corps. The permittee must comply with any case specific special conditions added by the Corps or by the Section 401 WQC. The conditions imposed in the Section 401 WQC are also conditions of this RGP.

24. Minimization/Avoidance: Discharges of dredged or fill material into waters of the U.S. must be minimized or avoided to the maximum extent practicable at the project site (i.e. on-site). In determining the minimal impact threshold, the Districts will consider the direct and secondary impacts of the fill or work and any mitigation measures.

25. Access: Representatives from the Corps of Engineers and/or IDEM may inspect any authorized activity or mitigation site at any time deemed necessary to ensure compliance with the terms and conditions of the RGP, Section 401 WQC, and applicable laws.

26. Construction Period: If construction of the project has commenced, or is under contract to commence prior to the expiration date, the applicant must complete the project within one (1) year of the RGP expiration date. If you find you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 3 months prior to the expiration date.

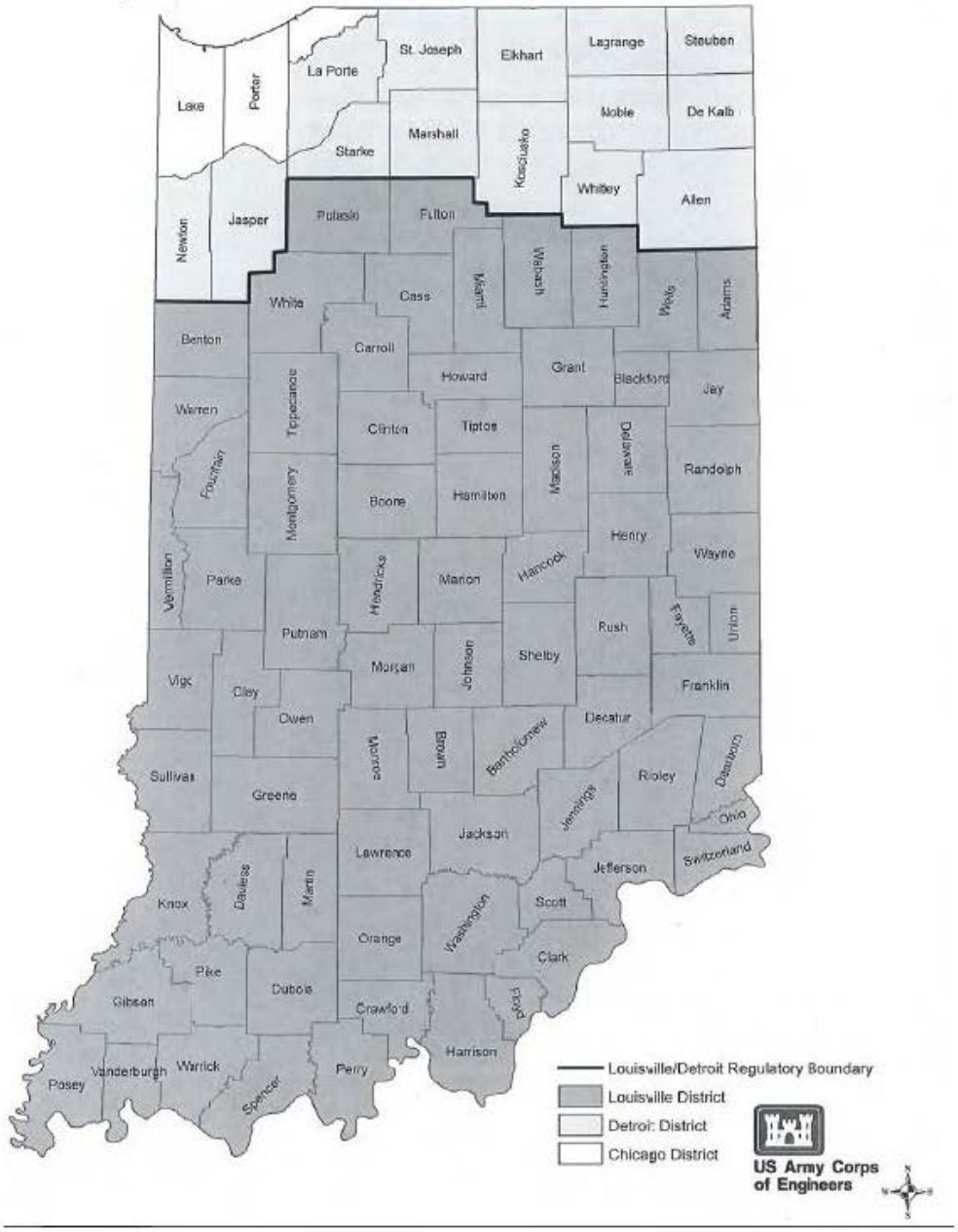
27. Reporting: The permittee, after completion of work under the RGP, shall submit a signed certification letter regarding the completed work and required mitigation, if applicable. The certification letter will include a statement that the work was done in accordance with the RGP authorization including compliance with all general and special conditions and completion of mitigation work.

December 15, 2014

APPENDIX

U.S. ARMY CORPS OF ENGINEERS DISTRICT BOUNDARIES IN INDIANA

This map represents the Louisville, Detroit and Chicago District boundaries. Please contact the appropriate District using the "Agency Notification Procedures" outlined above for your area.



19

401 / 404 RGP – REGIONAL GENERAL PERMIT - CHECKLIST

404/401 Regional General Permit (RGP) Checklist | 2013

INDOT *Environmental* Services (ES), Ecology and Waterway Permitting Office (EWPO)

1. PROJECT SPECIFIC INFORMATION	
Project Route/Type	
INDOT Des. Number	
County	
Letting Date	

2. APPLICATION BACKGROUND			
Designer/Firm			
Submittal Date		Submittal Number	
ES Reviewer/Contact Info.			
Review Date			

Review columns are abbreviated as follows: Sufficient (S), Deficient (D), and Not Applicable (NA). All items marked deficient require resolution from the designer prior to INDOT acceptance of the application.

3. REGIONAL GENERAL PERMIT (RGP) VERIFICATION			
S	D	NA	RGP Requirements*
			A) Are there less than 0.1 acres of total impact to streams and wetlands (considered cumulatively)? Are there any nearby projects that IDEM may consider for cumulative impacts? *Reviewer Notes:*
			B) Will less than 300' of streams be impacted (considered cumulatively)? Are there any nearby projects that IDEM may consider for cumulative impacts? *Reviewer Notes:*
			C) No state designated salmonid waters, Outstanding State and/or Natural Resource Waters, Exceptional Use Waters, or critical special aquatic sites will be impacted by the project. *Reviewer Notes:*
			D) There will be no permanent change to sinuosity, flow path, velocity, or cross sectional area under the Ordinary High Water Mark (OHWM) elevation or to the slope of the stream (i.e. activities such as stream relocations cannot be authorized by the RGP program per Condition 17). *Reviewer Notes:*
			E) Stream encapsulations must meet all of the following requirements:
			☐ Encapsulation must not exceed 150';
			☐ Cross sectional area of any encapsulation is 20% larger than the area under OHWM immediately upstream and downstream of the encapsulation;
			☐ Structure must be a single opening;
			☐ Embedded structure per IDEM sumping requirements or a three-sided structure (no bottom). *Reviewer Notes:*
			F) For bank stabilization activities, does the application include information demonstrating that the bank (or shoreline) in question is unstable (Condition 19)? In general, this information is typically not required for stabilization activities associated with new structures such as riprap outlet protection. *Reviewer Notes:*

***If any of the above requirements are not met, the RGP program will not apply and a different level of permitting will be required. Further review of the application is not required until a revised application on the appropriate form has been submitted to INDOT-ES**

S	D	NA	Additional Considerations
			A) Does the project qualify under the 404 Nationwide Permit (NWP) Program (see the NWP checklist for details)? If so, a NWP permit should be pursued instead. *Reviewer Notes:*

Comments:_____

4. STATE FORM 51937			
S	**D**	**NA**	**I: General Application Requirements**
			A) Was the most recent State Form 51937 application used (version *R3/8-08*)? If your project is in USACE Chicago District, was Corps Form 4345 included in the designer's submittal for the 404 application? The USACE Chicago District will not accept application on the state's form. *Reviewer Notes:*
			B) Was a waters of the U.S. report and/or wetland delineation included with the application and did this include the appropriate approved JD or pre-JD form signed by the preparer of the report or a representative of INDOT-ES? *Reviewer Notes:*
			C) Does the application reflect the waters report and/or wetland delineation prepared for this project? This includes:
			☐ The waters report and/or wetland delineation is less than five years old;
			☐ Accounting of all streams, wetlands, and/or other waters located within the project limits (including confirmation of any avoided waters);
			☐ Correct wetland boundary or boundaries used to calculate impacts;
			☐ Correct ordinary high water mark/s (OHWMs) used to calculate impacts;
			☐ Correct wetland types (emergent, scrub-shrub, forested) referenced in the application. *Reviewer Notes:*

S	D	NA	II: Applicant Information
			A) Does the applicant contact information reflect the appropriate EWPO Team Lead or Manager? *Reviewer Notes:*
			B) Are the agent blocks complete and accurate? *Reviewer Notes:*

S	D	NA	III: Project Location
			A) Are the blocks in this section complete and accurate? *Reviewer Notes:*
			B) Do the driving directions include distances (mileage)? *Reviewer Notes:*

S	D	NA	IV: Existing Conditions on the Project Site
			A) Are the appropriate boxes checked for lake, stream, and/or wetland impacts? *Reviewer Notes:*
			B) Are the correct names (USGS 7.5 minute series) provided for any lakes or streams that are located within the project site? *Reviewer Notes:*
			C) Is the total acreage of any wetlands located within the project site listed accurately (note that this acreage is not necessarily the same as the impact acreage)? *Reviewer Notes:*
			D) Is the date of the wetland delineation provided (if necessary)? *Reviewer Notes:*
			E) Is the date of USACE jurisdictional correspondence included if wetlands will be impacted (note that IDEM will require this in the 401 application submittal)? *Reviewer Notes:*

S	D	NA	V: Project Impacts
			A) Does the "*Activity Description*" meet the following requirements:

[2]

			☐ Overall description clarifies the waters resource(s) that will be impacted and is not solely focused on the roadway or structure work;
			☐ Existing structure dimensions (length, width, and height);
			☐ Proposed structure dimensions (length, width, and height);
			☐ Total cumulative impacts to streams (linear feet);
			☐ Total cumulative impacts to streams and wetlands (acres);
			☐ A short description of any temporary impacts associated with the project and a brief statement regarding the restoration of any areas impacted by temporary fill.
			Reviewer Notes:
			B) Does the "*Purpose of Project*" detail why the project is necessary?
			Reviewer Notes:
			C) Does the "*For Lake Impact*" box meet the following requirements:
			☐ Cumulative linear feet of shoreline that will be impacted;
			☐ Type of permanent fill, volume of fill (cumulative), and acres of fill (cumulative) below OHWM (temporary impacts should be quantified in an attached exhibit);
			☐ Appropriate box checked for presence/absence of vegetation;
			☐ Type of permanent fill and acres of fill (cumulative) beyond the shoreline.
			Reviewer Notes:
			D) Does the "*For Stream Impact*" box meet the following requirements:
			☐ Cumulative linear feet of permanent impacts to streams;
			☐ Type(s) of permanent fill material and volume of this material that will be placed below OHWM;
			☐ Proposed start and end date that are consistent with the project's letting date (Note that a fish spawning waiver will be needed during construction for work in-stream between April 1 and June 30 but this is not required for submittal of the application);
			☐ Channel width and depth are provided and match those listed in the waters report;
			☐ Structure type that will be installed;
			☐ Structure dimensions;
			☐ Type of permanent fill material for any open water impacts;
			☐ The cumulative permanent acres of impact below the OHWM for all stream impacts.
			Reviewer Notes:
			E) Does the "*For Wetland Impact*" box meet the following requirements:
			☐ Type of permanent fill material;
			☐ Cumulative permanent acres of wetland impacted with a breakdown of impacts by wetland type (emergent, scrub-shrub, and forested).
			Reviewer Notes:

S	D	NA	VI: Application Attachments
			A) Was a location map provided and did it meet the following requirements:
			☐ Location displayed sufficiently for regulatory agencies to locate project (include landmark);
			☐ A north arrow, scale bar, title block, and appropriate references included on the map.
			Reviewer Notes:
			B) Project Plans met the following requirements:
			☐ Plans represent both the existing and proposed project conditions (this can be addressed on the same plan page so long as each can be clearly reviewed);
			☐ All jurisdictional streams and wetlands are labeled on the plans with the appropriate USGS 7.5

[3]

			minute series name; ☐ Cross sections are provided for all wetland impacts with labels showing the boundary of the wetland; ☐ Cross sections are provided for stream impacts with labels for the OHWM and flow-line elevation; ☐ Plans do not contain excessive detail that prevents review of impacts (designers can remove specific layers to assist INDOT-ES and regulatory agency reviews); ☐ Flow direction of any stream is noted on the plans; ☐ Length (linear feet) of riprap placed below the OHWM is noted in the plans. *Reviewer Notes:*
			C) At least three photographs are provided in the application with captions that include the following: ☐ Direction taken, ☐ Statement of the image's content; ☐ Description of any unusual circumstances shown in the photograph. *Reviewer Notes:*
			D) Was correspondence from IDNR Division of Nature Preserves provided with the application stating the presence of any endangered, threatened, or rare (ETR species)? This correspondence must meet the following: ☐ The ETR clearance is less than five years old (Note that new coordination will be needed for all clearances greater that five years old); ☐ The ETR clearance states that no species were noted in the vicinity of the project or correspondence has been received from IDNR that the project is not likely to impact any ETR species. *Reviewer Notes:*
			E) Was a summary table provided for projects with multiple impacts to the same type of resources (for example: a project with impacts to multiple stream crossings)? Did this table meet the following requirements: ☐ Itemization of the impacts to each individual stream (length and acres below OHWM); ☐ Itemization of impacts to each individual wetland (acres); ☐ Volume of fill below OHWM (cubic yards) to each stream; ☐ Volume of fill that will be placed in each wetland; ☐ Existing structure dimensions (length, width, and height); ☐ Proposed structure dimensions (length, width, and height). *Reviewer Notes:*
			F) Were temporary impacts included in the application attachments (these should not be listed with the permanent impacts in State Form 51937)? The following must be included: ☐ Type of temporary fill material (should be non-erosive); ☐ Volume (cubic yards) and area (acres) associated with temporary measures below OHWM; ☐ Temporary acres of impact to any wetland(s); ☐ Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s); ☐ Expected amount of time the temporary measures will be in place; ☐ Number and dimensions (diameter and length) of pipes required for a temporary stream crossing; ☐ Restoration plan including an appropriate seed mix. Note that temporary measures should be designed to handle a two-year storm event. *Reviewer Notes:*

[4]

			G) Was documentation provided that demonstrates the project will not affect a property listed, or eligible for listing, in the National Register of Historic Places (i.e. Section 106 must be satisfied). *Reviewer Notes:*

Comments:

5. DOCUMENTATION			
S	**D**	**NA**	**I: INDOT-ES Internal Databases**
			A) Update the following databases:
			☐ EWPS;
			☐ Milestones;
			☐ PSCS;
			☐ Projectwise. *Reviewer Notes:*

Version: 20130524

[5]

SECTION 10 NAVIGABLE WATERS OF THE U.S.

LOUISVILLE DISTRICT
OHIO RIVER AND TRIBUTARIES

OHIO RIVER MILE	STREAM	JURISDICTION ABOVE MOUTH
451.3	Ohio River (mouth to Foster, Kentucky)	543.0 miles
491.0	Great Miami River	117.0 miles
494.2	Tanners Creek	10.6 miles
495.8	Wilson Creek	1.9 miles
496.7	Hogan Creek	0.4 miles
	North Hogan Creek	4.9 miles
	South Hogan Creek	5.0 miles
498.7	Laughery Creek	10.2 miles
501.4	Island Branch	1.0 miles
504.0	Buck Run	1.1 miles
508.7	Arnold Creek	4.4 miles
508.8	Grants Creek	2.5 miles
518.2	Goose Creek	1.5 miles
518.7	Wade Creek	0:6 miles
527.0	Bryant Creek	2.6 miles
	Sand Creek (tributary to Bryant Creek)	0.9 miles
529.0	Turtle Creek	1.3 miles
532.9	Log Lick Creek	2.3 miles
535.8	Plum Creek	2.9 miles
540.0	Indian Creek	4.1 miles
550.4	Indian Kentuck Creek	3.8 miles
569.3	Big Saluda Creek	1.0 miles
578.3	Camp Creek	1.7 miles
584.5	Bull Creek	1.1 miles
589.3	Fourteen Mile Creek	2.9 miles
597.7	Lancassange Creek	0.3 miles
606.8	Silver Creek	3.0 miles
634.5	Mosquito Creek	2.8 miles
647.3	Buck Creek	5.8 miles
657.0	Indian Creek	4.8 miles
661.3	Potato Run	0.4 miles
662.9	Blue River	57.15 miles
	D1y Creek (tributa1y to Blue River)	1.4 miles
678.6	Little Blue River	10.6 miles
691.7	Oil Creek	10.6 miles
	Clover Lick Creek (tributary to Oil Creek)	0.7 miles
	Little Oil Creek (tributary to Oil Creek)	4.4miles
	Webb Branch (tributa1y to Oil Creek)	0.9 miles
	Bull Hollow (tdbuta1y to Oil Creek)	0.7 miles
	Indian Fork (tributary to Oil Creek)	1.4 miles
	Bald Knob Creek (tributary to Oil Creek)	0.5 miles
692.4	Knob Creek	0.2 miles
696.6	Big Poison Creek	6.3 miles
	Caney Branch (tributary of Big Poison Creek) Little	0.2 miles
	Poison Creek (tributary of Big Poison Creek) Bear	1.2 miles
703.25	Creek	1.6 miles
703.9	Fannys Creek	0.8 miles
704.2	Buck Creek	0.7 miles
705.1	Kingly Creek	0.2 miles
705.5	Tates Hollow	0.3 miles
706.1	Sample Run	0.2 miles

717.2	Milestone Creek	1,4 miles
	Kelly Hollow (tributary to Millstone Creek)	1.0 miles
718.75	Deer Creek	5.9 miles
	Little Deer Creek (tributary to Deer Creek)	3.9 miles
	Caney Branch (tributary to Deer Creek)	0.8 miles
	Neglie Branch (tributary to Deer Creek)	0.5 miles
	East Deer Creek (tributary to Deer Creek)	0.6 miles
731.4	Anderson Creek	14.2 miles
	Middle Fork Anderson Creek (tributary of Anderson Ck.)	3.3 miles
733,2	Crooked Creek	7.7 miles
741.3	Little Sandy Creek	2.0 miles
742.1	Sandy Creek	2.6 miles
744.25	Honey Creek	1.8 miles
746.8	Lake Drain	1.6 miles
759.4	Caney Creek Garret	0.9 miles
760.5	Creek Jackson	2.2 miles
763.2	Creek Little Pigeon	1.8 miles
772.8	Creek	15.8 miles
	Clear Creek (tributary to Little Pigeon Creek)	2.4 miles
	Baker Creek (tributary to Little Pigeon Creek)	1.8 miles
775.3	Cypress Creek (diversion channel)	6.6 miles
793.0	Pigeon Creek	5.9 miles
	Locust Creek (tributary to Pigeon Creek)	1.5 miles
815.0	Bayou Creek	1.5 miles
828.9	McFadden Creek	2.3 miles
845.9	Harris Ditch	0.9 miles
	Little Pitcher Lake (tributary to Harris Ditch)	1.2 miles
848.0	Wabash River (mouth to Wells/Adams County Line)	441.9 miles

WABASHRIVERANDTRIBUTARIES

WABASH RIVER MILE	STREAM	JURISDICTION ABOVE MOUTH
95.6	White River	66.2 miles
	East Fork White River (tributary to White River)	21.9 miles
405.9	Little Wabash River (mouth to the junction with Ellison Rd.)	20.2 miles

DETROIT/CHICAGO DISTRICT

NAME OF WATERWAY	HEAD OF NAVIGATION
Grand Calumet River	navigable throughout
Indiana Harbor Canal	navigable throughout
Calumet River Branch of Indiana Harbor Canal	navigable throughout
Lake George Branch of Indiana Harbor Canal	from the main branch of Grand Calumet River to White Oak Ave. in East Chicago navigable throughout
Iroquois River	navigable throughout
Kankakee River	navigable throughout
Little Calumet River	navigable throughout
Lake Michigan	Hosey Dam at Ft. Wayne
Maumee River	E. St. bridge at Michigan City, I mi. above mouth
Trail Creek	

All embayments or backwater areas on all tributaries to streams listed above are considered navigable for administrative purposes. If anyone is now contemplating work or activity on a waterway, whether or not such waterway is listed above, or whether such proposed work or activity is above the jurisdictional limit shown above on a listed waterbody, it is suggested that the appropriate Corps of Engineers Office be contacted prior to commencement of such work or activity. Such contact may prevent a subsequent determination that such work or activity is illegal based upon a final determination of navigability.

As mentioned before, **the above listed stream limits define where permits are required, for work or construction, under Section 10 of the River and Harbor Act of 1899**. The Corps of Engineers has permitting jurisdiction pursuant to Section 404 of the Clean Water Act for all waters of the United States. Section 404 regulates the placement of dredged or fill material into streams and their adjacent wetlands areas. Therefore, should you anticipate placing material into <u>any</u> streams, lakes, wetlands you should contact the Corps of Engineers to determine the authorization required prior to the placement of the dredged or fill material.

APPENDIX C – USCG GUIDANCE

INTRODUCTION TO COAST GUARD BRIDGE PERMITTING

A. Who Must Apply for a Bridge Permit

1. Any individual, partnership, corporation, or local, state, or federal legislative body, agency, or authority planning to construct or modify a bridge or causeway across a navigable waterway of the United States must apply for a Coast Guard bridge permit. This includes all temporary bridges used for construction access or traffic detour.
2. For bridges constructed by the state or municipal agencies, primary authority to apply for a permit for the construction of a bridge project will be presumed without proof.
3. If state law does not require a license, primary authority may be granted in the charter of a corporation or the authority inherent in ownership of the land where the structure will be placed. In these cases, an extract from the charter and evidence of sufficient real estate interest to allow construction of the bridge should be submitted with the application. In such cases where the Coast Guard doubts the applicant's ability to construct and utilize the bridge, particularly for a private bridge owner, proof of property rights must be furnished to the Coast Guard as part of the application.
4. Failure to obtain a bridge permit before commencing bridge construction or modification work is a federal offense, punishable by civil and criminal penalties.

B. Bridge Permit Application Guide

1. The Bridge Permit Application Guide assists the applicant in applying for a Coast Guard bridge permit to:
   a. Construct a new bridge or causeway, or
   b. Reconstruct or modify an existing bridge or causeway across navigable waters of the United States.
2. The Bridge Permit Application Guide is located on the Bridge Program website: http://www.uscg.mil/hq/cg5/cg551/.

C. How the Coast Guard Can Help

1. The local Coast Guard District Bridge Office is one of the best sources of information for the project. The applicant should direct all project-related questions, concerns, comments, and requests to the bridge program staff in the Coast Guard District Bridge Office where the project is located.
2. A map of the district boundaries is located at the end of this document so the applicant may locate the Coast Guard District Bridge Office in the project area.
3. A list of the mailing addresses and telephone numbers of the Coast Guard District Bridge Offices is located on the Bridge Program website: http://www.uscg.mil/hq/cg5/g551/. The responsibility for processing all bridge permit applications is at the District Commander organizational level.
4. A glossary is also located on the Bridge Program website: http://www.uscg.mil/hq/cg5/g551/, providing explanations to many key terms involved in obtaining a Coast Guard bridge permit.

D. Requirements and Laws A bridge permit is the written approval of the location and plans of the bridge or causeway to be constructed or modified. Federal law prohibits the construction of these structures unless the Coast Guard first authorizes them.

E. Coast Guard Bridge Permitting Authority

1. In 1967, the Coast Guard was transferred to the Department of Transportation. One of the Coast Guard's newly assigned duties was to issue bridge permits.
2. In 2002, the Coast Guard preserved its assigned duties under the Homeland Security Act of 2002 when transferred from the Department of Transportation to the Department of Homeland Security.
3. The Secretary of Homeland Security delegated this authority to the Commandant, U. S. Coast Guard, on 28 February 2003, by Department of Homeland Security Delegation Number: 0170.1.
4. The Coast Guard approves bridge location and plans under the authority of several Acts pertaining to bridges.

F. Legislation Pertaining to Bridges

1. These Acts include Section 9 of the Rivers and Harbors Act of 1899 and the General Bridge Act of 1946.
   a. The purpose of these Acts is to preserve the public right of navigation and to prevent interference with interstate and foreign commerce. The General Bridge Act of 1946, as amended, the Rivers and Harbors Act of 1899, as amended, and the Act of March 23, 1906, as amended, all require the location and plans of bridges and causeways across the navigable waters of the United States be submitted to and approved by the Secretary of Homeland Security prior to construction. The General Bridge Act of 1946 is cited as the legislative authority for bridge construction in most cases.
   b. These Acts placed the navigable waters of the United States under the exclusive control of the U. S. Coast Guard to prevent any interference with their navigability by bridges or other obstructions except by express permission of the United States Government.

G. Bridge Program Policy

1. Under the previously mentioned Acts, the Coast Guard's mission is to administer the Bridge Program. The Coast Guard approves the location and plans of bridges and causeways and imposes any necessary conditions relating to the construction, maintenance, and operation of these bridges in the interest of public navigation.
2. The Coast Guard is also required by law to ensure environmental considerations are given careful attention and importance in each bridge permitting decision.
3. As explained further in Section C of the Bridge Permit Application Guide, relevant environmental statutes and executive orders for bridge project compliance include those listed in the Bridge Permit Application Guide.
4. The Coast Guard is obligated to consult with and obtain comments from any federal agency with legal jurisdiction or special expertise concerning any environmental or navigational impact involved. Such comments are generally obtained through direct coordination with affected agencies, responses to the public notice, and the Local Notice to Mariners (LNM).
5. The Coast Guard Bridge Program protects the freedom of navigation and the quality of the environment by taking a balanced approach to total transportation systems, both land and water modes, in all program actions.
6. The bridge statutes and subsequent court interpretations require bridges provide for the reasonable needs of navigation, not for all the needs of navigation. The reasonable needs of land traffic must also be met.
7. Therefore, Coast Guard bridge permit actions consider the overall goals of the U.S. Department of Homeland Security in a balanced manner to accommodate the needs of all modes of transportation.
8. Rules and regulations governing the U. S. Coast Guard bridge permit program are listed in Parts 114 and 115 of Title 33, Code of Federal Regulations (CFR). A copy may be found in most local libraries, online at the U.S. Government Printing Office website or purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20401.

H. Navigable Waters

1. Navigable waters for Coast Guard bridge permitting purposes are defined by 33 CFR § 2.36, unless specifically declared otherwise by Congress, to include:
   a. Territorial seas of the United States;
   b. Internal waters of the United States subject to tidal influence; and
   c. Internal waters of the United States not subject to tidal influence that:
      1) Are or have been used, or are or have been susceptible for use, by themselves or in connection with other waters, as highways for substantial interstate or foreign commerce, notwithstanding natural or man-made obstructions that require portage, or
      2) A governmental or non-governmental body, having expertise in waterway improvement, determines to be capable of improvement at a reasonable cost (a favorable balance between cost and need) to provide, by themselves or in connection with other waters, as highways for substantial interstate or foreign commerce.
2. If the applicant is uncertain whether or not a waterway is susceptible to improvement for navigation, is tidal, or is considered navigable, contact the Coast Guard to obtain information regarding a navigability determination.

3. The classification of certain waterways or portions of waterways as navigable occasionally changes, changing the information required for applicants.
4. For these reasons, if an applicant is planning to construct a new bridge or causeway or modify an existing bridge or causeway over a canal, channel, stream, river, lake, bay, or other body of water or waterway, they should contact the local Coast Guard District Bridge Office before submitting a formal permit application.
5. Additionally, due to the different characteristics of the waterways and navigation in each District, needed information varies from one District to another. An applicant should contact the local District Office for applicability of requirements listed in the Bridge Permit Application Guide.

I. Temporary Bridges

1. Any proposed temporary bridge requires a bridge permit prior to construction. Follow the same procedures and information requirements as for a permanent bridge.
2. A temporary bridge is often used during the construction of a permanent bridge. A request for the approval of this type of temporary bridge should be included in the application for the permanent bridge.

J. Time Limits for Construction

1. Based on the estimate given in the application, a reasonable period of time will be allowed for the construction of the bridge project covered by the permit.
2. Coast Guard bridge permits specify that the permit becomes null and void unless construction of the bridge is commenced and completed by certain dates. This time period is usually three years and five years, respectively, from the date of the permit.
3. Longer construction times can be requested and substantiated with good reasons. The specified time should correspond to the actual time needed to complete construction, since a time extension may not be routinely granted.
4. If the authorized work is not completed within the time specified in the permit, the permit is null and void. A new application and approval are required before construction work can continue.
5. However, if a written request for a time extension is submitted at least 30 days before the expiration date of the permit, the existing permit will remain in effect during processing. Work may continue until the final agency action is taken on the time extension request.

K. Bridge Protective Systems

1. When considering an application for a bridge permit, the Coast Guard may require a bridge protective system to provide navigation safety.
2. In the permit application, the applicant must consider the possible need for a bridge protective system that would promote safer navigation through the bridge.
3. The need for a bridge protective system is based on present and future navigation transiting the proposed bridge site.
4. When required, the applicant must submit a plan for a bridge protective system that includes the following information:
   a. A description of the proposed type of bridge protective system (include a description of the construction methods and materials from the standpoint of navigation safety).
   b. The dimensions and minimum clear horizontal distance normal to the channel axis measured between the most restrictive parts of the bridge protective system.
5. When changes in navigation affect the safety of navigation and the bridge structure, the Coast Guard District Commander may require the installation of bridge protective systems at the bridge owner's expense.
6. A Vessel Impact Assessment shall be completed to determine the type of bridge protective system required for the bridge, if applicable.

L. Clearance Gauges

1. When necessary for reasons of safety of navigation, the District Commander may require or authorize the installation of clearance gauges in accordance with 33 CFR § 118.160. Early coordination and consultation with the cognizant Coast Guard District Bridge Office is necessary for making this determination.
2. Under special or peculiar circumstances, or conditions which make compliance with these standards impractical, the bridge owner may apply in writing to the District Commander for permission to deviate from these standards or obtain a waiver of the requirement for clearance gauges. In some instances, the District Commander may authorize use of electronic measuring devices as replacement for the fixed gauges.

M. Approval of Falsework and Construction Procedures

1. Clearances provided for navigation through or under the bridge spans associated with falsework and construction activities must be approved by the Coast Guard. This is not a separate permit action by the Coast Guard but applicants should consult with the local Corps of Engineers Regulatory office for matters under the jurisdiction of the Corps. The Coast Guard will review, coordinate and approve the proposed temporary navigational clearance restrictions through or under a bridge by use of falsework, pilings, floating equipment, closure of draws, or any work or activities which temporarily reduce the navigational clearances and design flood flows, including obstruction of any or all spans of the bridge. Early coordination with the Coast Guard District Bridge Office is required for proposed construction/demolition plans.
2. A Coast Guard bridge permit normally includes a condition stating the plans for cofferdams, falsework, or any other temporary structures to be placed in the water to facilitate the bridge construction, must be submitted to and approved by the District Commander before the start of construction.
3. Approval of a temporary reduction of previously approved navigational clearances for any of these temporary structures varies greatly. Approval depends on the location of the bridge, type of river traffic, the time of year the structures will be in place, etc.
4. For these reasons, the applicant must specify the minimum navigational clearances required during the construction of a bridge in any construction contract.
5. The applicant may obtain this information by writing to the appropriate Coast Guard District Commander.
6. Requests for approval of the proposed plans for temporary structures and erection schemes shall be made in writing to the Coast Guard District Commander early enough to allow proper review, coordination and approval. This request must include the proposed plans, including drawings on 8 ½ x 11 paper, tentative work scheduled for the temporary structures and any other temporary hazards to navigation, such as a moored floating plant.
7. Plans for cofferdams, falsework bents, brackets, temporary dolphins, survey towers, test piles, work dikes, etc., should be submitted to the Coast Guard District Commander for his approval prior to commencement of construction. Use of these types of items may require review and permitting by the Corps of Engineers under the provisions of Section 10 of the River & Harbor Act of 1899 and/or Section 404 of the Clean Water Act.

N. Pre-Construction Conferences Coast Guard District Bridge Office personnel shall be invited to attend any pre-bid and pre-construction meetings for a bridge permitted by the Coast Guard. The Coast Guard appreciates the opportunity to explain procedures and answer any questions concerning our requirements. Invitations for Coast Guard personnel to attend pre-bid/pre-construction meetings should be made by contacting the Coast Guard District Bridge Office.

O. Maintenance

1. Bridges constructed under a Coast Guard permit must be maintained in accordance with the applicable Bridge Act, permit conditions and approved plans. No further authorization is required for routine maintenance. The Coast Guard District must be provided advance notification regarding any maintenance that will affect navigation to allow timely review, coordination with waterway users and approval prior to deviating from the approved plans or operation of the bridge.
2. Repairs to a bridge which do not alter the clearances, type of structure, or any integral part of the substructure or superstructure or navigation conditions, but which consist only in the replacement of worn or obsolete parts, may, if the bridge is a legally approved structure, be made as routine maintenance without approval of the U.S. Coast Guard.

P. Transfer of Permits

1. Although a permit is issued to a specific party, the approval granted for a bridge permit is not restricted to construction, operation, or maintenance of the bridge by that party.
2. The permit passes with the title when it is transferred to an assignee or purchaser of the bridge. The new owner or assignee must strictly comply with the terms and conditions of the permit.

Q. Bridge Navigational Lighting

1. Bridges across waterways, which support nighttime navigation, are required to display navigational lights in accordance with Part 118 of Title 33, CFR.
2. Approval of navigational lights and other required signals must be obtained, prior to construction, from the Coast Guard District Commander (Bridge Office) with jurisdiction over the bridge project area.
3. The permittee is responsible for maintaining proper temporary navigational lighting and other such markings, as prescribed, on bridges during construction. Permanent lighting must be maintained on the bridges after the completion of construction.
4. The District Commander may exempt bridges over waterways with no significant nighttime navigation from the lighting or other signal requirements.
5. For the best service and ease of maintenance, lighting installations should incorporate the recommended features outlined below in accordance with 33 CFR Part 118.
6. If the applicant considers bridge lighting during the bridge design phase, it can help avoid future difficulties.
7. Since the bridge lighting requirements in 33 CFR Part 118 are specified as performance standards, the applicant should ensure the lighting equipment proposed for a specific bridge project meets these standards by contacting the local Coast Guard District Bridge Office.
8. Any person required by 33 CFR Part 118 to maintain lights and other signals upon any bridge or abutment over or in the navigable waters of the United States who fails or refuses to maintain such lights and other signals, or to obey any of the lawful rules and regulations relating to the same is subject to a penalty as provided in 14 United States Code (U.S.C.) 85.
9. No person shall obstruct or interfere with any lights or signals maintained in accordance with the regulations prescribed in this part. Any person violating the provisions of 33 CFR § 118.10 shall be deemed guilty of a misdemeanor and be subject to a fine for each offense. Each day during which such violation shall continue shall be considered a new offense.
10. Additional information can be found in the Coast Guard Bridge Lighting and Other Signals guide found at http://www.uscg.mil/hq/cg5/cg551/.

R. Navigation Evaluation

1. Section 2.A.2.g.17.a) of the Bridge Permit Application Guide requires an applicant for a Coast Guard bridge permit to prepare a navigation evaluation. This evaluation shall be conducted to identify and evaluate current and future navigational needs with regards to the sufficiency of proposed horizontal and vertical clearances provided by a bridge project. Items which should be taken into consideration for this evaluation include, but are not limited to:
   a. Review of all bridges upstream and downstream of the proposed bridge site to determining existing minimum horizontal and vertical clearances;
   b. Review of guide clearances for the waterway;
   c. Waterway layout and geometry;
   d. Waterway depth and fluctuations;
   e. Current speed and direction;
   f. Type and size of vessels utilizing the waterway to include:
      1) Vessel Name
      2) Vessel length overall
      3) Vessel beam
      4) Vessel draft
      5) Vessel air draft
   g. Vessel transit frequencies, transit speeds and load configurations;
   h. Vessel traffic characteristics;
   i. Review of annual cargo movements (cargo types and quantities);
   j. Site-specific information such as historical data on vessel allisions/collisions, rammings and groundings in the waterway, bridge/waterway geometry, sailing path, stream speed, and wind speed;
   k. All vessels and cargoes that will need to be partially disassembled/dismantled in order to transit the proposed bridge and whether the vessels currently possess that capability;
   l. Proposed bridge clearance impact on present and prospective upstream commercial activity, e.g. jobs, and economic growth and development. Address any existing or planned commercial/industrial

developments negatively affected by the proposed clearances and discuss the economic impacts the proposed clearances will have on these businesses; and

m. Any existing facilities on the waterway that are or could be considered critical infrastructure, key resources, or important/unique US industrial capability i.e. are these facilities unique or one of only a few of the type in the area. Address whether the proposed clearances negatively impact those facilities and their customers.

2. Additional guidance on determining the reasonable needs of navigation can be found on the Coast Guard Office of Bridge Programs website: http://www.uscg.mil/hq/cg5/cg551/Navigational%20Clearance%20Methodology%20White%20Paper%2010%20Oct%2012(website%20version).pdf

Please contact your local Coast Guard District Bridge Office should you have any additional questions regarding navigation evaluations.

S. District Commander's Investigation

1. All bridge related work including new construction, replacement, alteration, demolition, etc are considered to be "proposed" until permitted or approved by the appropriate Coast Guard office.
2. Upon submission of a bridge permit application, a request for a bridge permit is investigated by the Coast Guard District bridge program staff to ensure:
   a. The proposed bridge is under Coast Guard jurisdiction (i.e., across navigable waters of the United States).
   b. The application includes all of the necessary information, including one set of reproducible plans on 8 ½ x 11 inch format, and adequate environmental and other supporting documentation. (As part of an initial review, a preliminary decision is made to determine the required type of environmental document.)
   c. The proposed bridge provides for the reasonable needs of navigation.
3. The Coast Guard District Commander undertakes a rigorous independent investigation to determine the possible impacts of the proposed project on navigation and the human environment.
4. As part of the District Commander's independent investigation, scoping/coordination meetings and consultation may be required to determine the level of environmental documentation (See Section 2.A. of the Bridge Permit Application Guide). In addition, a notice requesting public comment is issued to all known interested individuals, adjacent property owners, expertise groups, and government agencies.
5. The Coast Guard District bridge program staff receives, evaluates, and acts upon the responses to the public notice. The applicant will be furnished any substantive comments received in response to the public notice to resolve or dispute the issues that are raised. Normally, the public comment period is 30 days.
6. Public meetings shall be held when determined necessary by the Coast Guard, due to substantial issues concerning the proposed bridge's effect on the reasonable needs of navigation.
7. Public meetings may also be held, when appropriate, in accordance with the statutory requirements of the National Environmental Policy Act of 1969 (NEPA).
8. The purpose of a public meeting is to allow interested parties to express their views and develop pertinent data for evaluating the permit application.
9. Following the Coast Guard District Commander's investigation, the request for the permit is forwarded to Coast Guard Headquarters with the case record and the District Commander's recommendation for issuance or denial of the permit.
10. In certain cases, the District Commander may issue or deny the permit.

T. Headquarters Review

1. When a Coast Guard Headquarters final agency action is required, the staff of the Permits Division, Bridge Program Office, U. S. Coast Guard Headquarters in Washington, DC, reviews and evaluates the case file submitted by the District Commander.
2. Based on this evaluation, the District Commander's recommendation may be accepted or rejected, and a bridge permit may be issued or denied.

BRIDGE PERMIT APPLICATION GUIDE

OFFICE OF BRIDGE PROGRAMS, U.S. COAST GUARD

Bridge Permit Application Guide

U.S. Department of Homeland Security

United States Coast Guard

COMDTPUB P16591.3C

OCTOBER 2011

Promulgation Letter

U.S. Department of Homeland Security
United States Coast Guard

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United States Coast Guard

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Subj: BRIDGE PERMIT APPLICATION GUIDE

1. PURPOSE. This manual has been prepared to assist Federal, State and local agencies, as well as members of the general public, when applying for a Coast Guard permit to construct a new bridge or causeway or reconstruct or modify an existing bridge or causeway across the navigable waters of the United States.

2. ACTION. All Coat Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this manual. Internet release is authorized.

3. DIRECTIVES AFFECTED. This Publication supersedes the previous Bridge Permit Application Guide, COMDTPUB P15691.3B.

4. DISCUSSION. Federal law prohibits the construction of any bridge across the navigable waters of the United States unless first authorized by the Coast Guard. This manual shall be provided to State or local agencies who routinely apply for bridge permits and to other prospective applicants when requested through the Internet. If the procedures described in this manual are followed, it will expedite the permitting process. Questions regarding a specific project should be directed to the Bridge Program staff of the Coast Guard district where the project is located.

5. SUMMARY OF CHANGES.

   a. There have been many minor changes incorporated into this edition of the Bridge Permit Application Guide. A significant portion of the introductory/background information has been removed and will now be available solely on the Commandant (CG-551) website (http://www.uscg.mil/hq/cg5/cg551/). A significant change is the previous guide section which identified the information required for a letter of application, including a sample

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letter, was deemed repetitive. The sample letter has been removed and the section on the application package requirements has been updated. Also moved to the Commandant (CG-551) website is the glossary, lighting guide and guide clearance information, along with the district map and contact info.

b. The document attached herein provides all the necessary information for an applicant to apply for a Coast Guard bridge permit. The guide is now broken down into two sections, the Introduction and the Permit Application. The permit application section is further broken down into three subsections: The Application Package, Plan Sheet Requirements and Environmental Document Requirements. Overall the Guide provides policy guidance and clarification on program implementing procedures and numerous editorial and format changes.

6. RECORDS MANAGEMENT CONSIDERATIONS. This Manual has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirements.

7. ENVIRONMENTAL ASPECTS AND IMPACT CONSIDERATION.

a. The development of this directive and the general policies contained within it have been thoroughly reviewed by the originating office and are categorically excluded (CE) under current USCG CE #33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series).

b. This directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Manual must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), Council on Environmental Policy NEPA regulations at 40 CFR Parts 1500-1508, DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates.

8. FORMS/REPORTS. None.

D.A. Goward /s/
Director, Marine Transportation
Systems Management

TABLE OF CONTENTS

SECTION 1 INTRODUCTION TO THE PERMITTING PROCESS 1
SECTION 2 PERMIT APPLICATION 3
A. THE APPLICATION PACKAGE 3
1. Where to submit the permit application 3
2. Format for cover letter 3
a. Applicant information 3
b. Consultant/Agent information 3
c. Proposed Bridge(s) 3
d. Legal Authority for proposed action 4
e. International bridges (if applicable) 4
f. Dimensions of the navigation opening 4
1) Vertical clearance 4
2) Horizontal clearance 5
3) Length of bridge project 5
4) Width of project 5
5) Depth of the waterway 5
6) Width of waterway 5
g. Waterway characteristics, usage and prospective impacts 5
h. Existing bridge(s) 6
i. Removal of existing bridge(s) 7
j. Other Agencies with jurisdiction 7
k. Summary of environmental analysis 7
l. Signature Block 7
3. Attachments to the application package 7
a. Map of the location/vicinity and plan sheets 7
b. Environmental Evaluation or Re-Evaluation 7
c. Navigation Survey 7
d. Vessel Impact Assessment 7
e. Lead federal agency's CE, EA or EIS 7
f. Authorization to make application 8
g. Consultant/ Agent authorization letter 8
h. Proof of ownership 8
i. Proof of right to build 8
j. Extracts of motions from meetings 8
k. Water quality certification 8
l. CZM consistency 8
m. State agency concurrence in CZM 8
n. List of property owners 8
o. Summary of preliminary conferences and early coordination 8
4. Applications for Extensions of Time 8
a. Letter requesting extension of time 8
1) Description of construction 8
2) Status of the construction work 8
3) Why an extension is needed 8

4) Percentage of project completed 8
5) Length of extension 8
b. Water Quality Certification 9
c. Coastal Zone Management 9
d. State concurrence with CZM 9
e. Environmental documentation 9
B. PLAN SHEETS 9
1. Plan Sheet Checklist 9
a. General 9
b. Title Blocks 9
c. Location/Vicinity Map 10
d. Plan View 10
e. Elevation View 11
f. Typical Section View 11
g. Details of the Bridge Protective System 12
h. Temporary Structures/Falsework 12
i. Bridge Lighting Plan 12
EXAMPLE 2.1 - Example of Permit Plans, Location and Vicinity Maps 13
EXAMPLE 2.2 - Example of Permit Plans, Combined Vicinity and Location Map 14
EXAMPLE 2.3 - Example of Permit Plans, Combined Plan and Elevation Views 15
EXAMPLE 2.4 - Example of Permit Plans, Combined Plan and Elevation Views 16
EXAMPLE 2.5 - Example of Permit Plans, Combined Plan and Elevation Views 17
EXAMPLE 2.6 - Example of Permit Plans, Plan View 18
EXAMPLE 2.7 - Example of Permit Plans, Elevation View 19
EXAMPLE 2.8 - Example of Permit Plans, Typical Cross Section 20
EXAMPLE 2.9 - Example of Permit Plans, Bridge Protective System 21
EXAMPLE 2.10 - Example of Permit Plans, Bridge Protective System 22
C. ENVIRONMENTAL DOCUMENTATION REQUIREMENTS 23
1. Required information for application package 23
a. Alternatives 23
b. Clean Water Act 23
c. Coastal Zone Management Plan 24
d. Floodplain 25
e. Historic/cultural resources 25
f. Wetlands 26
g. Fish and wildlife 26
1) Threatened and endangered species 26
2) Essential fish habitat 27
h. Noise 27
i. Clean Air 28
j. Wild and Scenic Rivers 29
k. Residential or business displacement 30
l. Prime and unique farmland 30
m. Other environmental control laws 30
n. Cumulative and indirect impacts 31
2. Environmental checklist 32

TABLE 2.1 - Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions 33

SECTION 1 INTRODUCTION TO THE PERMITTING PROCESS

The Coast Guard approves the location and plans of bridges and causeways and imposes any necessary conditions relating to the construction, maintenance, and operation of these bridges in the interest of public navigation. A bridge permit is the written approval of the location and plans of the bridge or causeway to be constructed or modified across a navigable waterway of the United States. Any individual, partnership, corporation, or local, state, or federal legislative body, agency, or authority planning to construct or modify a bridge or causeway across a navigable waterway of the U.S. must apply for a Coast Guard bridge permit in accordance with 33 CFR 115.50.

Additional information regarding Coast Guard permitting can be found online at http://www.uscg.mil/hq/cg5/cg551/default.asp Federal law prohibits the construction of these structures unless the Coast Guard first authorizes them. By following the procedures in this publication the Coast Guard can efficiently process a bridge permit application.

This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is not intended to nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. You can use an alternative approach for complying with these requirements if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach (you are not required to do so), you may contact the District Commander who is responsible for implementing this guidance.

SECTION 2 PERMIT APPLICATION

The Coast Guard bridge permitting process is directed by laws, policies, professional standards, and other requirements. This chapter is a guide to help you through the bridge permit application process. Additional information may be found at 33 CFR, Parts 114 and 115.

A. THE APPLICATION PACKAGE - The application package consists of a cover letter, permit plans, and an environmental evaluation. A checklist for each of these portions of the application follows this section.

1. Per 33 CFR 1115.50(k), when you apply for a bridge permit, submit an application package to the cognizant Coast Guard District Bridge Office which has jurisdiction over the area of the proposed bridge site.

2. Format the application cover letter as shown below.

Salutation (i.e. Dear Sir;)

Application is hereby made for a Coast Guard Bridge Permit.

a. Applicant information:

1) Name;

2) Address;

3) Telephone number; and

4) Email address.

b. Consultant/Agent information (if employed):

1) Name;

2) Address;

3) Telephone number; and

4) Email address.

c. Proposed Bridge(s):

1) Lead federal agency for environmental review;

2) Name of the waterway that the bridge crosses;

3) Number of miles above the mouth of the waterway where the bridge is located and provide latitude and longitude at centerline of navigation channel (contact the local Coast Guard Bridge Office for guidance);

4) City or town, county, and state where the bridge is located at, near, or between;

5) Brief description of project to include type of bridge proposed and existing bridge at project site, if applicable;

6) Purpose and need of project;

7) Estimated cost of bridge and approaches;

   a) Provide the estimated cost of the bridge as proposed, with required vertical and horizontal navigational clearances.

   b) Provide the estimated cost of a low level bridge on the same alignment with only sufficient clearance to pass high water while meeting the intended purpose and need.

8) Type and source of project funding (federal, state, private etc).

d. Legal Authority for proposed action:

1) The primary authority for the construction of the bridge and under what legislative authority the bridge is being built (state permit, charter, or statement of ownership of lands); typically the General Bridge Act of 1946, as amended; and

2) The legislative authority for the existing bridge as listed in the original permit if it is to be replaced.

3) If the applicant does not own the existing bridge which is being replaced or modified, include a signed statement from the bridge owner authorizing the removal or modification work.

e. International bridges (if applicable):

1) The International Bridge Act of 1972, or a copy of the Special Act of Congress if constructed prior to 1972, should be cited as the legislative authority for international bridge construction; and

2) Presidential approval shall be obtained from the State Department prior to issuing a Coast Guard bridge permit under the International Bridge Act of 1972.

NOTE: Please include a copy of State Department approval for international bridges in the application package for a Coast Guard bridge permit.

f. Dimensions of the navigation opening: (All navigational clearances should be stated in US linear feet. Provide clearances in meters if international bridge).

1) Vertical clearance: This is the vertical distance between the lowest part (e.g., member, chord, or steel) of the superstructure spanning the navigation channel and the recognized datum (e.g., MHW, 2% flow line, etc.) at the bridge site. Cite clearances above the appropriate high water elevation and low water elevation. In

the case of movable bridges, cite clearances in the open and closed positions. In some situations, vertical clearances should be cited at the margins of channel, and for a bascule bridge clearances at the tip of the leaves, if not fully open.

2) Horizontal clearance: This is the horizontal distance, measured normal to the axis of the channel, through which the stated vertical clearance is available. Clearance may be between piers (full width of the span), between the bridge protective system, or bank-to-bank in the case of a bridge having no piers in the waterway.

3) Length of bridge project: This is the horizontal distance from abutment-to-abutment or approach-to-approach.

4) Width of project: This is the width of the bridge at its widest point (out-to-out).

5) Depth of the waterway: At the appropriate elevation (e.g., NGVD 1929, NAVD 1988, etc.).

6) Width of waterway: At project site at MHW if tidal or OHW if non-tidal.

g. We recommend you discuss waterway characteristics, waterway usage, and prospective long term navigational impacts of the proposed project, and include:

1) The name and contact information for marine facilities within a 3-mile radius of the project [public boat ramps, marinas (or major docking facilities), boat repair facilities, etc.];

2) The approximate width of the waterway at the proposed bridge location (bank to bank, shoreline to shoreline, etc.);

3) The depths of the waterway at the proposed bridge location in and around the navigation channel;

4) A description of vessels on the waterway that are engaged in emergency operations, national defense activities, or channel maintenance, and any potential impacts to their operation;

5) Information regarding whether the Corps of Engineers has completed or plans to complete a federal navigation project on this waterway;

6) A description of the present and prospective recreational navigation on the waterway, indicating whether the proposed project will have an impact on the safe, efficient movement of any segment of the present or prospective recreational fleet operating on the waterway;

7) A description of the present and prospective commercial navigation and the cargoes moved on the waterway, indicating whether the proposed project will have an impact on the safe, efficient movement of any segment of the present or prospective commercial fleet operating on the waterway;

8) Whether the proposed bridge will block access of any vessel presently using local service facilities;

9) Whether alternate routes bypassing the proposed bridge are available for use by vessels unable to pass the proposed bridge;

10) A description of any local harbor, indicating whether the bridge will prohibit the entry of any vessels to the local harbor refuge;

11) Whether the proposed bridge will be located within one-half mile of a bend in the waterway;

12) Whether there are factors located within one-half mile of the proposed bridge which would create hazardous passage through the proposed structure and a description of each factor;

13) Whether local hydraulic conditions increase the hazard of passage through the proposed bridge and a description of these conditions;

14) Whether atmospheric conditions increase the hazard of passage through the proposed bridge and a description of these conditions;

15) A description of guide clearances established for the waterway, if applicable. If not, indicate whether clearance gauges are needed and why;

16) A description of any other factors considered necessary for the safe, efficient passage of vessels through the proposed bridge; and

17) A description of the impacts to navigation caused or which could be reasonably caused by the proposed bridge including but not limited to: proposed construction methodology, proposed or prospective changes to the existing bridge operating schedule (for movable bridges), and any proposed mitigation to all unavoidable impacts to navigation.

    a) Conduct a navigational evaluation, and include a review of all bridges upstream and downstream of the proposed site to determine the minimum vertical and horizontal clearances available on the waterway.

    b) If the proposed bridge is fixed, and is replacing an existing drawbridge with unlimited vertical clearance, you must determine whether the proposed bridge will accommodate existing and perspective navigation.

h. Existing bridge(s) if applicable:

1) Name(s) of bridge: e.g., US 40 Highway Bridge; or Coleman Memorial Bridge; or State Route 7 Bridge also known as Preston Falls Bridge;

2) Type of bridge: e.g., fixed or moveable (drawbridge, bascule, vertical lift, swing span); highway, railway, pedestrian, pipeline;

3) Mile point, latitude and longitude at centerline of bridge, and navigational clearances, in linear measurement; and

4) Owner of the bridge.

i. Discuss construction methodology and removal of existing bridge(s), as applicable:

1) Discuss proposed construction methodology and restrictions;

2) Discuss maintenance of land and waterborne traffic during construction activities;

3) Discuss extent of removal of existing bridge, time needed for removal, etc.; and

4) Discuss demolition methodology.

NOTE: Because the safety of navigation is of paramount importance, the Coast Guard shall make the final decision concerning the extent of bridge removal.

j. Other Agencies with jurisdiction over the proposed project:

1) Agency; and

2) Permits or type of approvals required for the project.

k. Summary of environmental analysis.

1) Identify lead federal agency for NEPA. (For an EIS include date filed with EPA and a copy of the Record of Decision); and

2) Indicate whether the proposed bridge will have a significant effect on the human environment and briefly identify impacts.

l. Signature Block (applicant/consultant/agent).

3. Include the following attachments (if applicable) with the application package:

a. Original and one copy of map of the location/vicinity and plan sheets on standard 8 ½ x 11" paper (See Plan Sheet Checklist);

b. Environmental Evaluation or Re-Evaluation (contact the local Coast Guard District Office for re-evaluation requirements). (See Section 2.C.);

c. Navigation Survey to support vertical and horizontal navigation clearance requirements;

d. Vessel Impact Assessment, if required by the District Commander;

e. Lead federal agency's Final CE determination, EA, EIS, FONSI, or ROD as appropriate (If EIS, provide EPA filing dates for DEIS & FEIS). When the Coast

Guard is the lead federal agency, the Coast Guard must concur with the selection of the consultant used for the development of the environmental document;

f. Authorization for applicant to make application to modify or remove another's bridge;

g. Consultant/ Agent authorization letter;

h. Proof of ownership of existing bridge;

i. Proof of right to build (ownership of land);

j. Extracts of motions from meetings authorizing construction of the proposed bridge;

k. Water quality certification under 33 U.S.C. 1251 (and proof of application requesting it), to include time extensions, waivers, or a statement from the certifying agency that the WQC is either still valid or that WQC is not needed. (See Section 2.C.1.b.);

l. CZM consistency statement, to include time extensions. (See Section 2.C.1.c.);

m. State agency concurrence in CZM consistency certification, to include time extensions, or a statement from the certifying agency that the state concurrence is still valid;

n. List of property owners – at a minimum adjacent property owners, formatted in Microsoft Excel, or comparable spreadsheet software. Please contact the local bridge office for additional guidance; and

o. Provide a summary of preliminary conferences and early coordination or scoping efforts with applicant and/or interested parties. Include information about public meetings.

4. Applications for Extensions of Time.

a. Per 33 CFR 114.45, applicants must submit to the appropriate Coast Guard District Commander, time extension requests to commence or complete bridge construction, or to remove a bridge being replaced as part of a permitted bridge project. Submit the following information when requesting an extension of time:

1) Description of construction;

2) Status of the construction work;

3) An explanation of why the project will not be commenced/completed on time, i.e. why an extension is needed;

4) Percentage of project completed to date;

5) Projected completion date and how long the applicant wishes for the permit extension;

6) Water Quality Certification and application for Certification;

7) Coastal Zone Management (CZM) consistency certification;

8) State concurrence with CZM consistency certification; and

9) Environmental documentation: Any categorical exclusions, environmental assessments, environmental impact statements, supplemental studies, findings of no significant impact, records of decision or reevaluations required by the lead agency.

B. PLAN SHEETS - Plans submitted with the bridge permit application become an official, and permanent, part of the issued permit or permit. To minimize delays, provide the following information:

1. Plan Sheet Checklist - Use the following checklist for specifics to include with bridge plans:

a. **General**

____ Provide all plans on standard 8 ½ X 11" paper. Include the original plus one copy of the plans (of good reproducible quality), on the fewest sheets possible that still show significant project structural details.

NOTE: Do not show bridge navigational lighting plans on bridge plan and elevation views. Use a separate sheet for the bridge lighting plan.

____ Show all dimensions and distances in U. S. linear feet. For international bridges also show all dimensions in metric equivalent.

____ Include the datum used in the plan and elevation view. Use the same datum for all submitted drawings (e.g. NAVD, NGVD).

____ All plan sheets shall bear the stamp of a professional engineer certifying the design meets American Association of State Highway and Transportation Officials (AASHTO) and/or American Railway Engineering and Maintenance-of-Way Association (AREMA) standards, including private bridges. If the bridge has been designed to withstand vessel impact, a certified statement to that effect, along with the design vessel chosen, shall be included on the plan sheets by a professional engineer.

b. **Title Blocks** – Include the following items in the title blocks (lower right-hand corner on all of the plan sheets):

____ Applicant/Owner;

____ Consultant/Agent;

____ Name of Bridge;

____ Name of Waterway;

____ Mile point of bridge location (from confluence of mouth of waterway) in statue miles;

____ City, County, and State (state at, near, or between – as appropriate);

____ Date of plans (i.e. mm/dd/yyyy); and

____ Sheet number of total number of sheets in set (i.e. Sheet 1 of 5).

c. **Location/Vicinity Map**

____ Show graphic scale and north arrow;

____ Show location of bridge on waterway;

____ Identify the name of the waterway;

____ Show course of waterway (i.e. ebb/flood);

____ Show structures immediately adjacent to the proposed bridge and their relation to the proposed bridge;

____ Identify wildlife and waterfowl refuges and any historical and archaeological sites; and

____ Insert a small map of the state in which the project is located with an arrow showing the location of the proposed project.

d. **Plan View**

____ Show graphic bar scale and north arrow;

____ Identify the adjacent property owners at the four corners of the proposed structure(s);

____ Show existing shorelines;

____ Show ebb and flood in tidal waters and direction of flow in non-tidal waterway;

____ Show mean high and low waterlines in tidal areas. Show ordinary high water and ordinary low water elevations if proposed activity is in a non-tidal waterway;

____ Show all portions of existing bridge(s) that will remain in place;

____ Show principal dimensions of structure(s) from grade to grade. Show length, width, etc.;

____ Show location of dredging, excavation, fill or rip-rap. Give approximate number of cubic yards;

____ Show location of the bridge protective system, piles, cables, etc. existing or to be constructed in the waterway. Identify type of material to be utilized;

____ Show limits of navigational channel;

____ Show axis of channel;

____ Show horizontal clearances, normal to the axis of the channel between the bridge protective system, pilings, or abutments;

____ Show water depth at mean low (or ordinary low if non-tidal) at various locations in the channel, under, upstream and downstream of the bridge; and

____ Show outline of the bridge protective system.

e. **Elevation View**

____ Show graphic bar scale and north arrow;

____ Show mean high and mean low water elevations in tidal areas. Show ordinary high and low water elevations in non-tidal areas;

____ Show amount of fill in cubic yards below mean high water;

____ Show horizontal clearance normal to the axis of the channel between the bridge protective system, pilings, or abutments, as appropriate for navigational channel;

____ Show vertical clearances referenced to the appropriate high water stage either Mean High Water (MHW) or Ordinary High Water (OHW). Show vertical clearances at the center, as well as at the horizontal limits of the navigational channel (the most restrictive vertical clearance in the navigational channel);

____ If the bridge will have a draw, show the draw in the open and closed positions;

____ Show proposed and existing contour of waterway bottom; and

____ Show 100-year flood elevation.

f. **Typical Section View**

____ Show graphic bar scale;

____ Show out-to-out width of the structure(s). (This is the width of the bridge at its widest point.); and

____ Include location and dimensions of travel lanes, shoulders, sidewalks, fishing/pedestrian platforms, railings, pipelines, etc.

PLEASE SUBMIT THE FOLLOWING PERMIT PLAN SHEETS SEPARATELY IF APPLICABLE:

g. **Details of the Bridge Protective System**

____ Show bridge protective system in plan and elevation views including detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view).

h. **Temporary Structures/Falsework**

____ Show temporary structures/falsework;

____ Show existing bridge(s) to be removed; and

____ Show minimum horizontal and vertical clearances during construction.

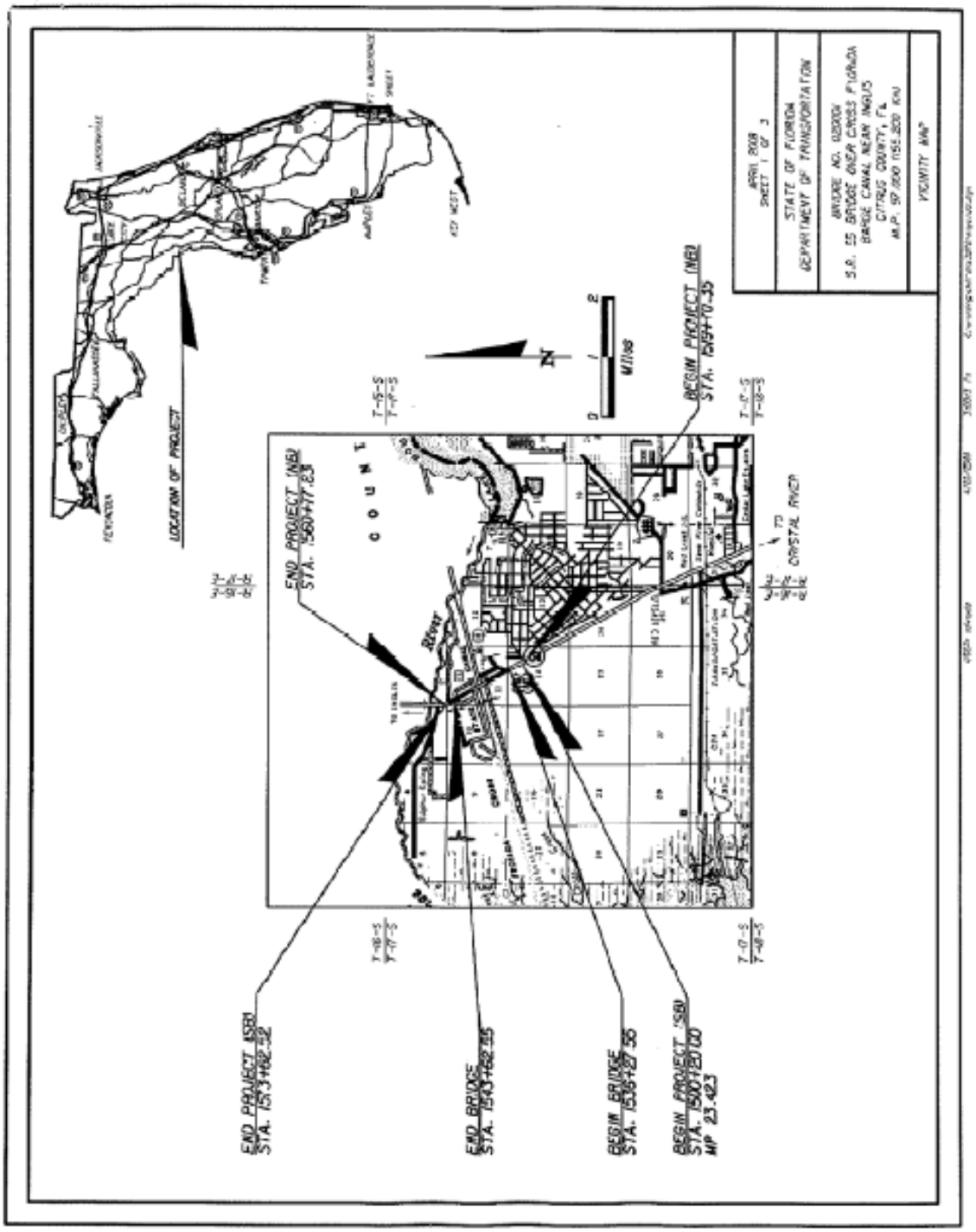
i. **Bridge Lighting Plan**

____ Submit lighting plan application in accordance with 33 CFR 118 and bridge lighting guide (see USCG Bridge Program website). This is a separate application from the bridge permit application.

2. SAMPLE PLANS SUBMITTED FOR APPROVAL

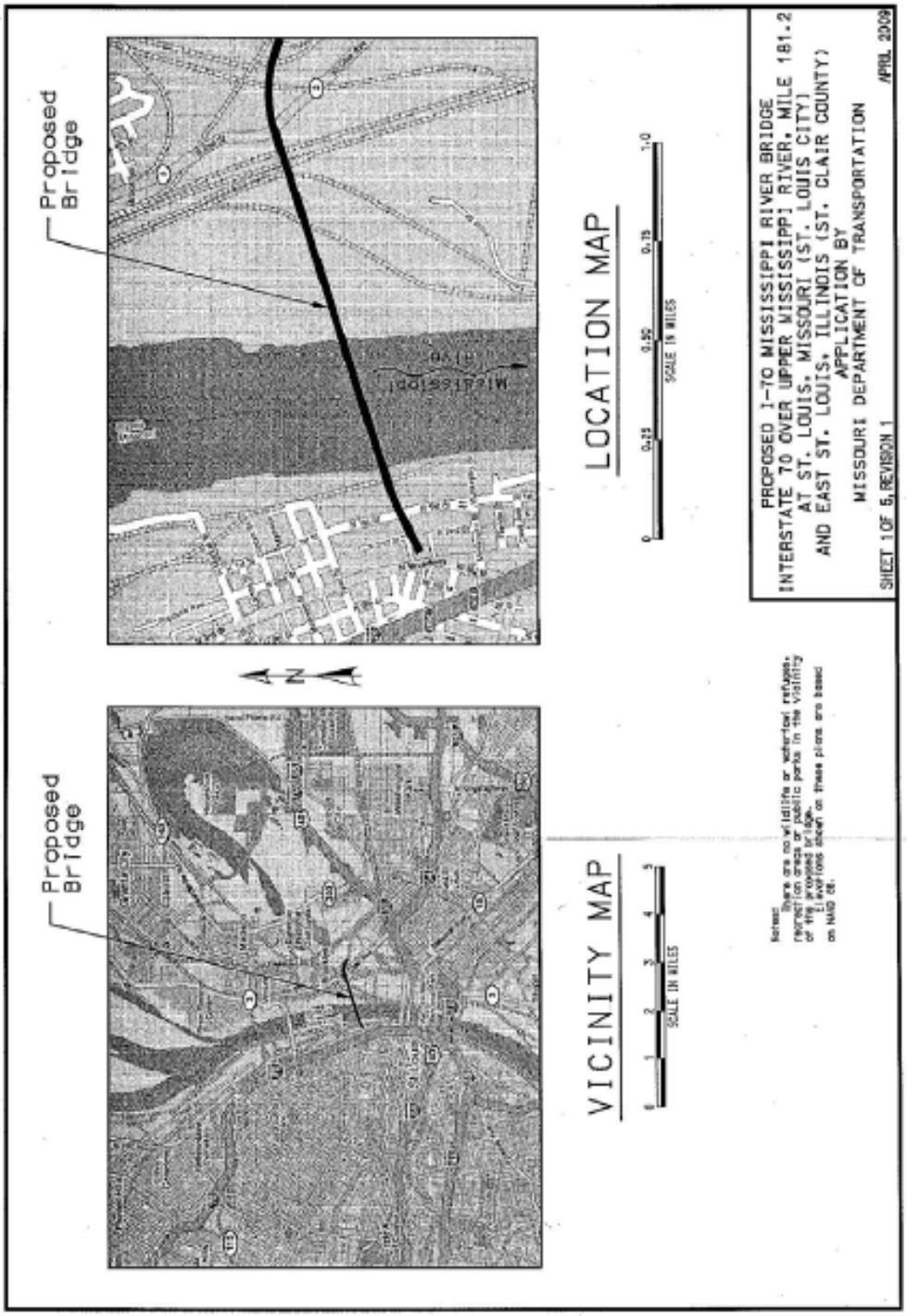
Example 2.1

Location and Vicinity Maps



Example 2.2

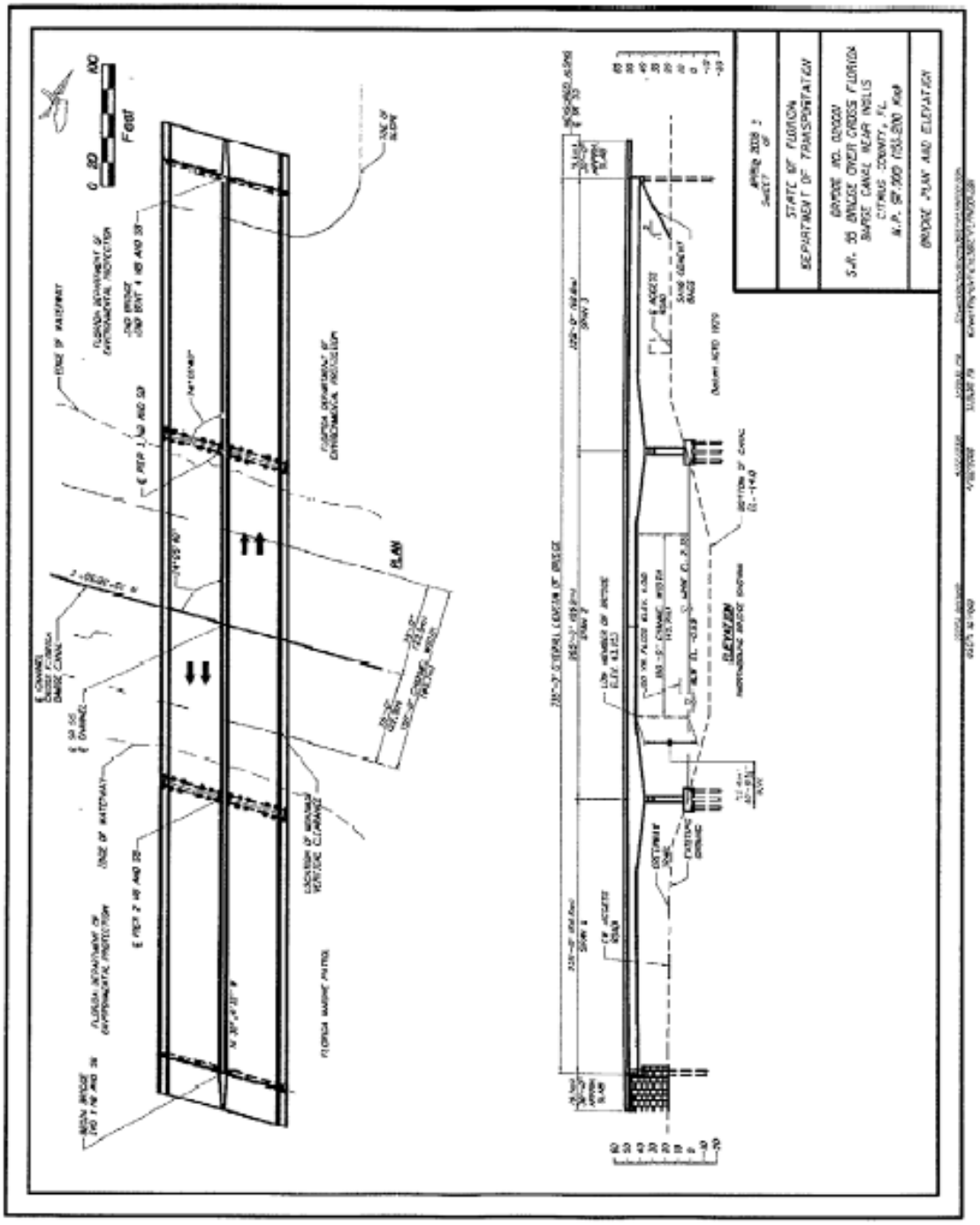
Combined Vicinity and Location Map



14

Example 2.3

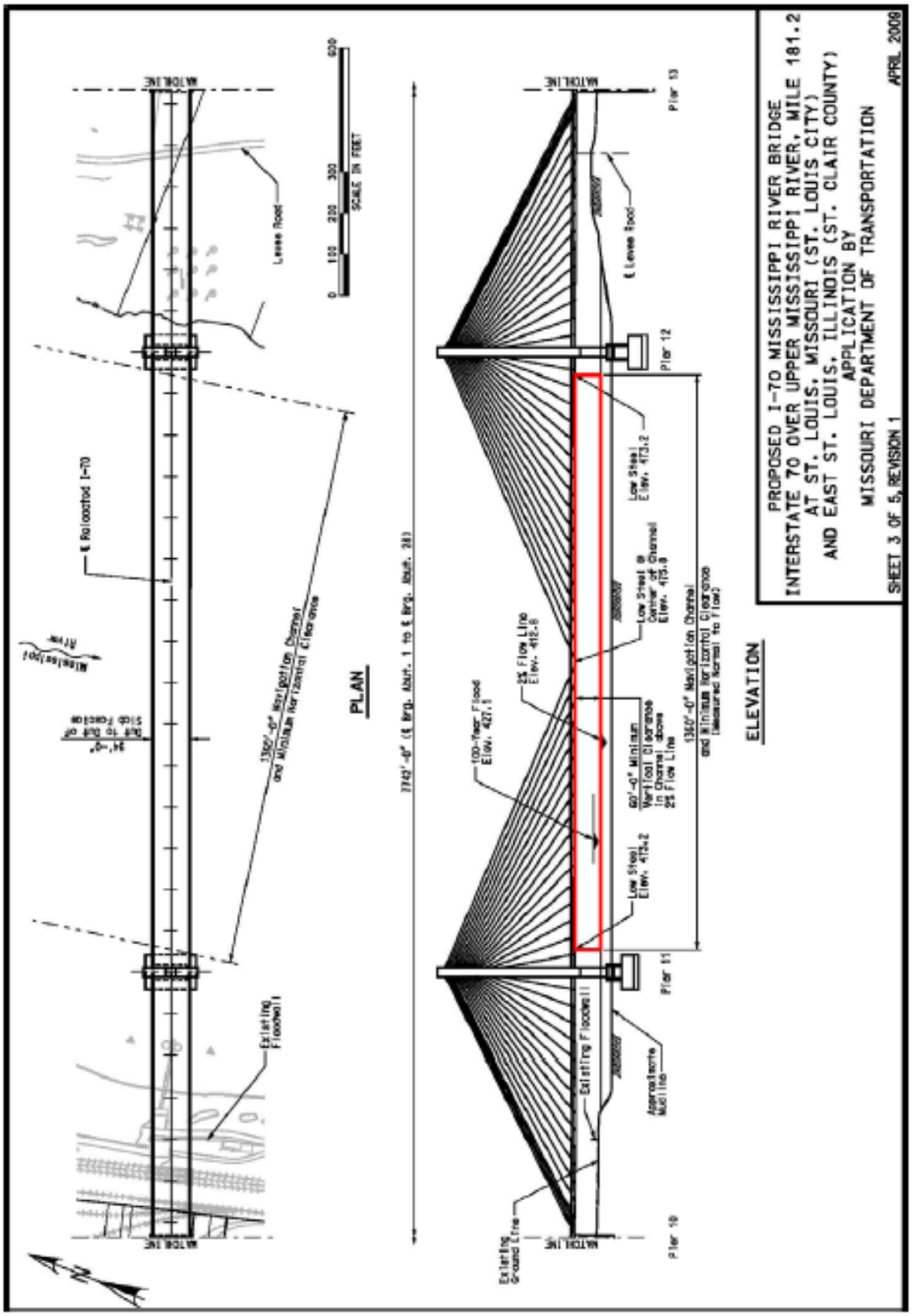
Combined Plan and Elevation Views



15

Example 2.4

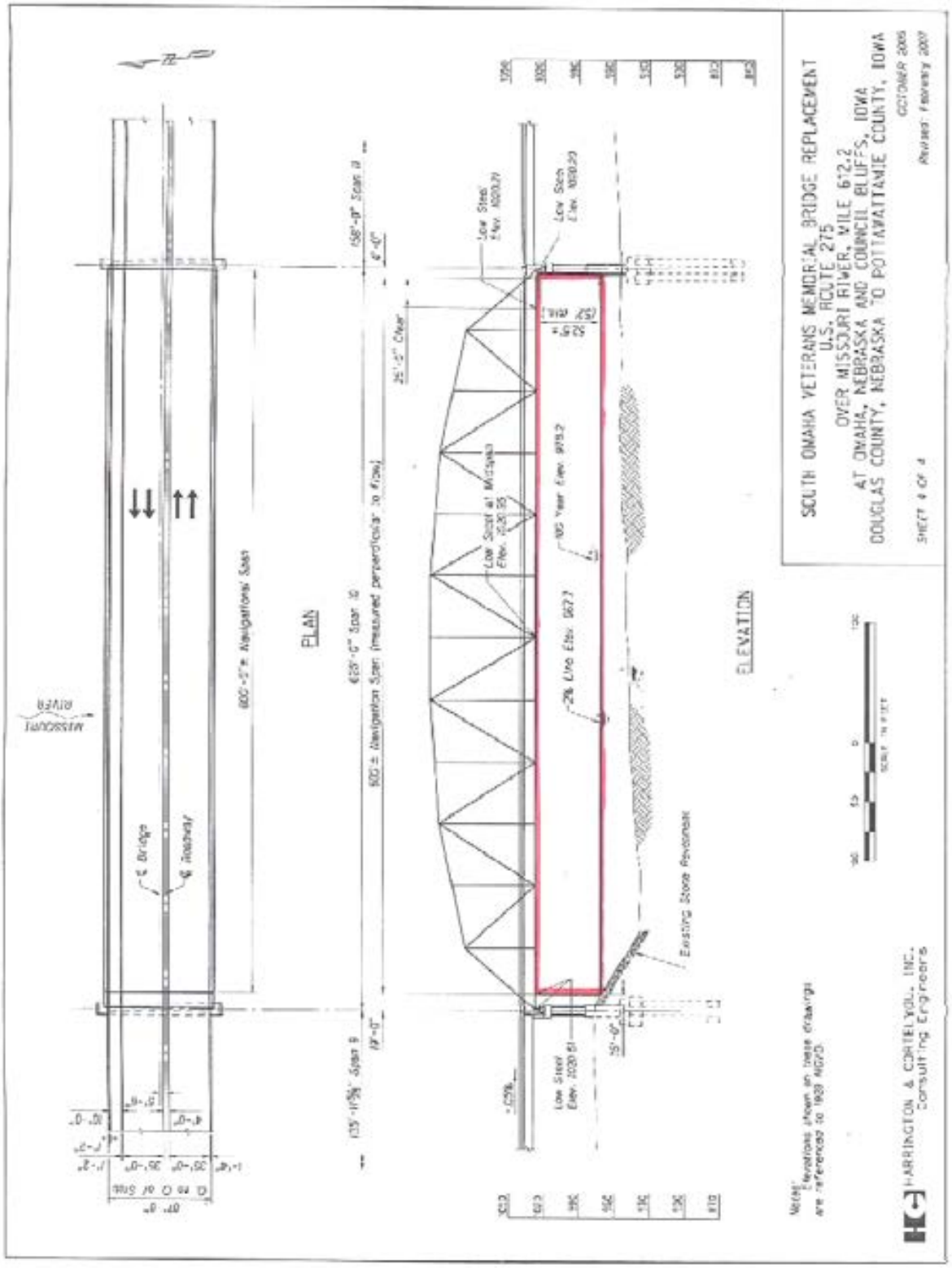
Combined Plan and Elevation Views



16

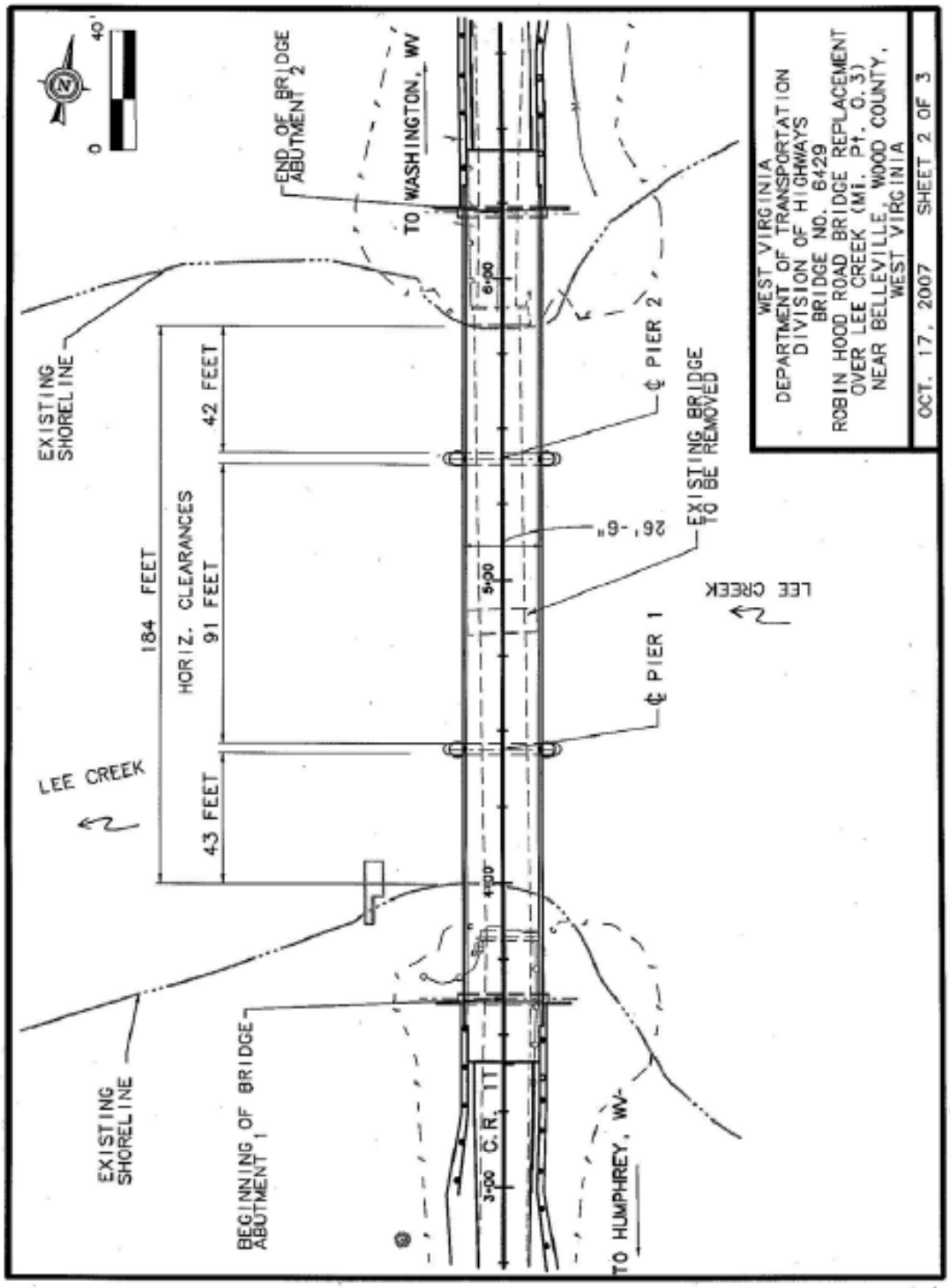
Example 2.5

Combined Plan and Elevation Views



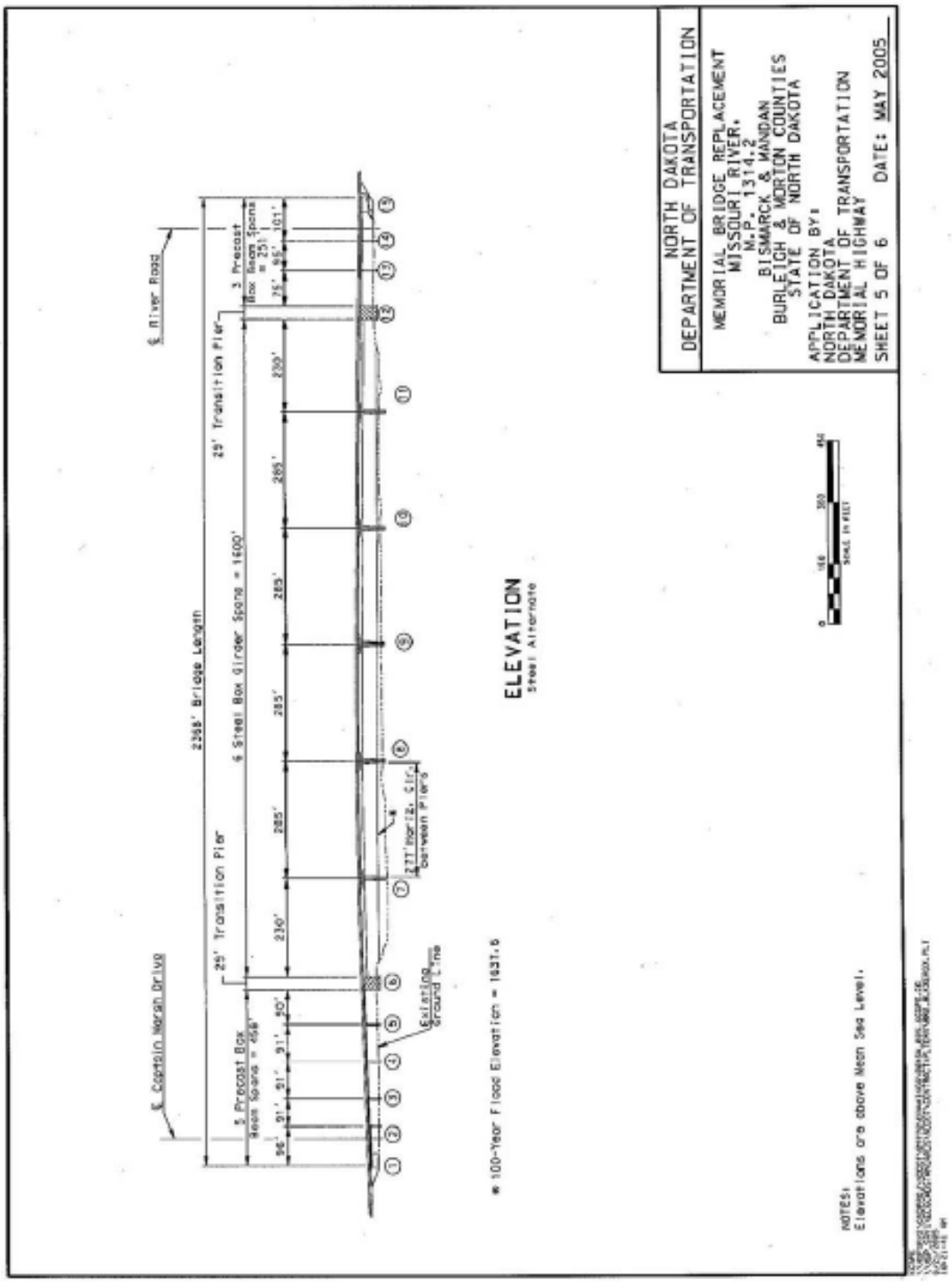
Example 2.6

Plan View



Example 2.7

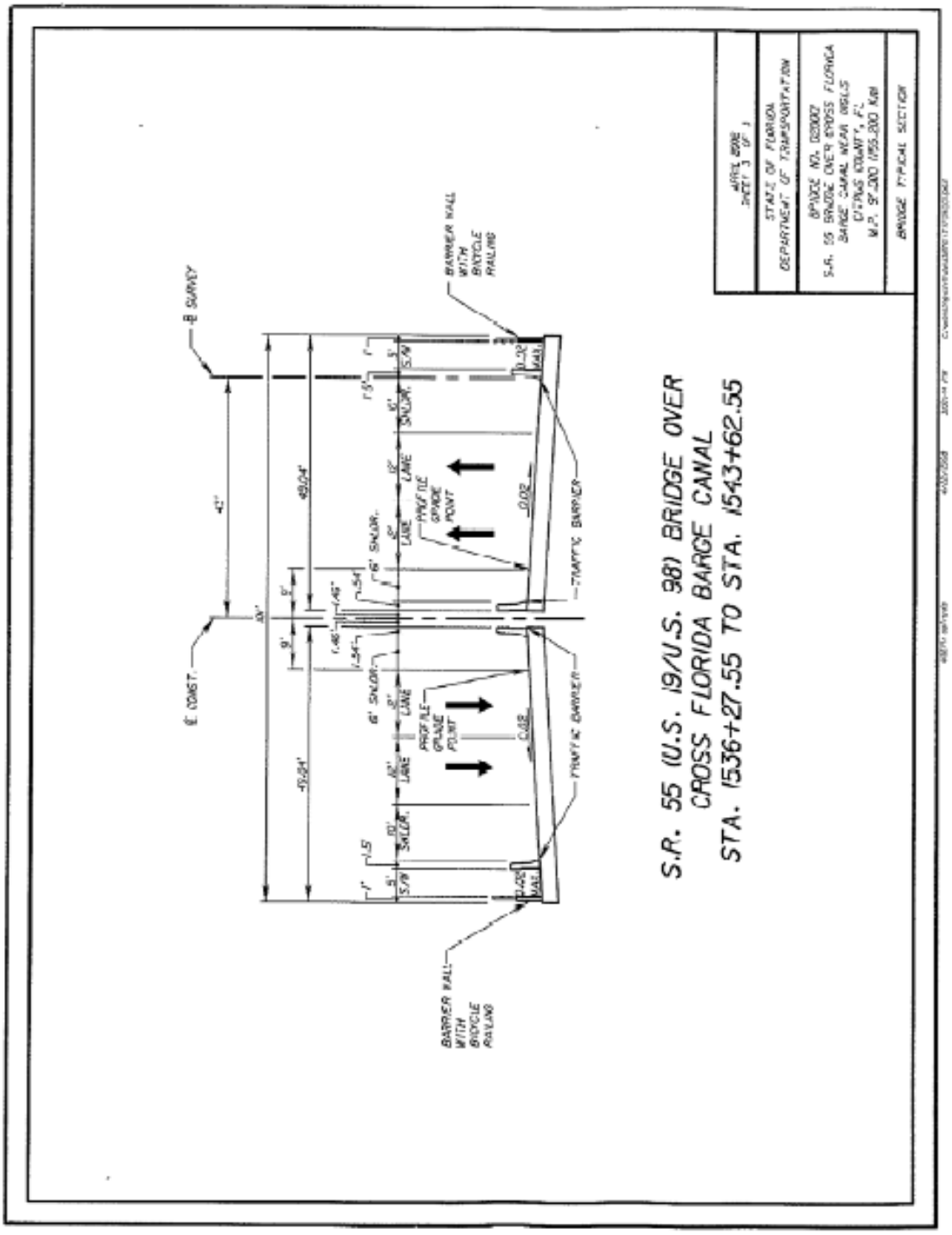
Elevation View



19

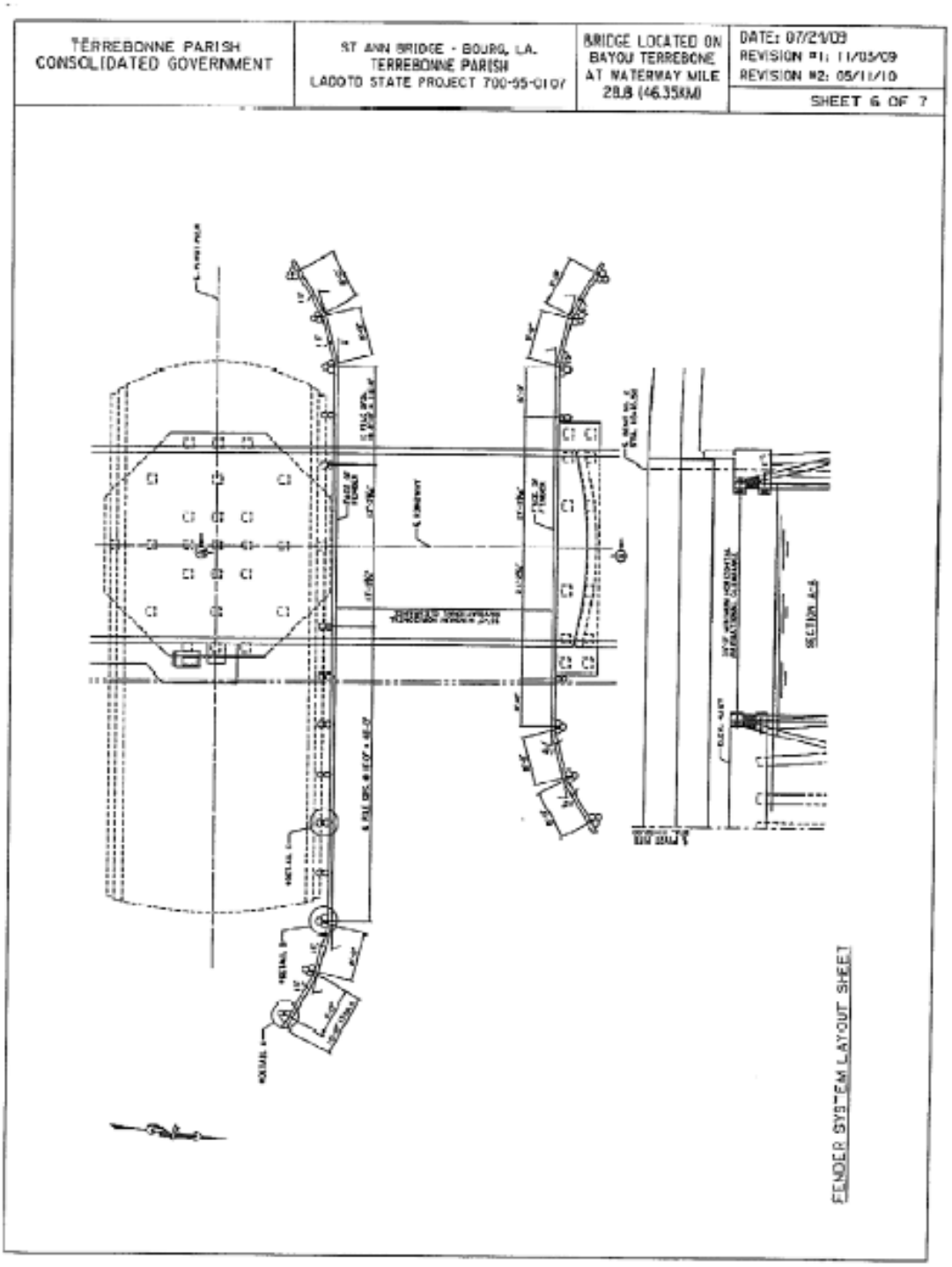
Example 2.8

Typical Cross Section



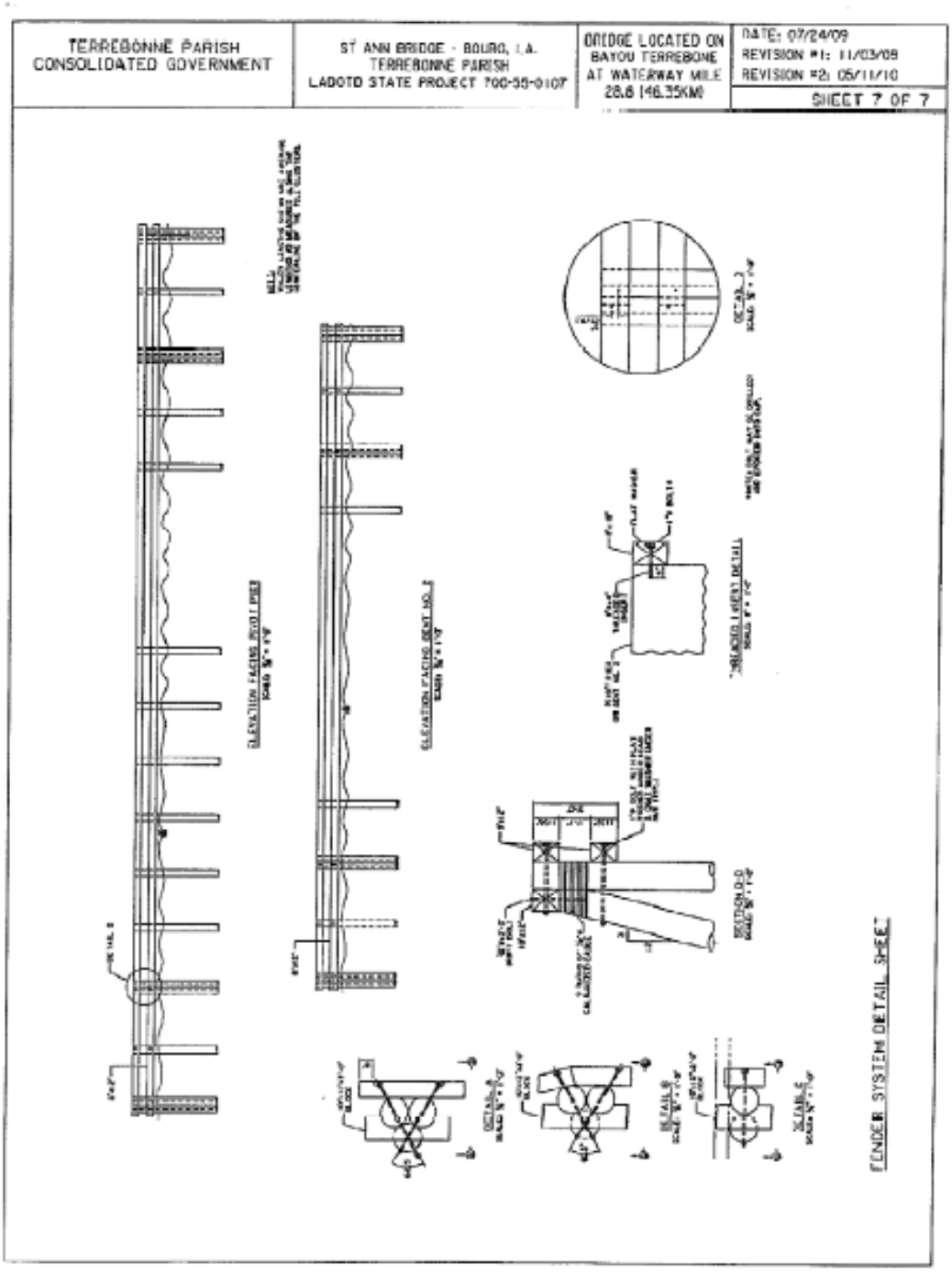
Example 2.9

Bridge Protective System



Example 2.10

Bridge Protective System



C. ENVIRONMENTAL DOCUMENTATION REQUIREMENTS

1. Per the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321) as amended, and its implementing regulations (40 CFR 1500-1508), the following information is required for all application packages:

   a. **Alternatives:** NEPA requires all federal agencies to use a systematic, interdisciplinary, scientific approach when analyzing project impacts under their respective jurisdictions.

      1) These studies must assess: primary and causally related impacts due to the construction of the proposed bridge project, irreversible or irretrievable commitments of resources, comments of federal, state and local government agencies having jurisdiction by law or expertise, and comments of other interested parties or groups. The potential impacts on navigation are considered to be a significant part of the environmental impacts and shall be included in the NEPA review process. When the Coast Guard is the lead federal agency in a project involving a bridge, the NEPA jurisdiction extends to the logical termini on both sides of the bridge or the bridge and road sections having independent utility.

      2) Per 40 CFR 1502.14, the following information is required to document alternatives:

         a) Identification of the alternatives for the proposed project (Alternatives provided should be more than just build and no build. Alternatives should include various bridge types considered.);

         b) Location;

         c) Design;

         d) Probable impacts of each alternative on the quality of the human environment;

         e) Commitments of resources; and

         f) Comments of federal, state and local government agencies, and other interested parties or groups. (For further information, contact the local Coast Guard District.)

   b. **Clean Water Act Coordination:** Section 401 of the Clean Water Act of 1977 (33 U.S.C. 1251), as amended, prohibits federal permitting or licensing agencies from issuing authorizations for construction activities having discharges into navigable waters, until the appropriate water quality certifying agency has issued a water quality certification or waiver procedures have been satisfied.

      1) Water Quality Certification: If applicable to the proposed project;

a) State certifying agency name and point of contact with phone and email address. (e.g., State DEP, Water Management District, State Department of Natural Resources, etc.);

b) Obtain a Water Quality Certification (WQC), waiver or statement that the WQC is not required from the appropriate federal, interstate, or state agency and include in the permit application package, along with a copy of the WQC application, if applicable;

c) If the WQC has not yet been obtained, but has been applied for, include the proof of application in the permit application package;

d) If WQC was waived, provide authority of the waiver; and

e) Specify if the WQC is granted under a Programmatic Agreement (e.g., US Army Corps of Engineers Nationwide Permit (NWP) and the NWP number, etc.).

2) NPDES Permit: List coordination, date(s), enclosures, and EPA comments, if applicable.

3) Safe Drinking Water Act: List coordination, date(s), enclosure(s), and EPA comments, if applicable.

c. **Coastal Zone Management Plan:** The Coastal Zone Management (CZM) Act of 1972 (16 U.S.C. 1451), as amended, and its implementing regulations (15 CFR 930), requires all projects located within the designated coastal zone of a state to be consistent with the state's federally approved CZM plan.

1) Section 307 of that act instructs federal agencies not to take action until they have received written certification from the applicant and the state CZM agency, signifying that the proposed project is consistent with the state's coastal zone management plan.

2) If the State or territory has a federally approved CZM plan, and the project is located in the coastal zone, the following information is required:

a) Written certification and date that the proposed project is consistent with the approved state CZM Plan; and

b) The State CZM Program office concurrence in writing with the certification. (For further information, contact the State Coastal Zone Management Office.)

3) Per the Coastal Barrier Resources Act of 1982: 16 U.S.C. 3501, verify that the proposed project complies with the listed act's guidance (if applicable).

4) List Executive Order 13089 – Coral Reef Protection coordination, and US Coral Reef Task Force, if applicable.

d. **Floodplain:** The base floodplain is the area that would be inundated by a base flood or 100-year flood. The base flood is defined as that flood having a one-percent chance of being exceeded in any given year. Executive Order 11988, Floodplain Management and Protection, requires federal agencies to avoid authorizing projects in the base floodplain unless there is no practical alternative. By their very nature, most bridges are located within the base floodplain. Therefore, the Coast Guard must ensure that the project design includes all measures practicable to minimize floodplain impacts and to protect the natural and beneficial values of the floodplain.

1) State whether the proposed project is located in a base floodplain. If the proposed project is located in a base floodplain, be sure that the application package includes the following information:

a) Describe extent of encroachment in base floodplain to include amount fill;

b) The degree that the action supports development in the floodplain;

c) Any risk to human safety (For further information, contact the regional office of the Federal Emergency Management Agency (FEMA). State the FEMA Flood Insurance Rate Map Community Panel Number and panel dates, if applicable;

d) Cite the 100-year flood elevation and proposed bridge low member (chord, or steel) elevation, within the 100-year floodplain; and

e) Describe the effect of the proposed bridge on drift and flood height.

e. **Historic/Cultural Resources:** All bridge actions require compliance with:

1) The National Historic Preservation Act of 1966, Section 106 (16 U.S.C. 470);

2) Protection and Enhancement of the Cultural Environment (E.O. 11593);

3) Native American Graves Protection and Repatriation Act;

4) Antiquities Act of 1906;

5) Archaeological Resources Protection Act of 1979; and

6) American Indian Religious Freedom Act of 1978.

For further information, contact National Park Service, State Historic Preservation Officer (SHPO), local parks or recreation officials, or local historic preservation organizations. If the proposed project impacts any resources covered under any of the above mentioned Acts or Executive Orders:

1) Briefly describe these properties and discuss the impacts of the proposed project;

2) Briefly describe mitigation efforts to reduce these impacts;

3) Provide a copy of Cultural Resource Assessment Survey, if applicable;

4) If applicable, provide other unique information regarding Section 106 process, such as any correspondences with applicable historic preservation and cultural resources agencies for compliance with the National Historic Preservation Act, Executive Order 11593 – Protection and Enhancement of the Cultural Environment, Native American Graves Protection and Repatriation Act, Antiquities Act of 1906, Archaeological Resources Protection Act of 1979, and American Indian Religious Freedom Act of 1978. Include all correspondence, if applicable; and

5) Include all coordination from Advisory Council on Historic Preservation, National Park Service, SHPO, and other unique and substantive information, if applicable.

f. **Wetlands:** Wetlands are defined as lands either permanently or intermittently covered or saturated with water. Executive Order 11990, Protection of Wetlands, states that no federally approved project shall occur in wetlands unless there is no practical alternative to constructing in the wetlands. As a result, the Coast Guard must analyze alternative locations which avoid taking wetlands. If no alternative locations or designs are practicable, then the Coast Guard must ensure that the project design includes all practicable measures to minimize wetland impacts. If the proposed project is located in or adjacent (within 500 feet) to a wetland, the following information is required:

1) Type and acreage of wetlands taken;

2) A brief description of efforts to mitigate impacts and estimated monetary/functional value, if known or can be reasonably estimated;

3) Date the Wetlands Finding was approved and include a copy of the Wetlands Finding, as applicable; and

4) The amount of acreage saved or increase in wetlands resulting from mitigation efforts.

g. **Fish and Wildlife**

1) Threatened and Endangered Species: The Endangered Species Act of 1973 (16 U.S.C. 1531), as amended, prohibits any activity threatening the continued existence of a federally designated endangered or threatened species. If threatened or endangered species are potentially present in the proposed project area, then the applicant must:

a) Contact the U. S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) and the State Fish and Game Commission representatives for assistance in determining whether the project is located in the range or habitat of endangered or threatened species;

b) If the project is within the range of such species, list species and discuss impacts or lack thereof;

c) Briefly discuss mitigation efforts to reduce the impact;

d) Provide the date and a copy of any biological assessment prepared or approved, if applicable; and

e) List any correspondence and dates of consultations with Federal, state or local agencies to determine compliance with Endangered Species Act of 1973, Fish & Wildlife Coordination Act (FWCA), Marine Mammal Protection Act of 1972, Migratory Bird Treaty Act of 1918, Executive Order 13186 – Responsibility of Federal Agencies to Protect Migratory Birds, Bald and Golden Eagle Protection Act, National Marine Sanctuaries Act, Executive Order 13112 - Invasive Species, and other unique and substantive information, if applicable.

2) Essential Fish Habitat: The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1855), as amended, requires federal agencies which fund, permit, or carry out activities that may adversely impact Essential Fish Habitats (EFH) to consult with the National Marine Fisheries Service (NMFS) regarding potential adverse effects of actions on EFH.

If the applicant knows at the time of application for a bridge permit that the proposed project will impact EFH, the applicant should submit an EFH assessment technical memo.

h. **Noise Levels:** All authorized bridge construction work must comply with the provisions of the Noise Control Act of 1972 (42 U.S.C. 4331), as amended. Under the Noise Control Act, the adverse impacts on existing activities or land uses that may result from the bridge, its related highway sections, or its construction must be considered.

1) Include the following information in the application packet concerning noise levels:

a) The anticipated operational noise levels for the proposed project and mitigation;

b) The anticipated temporary construction noise/vibration levels for the proposed project and mitigation;

c) A description of all possible measures to minimize the noise impact if there is no alternative to avoid the adverse effects;

d) State standards that were used as guides for noise levels for particular activity categories, for example the FHWA's Federal-Aid Highway Program Manual and any state or local ordinances that may be used (For further information, contact the local highway department); and

e) State whether the proposed project is in compliance with the Noise Control Act of 1972 and include EPA comments if applicable.

i. **Clean Air:** All bridge actions must comply with the provisions of the Clean Air Act (CAA) [42 U.S.C. 7506(c)], as amended. Section 176(c) of the CAA, as amended (42 U.S.C. 7401), prevents the Coast Guard from approving any project or from issuing any permit for actions not conforming to the provisions of an approved Federal Implementation Plan (FIP) or to a State Implementation Plan (SIP). The Coast Guard must ensure that projects under its jurisdiction meet the National Ambient Air Quality Standards (NAAQS) before issuing a bridge permit.

1) NAAQS were established pursuant to Section 109 of the CAA and include standards for the following criteria pollutants:

a) Carbon monoxide (CO);

b) Lead (Pb);

c) Nitrogen Oxide (NOx);

d) Ozone (O3);

e) Particulate matter (PM10); and

f) Sulfur dioxide (SO2).

2) The General or Transportation Conformity Rule applies to all proposed bridge projects in an area designated non-attainment or maintenance for any of the six criteria pollutants under the NAAQS.

a) When the General Conformity Rule (40 CFR 93.150) applies to bridge projects requiring a Coast Guard bridge permit, a conformity determination is required for each of the criteria pollutants identified in 40 CFR 93.153, unless the pollutant levels are deemed de minimus for the proposed project during construction and operational scenarios or are exempt under sections such as 40 CFR 93.126.

b) Transportation plans, programs and projects funded or approved under Title 23, United States Code, or the Federal Transit Act require air quality conformity analyses and determinations pursuant to 40 CFR Part 51 and 93, Subpart T (51.390, 93.100), the Transportation Conformity Rule. This determination is normally completed by the FHWA or the FTA, as appropriate, for Title 23 Projects. This rule also applies to projects that are

regionally significant, per 40 CFR 93.121. EPA and/or the local air agency make the determination of regional significance.

c) Both Conformity Rules apply when private funds are used for the project and the project is considered regionally significant.

3) If the proposed bridge project is in an attainment area, the Conformity Rules do not apply. Actions do not require FIP or SIP conformity when neither the General nor Transportation Conformity Rules apply.

4) Certain projects may generate low levels of direct or indirect emissions of the criteria pollutants. They are likely to be below minimum allowable levels and may be exempt from the General Conformity Rule air quality assessment.

5) The Conformity Rules pertain to criteria pollutants only. NEPA documents should contain information on these criteria pollutants, attainment/non attainment status, conformity determinations, as well as, hazardous air pollutants, greenhouse gases and odor compounds.

6) During the bridge permitting process, early coordination and consultation with the state and local air quality agencies is important to determine whether the project is consistent with an approved FIP or SIP governing the ambient air quality at the proposed bridge project location.

j. **Wild and Scenic Rivers:** Section 7 of the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271), as amended, prohibits the issuance of any federal permit for construction of projects having adverse impacts on a river, or a proposed river, with values qualifying it for protection under this act.

1) To determine whether there are any designated or proposed wild, scenic, or recreational rivers located in or within ½ mile radius of the proposed project, the applicant should visit the U. S. National Park Service (NPS) website or contact a NPS representative with jurisdiction over the geographic area of the proposed bridge for assistance in identifying wild and scenic rivers in the project area. If the proposed project will affect a wild and scenic river:

a) List date that waterway was designated as a wild, scenic, and/or recreational river and include the proposed project's impacts;

b) List impacts and mitigation, and cite corresponding materials and dates, provide NPS comment, and provide other unique and substantive information, if applicable;

c) If the river is recreational, list compliance with Section 6(f) - Land and Water Conservation Fund Act of 1965, provide NPS comment, and provide other unique and substantive information, if applicable; and

d) List compliance with Executive Order 13061 - American Heritage Rivers, provide CEQ comment, and provide other unique and substantive information, if applicable.

k. **Residential or Business Displacement:** All bridge actions must comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. 4601 and 4604). The Act applies to projects that involve federal action.

1) When applicable, the following information is required for displaced residences or businesses:

a) List businesses and residences affected by project; and

b) List impacts and mitigation.

2) Bridge actions must also comply with the Executive Order 12898, Federal Actions to address Environmental Justice in Minority Populations and Low-Income Populations. (For further information, contact the local Coast Guard District.)

l. **Prime and Unique Farmland:** The Council on Environmental Quality directed federal agencies authorizing construction projects to evaluate impacts on prime and unique farmlands. Agencies should ensure that such farmlands are not irreversibly converted to uses which eliminate their productivity, scenic or wildlife habitat values, or benefit as open space.

1) If prime and unique farmlands are within the proposed project area, then the applicant must:

a) Contact the U. S. Natural Resources Conservation Service (NRCS) representative with jurisdiction over the geographic area of the proposed project for information regarding prime and unique farmlands under the Farmlands Protection Policy Act of 1981 (7 U.S.C. 4201);

b) State the number of acres of designated prime or unique farmlands being taken by the proposed project; and

c) Contact the Coast Guard District with jurisdiction over the geographic area of the proposed project for further guidance if the project will affect prime and unique farmlands.

m. **Other Environmental Controls/Laws:** list impacts and mitigation in reference to Federal, state, and other environmental controls/laws unique to this case and cite corresponding enclosure(s). Include in this list:

1) Environmental Health and Safety Risks to Children: List compliance with Executive Order 10345 – Environmental Health and Safety Risks to Children, and cite corresponding enclosure(s) and EPA comment, if applicable;

2) Occupation Safety and Health Act of 1970: List compliance with Occupation Safety and Health Act of 1970, and cite corresponding enclosure(s) and OSHA comment, if applicable;

3) Emergency Planning and Community Right-to-Know Act: List compliance with the Emergency Planning and Community Right-to-Know Act, and cite corresponding enclosure(s) and EPA comment, if applicable;

4) Federal Compliance with Right-To-Know Laws & Pollution Prevention Requirements: List compliance with Executive Order 12856 – Federal Compliance with Right-To-Know Laws & Pollution Prevention Requirements, and cite corresponding enclosure(s) and EPA comment, if applicable;

5) Pollution Prevention Act of 1990: List compliance with the Pollution Prevention Act of 1990, and cite corresponding enclosure(s) and EPA comment, if applicable;

6) Resource Conservation and Recovery Act: List compliance with Resource Conservation and Recovery Act, and cite corresponding enclosure(s) and EPA comment, if applicable;

7) Federal Compliance with Pollution Control Standards: List compliance Executive Order 12088 – Federal Compliance with Pollution Control Standards, and cite corresponding enclosure(s) and EPA comment, if applicable;

8) Environmental Effects Abroad of Major Federal Actions: List impacts and mitigation for Executive Order 12144 – Environmental Effects Abroad of Major Federal Actions, and cite corresponding enclosure(s) and EPA comment, if applicable; and/or

9) Comprehensive Environmental Response, Compensation and Liability Act: List compliance with Comprehensive Environmental Response, Compensation and Liability Act, and cite corresponding enclosure(s) and EPA comment, if applicable.

n. **Cumulative and Indirect Impacts:** Briefly discuss potential cumulative or indirect impacts, if any. List impacts and mitigation, cite corresponding materials and dates, and provide other unique and substantive information.

NOTE: For More Information – As stated throughout this guide, your local Coast Guard Bridge Office is available to provide information regarding any questions in the bridge permit application process.

2. **ENVIRONMENTAL CHECKLIST** - The following checklist is provided as a quick reference to ensure the Environmental Section of the permit application package is complete:

- ☐ Environmental documentation, including the following items, if applicable:
  - ☐ Alternatives
  - ☐ Clean Water Act Coordination
    - ☐ Water Quality Certification
    - ☐ CZM Plan
  - ☐ Floodplain
  - ☐ Historic/Cultural Resources
  - ☐ Wetlands
  - ☐ Fish and Wildlife
    - ☐ Threatened and Endangered Species
    - ☐ Essential Fish Habitat
    - ☐ Migratory Bird Act
    - ☐ Marine Mammal Protection Act
  - ☐ Noise Levels
  - ☐ Clean Air
  - ☐ Wild and Scenic Rivers
  - ☐ Residential or Business Displacement
    - ☐ Environmental Justice
  - ☐ Prime and Unique Farmland
  - ☐ Other environmental controls/laws
  - ☐ Cumulative and Indirect Impacts
  - ☐ Navigation

TABLE 2.1 - Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions

UNITED STATES CODE REFERENCES	IMPLEMENTING REGULATIONS
BRIDGE LAWS: *33 U.S.C. 401; 491 – 508; 511 TO 535(I)*	33 CFR PARTS 114 – 118
NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 *42 U.S.C. 4321*	40 CFR 1500 – 1508
CLEAN WATER ACT OF 1977 *33 U.S.C. 1251, 1352 AND 1330)* **SAFE DRINKING WATER ACT** *42 U.S.C. 300(f)* **COASTAL ZONE MANAGEMENT ACT OF 1972** *16 U.S.C. 1451; and 3501 - 3503* **COASTAL BARRIER RESOURCES ACT OF 1982** *16 USC 3501*	40 CFR PART 121 Water Quality Certification 40 CFR PARTS 401-503 and 136 15 CFR PART 930 E.O. 11990, Protection of Wetlands E.O. 11988, Floodplain Management and Protection DOT Order 5620.2 Floodplain Management E.O. 13089, Coral Reef Protection
NATIONAL HISTORIC PRESERVATION ACT OF 1966, SECTION 106 *16 U.S.C. 470* **NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT** *25 U.S.C. 3001* **ARCHAEOLOGICAL RESOURCES PROTECTION ACT OF 1979** *16 U.S.C. 470aa. – 470ll.* **AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978**	36 CFR PARTS 60, 63, and 800 43 CFR 10 E.O. 11593, Protection and Enhancement of the Cultural Environment
FISH AND WILDLIFE COORDINATION ACT *16 U.S.C. 661 - 666* **ENDANGERED SPECIES ACT OF 1973** *16 U.S.C. 1531* **MARINE MAMMAL PROTECTION ACT OF 1972**	50 CFR PART 17 50 CFR PART 402 50 CFR PART 216

Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions	
NATIONAL MARINE SANCTURIES ACT *16 U.S.C. 1431*	15 CFR PART 922
MAGNUSON – STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT *(Essential Fish Habitat)* *16 U.S.C. 1855*	50 CFR PARTS 600.805 - .930 E.O. 13112, Invasive Species
MIGRATORY BIRD TREATY ACT OF 1918 *16 U.S.C. 703 – 712*	50 CFR PART 10 and 21
BALD AND GOLDEN EAGLE PROTECTION ACT	E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds
NOISE CONTROL ACT OF 1972 *42 U.S.C. 4331, 4332, and 4901*	23 CFR PART 772
CLEAN AIR ACT *42 U.S.C. 7401, 7410 and 7506(C)*	40 CFR PARTS 6, 51 and 93
WILD AND SCENIC RIVERS ACT OF1968 *16 U.S.C. 1271 – 1287*	36 CFR PART 297
UNIFORM RELOCATION ASSISSTANCE & REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 *42 U.S.C. 4601 and 4604*	23 CFR PART 740 and 49 CFR PART 24 E.O. 12898 Environmental Justice
PRIME AND UNIQUE FARMLANDS (Farmlands Protection Policy Act of 1981) *7 U.S.C. 4201*	7 CFR PART 658 DOT Order 5610.1C, Procedures for Considering Environmental Impacts
OCCUPATIONAL HEALTH AND SAFETY ACT OF 1970 *29 U.S.C. 651*	29 CFR PART 1910
ENVIRONMENTAL HEALTH AND SAFETY RISKS TO CHILDREN	E.O. 10345, Environmental Health and Risks to Children
EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 *14 U.S.C. 116*	40 CFR PARTS 350-372
FEDERAL COMPLIANCE WITH RIGHT-TO-KNOW LAWS AND POLLUTION PREVENTION REQUIREMENTS	E.O. 12856, Federal Compliance with Right-to-Know Laws & Pollution Prevention Requirements
POLLUTION PREVENTION ACT OF 1990 *42 U.S.C. 13101*	40 CFR PARTS 112 & 300

Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions	
RESOURCE CONSERVATION AND RECOVERY ACT *42 U.S.C. 9601*	40 CFR PARTS 239-282
FEDERAL COMPLIANCE WITH POLLUTION CONTROL STANDARDS	E.O. 12088, Federal Compliance with Pollution Control Standards
ENVIRONMENTAL EFFECTS ABROAD OF MAJOR FEDERAL ACTIONS	E.O. 12144, Environmental Effects Abroad of Major Federal Actions
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 *42 U.S.C. 103*	40 CFR PARTS 300 – 374

BRIDGE PERMIT PROCESSING PROCEDURE

The information provided below outlines the steps involved in processing a permit application from initial pre-application coordination to permit issuance or denial. The responsibility for processing all bridge permit applications is at the District Commander organizational level.

1. Pre-application meetings between the Coast Guard, the applicant and any other interested federal, state or local agencies, to include the NEPA scoping process and consultation.
2. Receipt of the application by the Coast Guard.
3. Coast Guard review process:
   a. Within 30 days of receipt of the application, Coast Guard District sends letter to applicant requesting any additional information, if required;
   b. When application received is considered complete, Coast Guard District prepares public notice, coordination letters and Coast Guard Local Notice to Mariners;
   c. Coast Guard issues public notice, coordination letters and Local Notice to Mariners;
   d. Coast Guard review of comments:
      1) Applicant provided opportunity to respond to comments; and
      2) District holds scoping/coordination meetings and public hearings, if necessary.
   e. Coast Guard findings and recommendations:
      1) Preparation of navigability documentation; and
      2) Preparation of environmental documentation.
4. Final Coast Guard agency action:
   a. Coast Guard District action:
      1) Coast Guard District completes a full evaluation and prepares its Findings of Fact;
      2) Coast Guard District provides recommendation to issue or deny permit; and
      3) Coast Guard District either issues or denies a Coast Guard bridge permit. Bridge Program policy requires more complex permit applications, such as those which are highly controversial or which require an environmental assessment of environmental impact statement, be issued by Coast Guard Headquarters.
   b. Coast Guard Headquarters final agency action:
      1) Review and full evaluation of proposed project (navigation and environmental); and
      2) Permit issuance or denial (as necessary).

GLOSSARY OF BRIDGE TERMS

1. **Abutment:** A substructure composed of stone, concrete, brick or timber supporting the ends of a single span bridge or the extreme end of a multi-span bridge. Usually it also supports the approach embankment.

2. **Advance Approval Waterways:** (Title 33, Code of Federal Regulations, Section 115.70, as amended): The Commandant, U.S. Coast Guard has given advance approval to the location and plans of bridges to be constructed across reaches of waterways navigable-in-law, but not actually navigated other than by logs, log rafts, rowboats, canoes and small motorboats. In such cases, the clearances provided for high water stages will be considered adequate to meet the reasonable needs of navigation. The term “small motorboats” shall be interpreted in light of the things and conditions with which it is associated. The term means rowboats, canoes, and other similar craft with outboard motors. It does not include sailing or cabin cruiser craft. The term is used to distinguish such craft from the definition of “motorboat” in the Motorboat Act of June 25, 1940 (46 U.S.C. 526), which includes craft up to 65 feet in length.

3. **Allision:** For Bridge Program terms, the violent impact of a movable object (vessel) striking a stationary object (bridge or/and bridge protective system).

4. **Alteration:** For Bridge Program terms, the structural changes, replacement, or removal of the bridge.

5. **Alteration of Bridge:** Any repairs, relocation, reconstruction, additions, or modifications to a bridge, which will change any of the information shown on the plans (permit drawings) attached to the Federal Bridge Permit is considered an alteration of the bridge and requires prior approval of the Coast Guard.

6. **“After-the-fact Permit”:** A permit designation for a bridge that is completed.

7. **Amendment:** For Bridge Program terms, a Coast Guard document that amends original bridge permit and is signed by District Commander or Administrator, Bridge Program.

8. **Approval Date:** The date of final agency action when the permit is signed by the approving official, the date the permit is issued. Each page of the permit text and attached plan set is stamped with the approval date and shows the permit number.

9. **APA:** The Administrative Procedure Act (APA) in 1946 established the basic framework of administrative law governing agency action, including rulemaking.

10. **Approval plan set:** Approved plans consecutively numbered as a set, part of the permit.

11. **Approved:** The term ``approved'' means approved by the Commandant unless otherwise stated.
12. **Appurtenance:** For Bridge Program terms, means an attachment or accessory to a bridge or vessel. Appurtenances on a bridge include the bridge protective system, clearance gauges, lighting, etc. An appurtenance on a vessel extends beyond the hull or

superstructure, is not an integral part of the vessel and is not needed for a vessel's piloting, propelling, controlling, or collision avoidance capabilities.

13. **Automated Drawbridge:** For Bridge Program terms, means a drawbridge that is operated by an automated mechanism, not a drawtender. An automated drawbridge is normally kept in the open-to-navigation position and closes when the mechanism is activated.

14. **Axis of the Channel:** An imaginary line representing the usual line of travel by a vessel through a bridge, usually the center marked by an arrangement of two green 360-degree lights suspended just below the outermost edges of the upstream and downstream bottom chords.

15. **Bank Cushion:** The distance or amount of space between a channel bank and a vessel considered necessary to minimize risk of vessel grounding as a result of bank suction.

16. **Bank Suction:** The tendency to force a ship bodily in a transverse direction (sway force) when running close to a channel bank. Usually the ship will tend to move toward a channel bank; thus the force is called bank suction.

17. **Bascule Bridge:** A bridge superstructure on which one or two movable roadway spans are counterbalanced by weights and raised from a horizontal position to almost vertical (open) position for the passage of river traffic.

18. **Base Flood:** A flood having a one percent change of being exceeded in any given year (commonly known as a 100-year flood).

19. **Base Floodplain:** The area adjacent to the waterway, which would be inundated by a base flood.

20. **Beam:** One of three principal dimensions of a ship; the width of a vessel in a transverse direction at its widest point, usually amidships.

21. **Bend:** A channel turn that is designed as a continuous curve with a given radius; usually provided for large channel changes (or turn angles) in direction. However, for bridge permit purposes, any bends in the waterway within one-half mile of the proposed bridge are documented regardless of the radius of the curve or size of the channel.

22. **Bent:** A supporting unit of a trestle or a viaduct type structure. A "bent" consists of two or more columns or column-like members connected at their topmost ends by a cap, strut, or other member holding them in their correct position.

23. **Body:** A series of paragraphs in the bridge permit document which identify the applicant, the work proposed and the work approved. The body precedes the conditions.
24. **Bow:** The forward part of a ship or vessel; generally the forward 10 percent of the length of the ship hull where most of the hull curvature (flare) is located.

25. **Bow and Stern Thrusters:** Independent propulsion units integrated into the hull of a vessel or attached to barges being transported that help control the direction and alignment of a vessel or tow.

26. **Bowboat:** A small towboat or "tug" engaged to help a large tow to maneuver, usually by pushing or pulling on the head or "bow" of the tow.

27. **Bridge:** Any structure over, on, or in navigable waters of the United States used for transporting persons, vehicles, commodities or other physical matter and providing for the passage or flow of water through or under the structure.

    a. The term "bridge" includes all integral bridge elements: approaches and appurtenances, regardless of the materials used, whether natural or manufactured, or the construction methodology.

    b. Types of "bridges" include: highway bridges, railroad bridges, pedestrian bridges, aqueducts, aerial tramways and conveyors, overhead pipelines, and similar structures of the same function with their approaches, bridge protective systems, foundations, and appurtenances (integral features).

    c. The definition of "bridges" does not include: aerial power transmission lines, submerged pipelines, and other similar structures and works unless they are integral features of a bridge used in its construction, maintenance, operation or removal; or they are affixed to the bridge and affect the bridge clearances.

28. **Bridge Permit:** An authorization issued by the Coast Guard, approving the location and plans of a bridge across a navigable waterway of the United States. A "bridge permit" includes the approved bridge project plans.

    a. A "bridge permit" expresses the assent of the Federal Government as far as the project affects the public right of navigation, giving due consideration to the impacts on the quality of the human environment.

    b. A "bridge permit" does not give any property rights, in either real estate or materials, or authorize any injury to private property or invasion of private rights. It does not remove the necessity of obtaining the assent of other agencies with cognizance of any aspect of the location, construction, or maintenance of a bridge.

    c. Permits for completed bridges remain valid indefinitely, unless otherwise conditioned or amended, as long as the bridge remains in place, continues to be used for transportation purposes, and conforms to the original approved plans.

29. **Bridge Protective System:** Protective structures provided on a bridge to fully or partially absorb the vessel collision impact forces, or redirect the aberrant vessel away from the pier. The protective structures may be located directly on the bridge such as bridge pier fenders, or independent of the bridge such as dolphins. General types of bridge protective systems

include fenders, pile clusters, dolphins, sheer booms, sheer fences, island protection systems, and floating protection systems.

30. **Canalized Channel:** A channel consisting of one or more canals; an excavated watercourse, usually artificially cut through land area, without any existing channel, designed for navigation. Canal edges or borders usually extend above the water surface with visible banks and have important ship and bank interaction effects.

31. **Categorically Excluded Federal Action:** Certain Bridge Permit actions under consideration by the Coast Guard are categorically excluded from meeting the requirements of the National Environmental Policy Act (NEPA) of 1969. Projects and permit actions classified as categorical exclusions are not subject to Section 102(2)(C) of NEPA. Although not subject to NEPA, categorically excluded actions are reviewed for compliance with the other environmental protection laws, and may require preparation of an environmental assessment.

32. **Causeway:** A raised road of solid fill across water or marshland, constructed so that the water or marshland is on both sides of the road and there are no openings for navigation or water transfer.
    a. A raised road with any openings is a “bridge” with solid fill approaches, not a “causeway.”
    b. Congressional approval is required before the Coast Guard may approve a “causeway.”

33. **Channel:** The deeper, navigable portion of a waterway, usually marked and designated on the appropriate navigation chart with known widths and depths.

34. **Channel Limit:** The location of the authorized channel as designated on project design documents and depicted on hydrographic survey sheets; often provided as a channel width on navigation charts.

35. **Clearance Gauges:** A series of markings painted on or attached to bridge piers to indicate the vertical clearance available beneath the navigation span between “low steel” and various water levels. They may also be authorized electronic displays serving the same purpose.

36. **Closed:** For Bridge Program terms, means that the drawspan is not in the open position. Vessels, which can pass beneath the “closed” drawspan, are free to proceed.

37. **Coast Guard District Commander or District Commander:** The term "Coast Guard District Commander" or "District Commander" means an officer of the Coast Guard designated as such by the Commandant to command all Coast Guard activities within his or her district.

38. **Cofferdam:** An open box-like structure surrounding the area where an abutment, pier, retaining wall, or other structure will be placed. Water is removed from the enclosure so the excavation for preparing a foundation and the abutment, pier, or other construction may be done in the open air.
39. **Commencement of Construction:** The date when work actually starts at the proposed bridge site, its approaches, or ancillary works is the commencement of construction.

40. **Completion of Construction** (as defined in completion reports): The Coast Guard considers construction completed when removal of falsework and removal of existing bridge is completed, the construction contract is completed, required navigation lights and clearance gauges have been installed, and the bridge has been opened to traffic or placed in operation.

41. **Completion Report:** CG-4599 Form documenting official pertinent facts of a bridge.

42. **Concave Bank:** The bank of a meandering stream curved like the inner surface of a ball.

43. **Condition:** A specific provision placed in the permit. Conditions are numbered as a set of permit provisions to which the permittee is required to adhere as part of Coast Guard approval.

44. **Controllability:** A subjective term used to describe the apparent adequacy of response to ship control by the mariner; the inherent quality of a ship to stay on track.

45. **Crosscurrent:** The magnitude of the tidal or river current component perpendicular to the channel centerline or intended ship track.

46. **Current:** A generic term referring to the horizontal movement of water caused by various forces such as river currents or tidal currents.

47. **Datum Plane:** Reference to a specified tidal datum, usually in reference to Mean Sea Level (MSL).

48. **Deep Draft Waterway:** Navigation channels (usually excavated as by dredging) provided for the movement of self-propelled vessels with drafts greater than 15 feet.

49. **Demolition Plan:** The start-to-finish plan expected to be followed to remove a bridge or any portion of a bridge. The demolition plan must include text and drawings (plans) submitted to the Coast Guard District Commander (Bridge Office) for review and coordination prior to commencement of work. It should include a step-by-step description of the work and the expected times for commencing and completing each step.

50. **Descending Bank:** A generic term referring to the banks along a river with a flowing current; often referred to as left or right descending banks as seen by an observer looking downstream.

51. **Design-Build:** Allows for a bridge permit to be issued prior to final bridge design selection. Bridge permits can accommodate the design-build concept by allowing the bridge owner to obtain bids and select a design-build contractor while assuring the Coast Guard will get a set of final design plans which provide navigational clearances approved by the permit. Conceptual plans must be submitted with the permit application which clearly defines the navigational clearances to be provided at final design and with respect to channels located at the bridge location. There must be no deviation between conceptual design plans and final design plans which would materially affect navigation.

52. **Design Vessel (Ship):** A real or hypothetical ship with dimensions of the largest vessel that a navigation project is designed to accommodate. The design vessel size for critical bridges shall be determined such that the annual number of vessel passages that involved vessels larger than the design vessel amounts to a maximum of 50 vessel passages, or five percent of the total number of merchant vessels per year which could impact the bridge element, whichever is smaller. The design vessel size for regular bridges shall be determined such that the annual number of vessel passages that involve vessels larger than the design vessel amounts to a maximum of 200 vessel passages or ten percent of the total number of merchant vessels per year which could impact the bridge element, whichever is smaller.

53. **Deviation:** For Bridge Program terms, means a District Commander's action authorizing a drawbridge owner to temporarily not comply with the drawbridge opening requirements in 33 CFR Part 117. A temporary change to the operating schedule of a drawbridge lasting less than or equal to 180 days; bridge owners must receive permission before commencement of a deviation.

54. **Docket:** A docket contains the administrative record of a rulemaking. The docket file includes each regulatory document published in the rulemaking, all public comments received on the notice of proposed rulemaking (NPRM), documentation of all public contacts resulting in comments on the merits of the NPRM, the evaluations required by the Department of Homeland Security, Executive Orders, or statute, an environmental assessment, and any relevant studies and materials considered in the rulemaking. The docket must be available for public inspection and copying during normal business hours.

55. **Docket Number:** Each rulemaking must have its own docket number. All Coast Guard rulemakings are assigned unique docket numbers provided via the Federal Docket Management System (FDMS). Docket numbers are obtained through the Coast Guard Office of Regulations in this format: Example USCG-2011-1234

56. **Dolphin:** A stand-alone unit placed upstream or downstream of a substructure element to protect portions of bridge exposed to possible damage from impacts by floating debris or vessels. Smaller dolphins are comprised of a cluster of piles drawn together with wire rope while larger dolphins are typically fixed together using concrete capping or a structural steel frame.

57. **Disclaimer Condition:** A standard condition in the permit alerting the permittee to his possible obligations to other agencies.

58. **Drawbridge:** For Bridge Program terms, means a bridge with an operational span that is intended to be opened for the passage of waterway traffic.
59. **Drawbridge Operation:** Drawbridges must open on signal unless otherwise specified in 33 CFR Part 117 subpart B.
60. **Drawbridge Types:**

    a. **Double-leaf Bascule**: The drawspan opens in an arc from the horizontal to the near vertical from both sides of the bridge.

b. **Pontoon**: A floating bridge, using "pontoons" (i.e., flat-bottomed boats or portable floats) for support that has a movable span for allowing vessels to pass through.
c. **Retractable**: The drawspan is drawn horizontally back into the bridge.
d. **Single-leaf Bascule**: The drawspan opens in an arc from the horizontal to the near vertical from one side of the bridge.
e. **Swing**: The drawspan opens by rotating horizontally on a central axis (i.e., a pivot pier) so it is in line with the channel.
f. **Vertical Lift**: The drawspan opens by being lifted vertically.

61. **Drawspan:** For Bridge Program terms, means the operational span of a drawbridge.

62. **Drift:** A bank or pile of flotsam/jetsam heaped up by currents of water resulting in damming.

63. **Ebb Current:** The tidal current away from shore and toward the sea; usually downstream in a tidal stream and associated with a decrease in tide height.

64. **Elevation (geographical):** Height above Mean Sea Level (MSL).

65. **Encroachment:** Bridge construction or modification where any part of a bridge structure or approach roadway is located in the floodplain. An “encroachment” does not exist in replacement projects when only the piers, pilings, or pile bents are in the floodplain.

66. **Environmental Assessment:** An analysis of the environmental impacts of a proposed activity that identifies the type, degree of effect, and probability of occurrence respecting primary, secondary and cumulative potential impacts (positive and negative) of that action, including alternative courses of action and if possible mitigative measures to minimize adverse impacts. Environmental assessments in support of application for bridge permits should be prepared following the guidelines in the Bridge Permit Application Guide.

67. **Erection Scheme:** The start-to-finish plan expected to be followed to erect a bridge or any portion of a bridge. The erection scheme should accompany falsework plans submitted to the Coast Guard District Commander for approval prior to commencement of work. It should include a step-by-step description of the work and the expected times for commencing and completing each step.
68. **Existing Bridge:** Bridge currently located at the site.

69. **Existing to-be-modified bridge:** The structure at the bridge site which is to be altered under the proposed permit action.

70. **Existing to-be-replaced bridge:** The structure at the bridge site which is to be removed as part of the new bridge construction.
71. **Extension of Time:** For Bridge Program terms, a Coast Guard document that grants additional time to commence and/or complete a bridge project.
72. **Falsework:** Any temporary structure that facilitates the construction, modification, or removal of a bridge. Types of “falsework” include: work platforms, temporary bents, erection towers, and cofferdams.

73. **FDMS:** Federal Docket Management System (FDMS) offers a single computerized, easily accessible location where all documents associated with a rulemaking are open to the public.

74. **Federal Register:** The Federal Register is a Government Printing Office document that contains a daily listing of all federal agency rulemakings and notices. Publication in the Federal Register provides constructive legal notice.

75. **Fender:** A protective structure that usually consists of timber, rubber, steel or concrete elements placed on or around a pier or abutment face as a buffer to fully or partially protect portions of bridge exposed to possible damages from impacts by floating debris or vessels. A fender may be supported by the pier it is intended to protect, or it may be independently supported.

76. **Final Rule:** The basic rulemaking document used to make a permanent change to the Code of Federal Regulations.

77. **Fixed Bridge:** For Bridge Program terms, a stationary structure across a waterway.

78. **Flanking:** The maneuvering action of a downbound tow (towboat and barges) sometimes used when approaching bridge, locks, or sharp bends. The current only is used for headway and the engines and rudders are used to maintain the proper angle until just before the lead barge reaches the bridge span, at which time the engines are backed and the head of the tow is swung gently in line with the opening. Then power is applied to drive through the opening. This is the safest way a heavy tow can make tight passages. Flanking often increases the transit time through a bridge.

79. **Floating Protection System:** It is usually consisted of cable net system suspended across the waterway or floating pontoon anchored in front of the pier to engage and capture the bow of an aberrant vessel. Usually this system is considered only for extremely deep water situations where other protective systems are not practicable.

80. **Flood Current:** The tidal current toward shore or up a tidal stream; usually associated with an increase in tide height.

81. **FOIA:** Freedom of Information Act (FOIA). Enacted in 1966, FOIA generally provides that any person has a right, enforceable in court, to obtain access to federal agency records (exceptions apply).

82. **Guide Clearances:** Guide clearances have been established for bridges over certain waterways. Guide clearances are the minimum acceptable clearances for bridges over a waterway or a reach of a waterway.

83. **High Water (HW):** The maximum height reached by a rising tide.

84. **Intended Strike:** Incidence where a vessel calls a bridge and requests and receives permission to land on the bridge or its protection system. Such strikes are used to “guide” or

"assist" a vessel or barge through a narrow bridge opening. Since these "Intended Strikes" do little to no damage, they do not meet the level of a reportable marine casualty.

85. **Island Protection System:** A protective island built around a bridge pier; typically a sand or quarry-run rock core protected by outer layers of heavy rock riprap for wave, current, and ice protection. The island geometry is developed to stop an aberrant vessel from hitting a pier by forcing it to run ground.

86. **Lead Federal Agency (LFA):** The federal agency with the primary responsibility to prepare the NEPA document.

87. **Local Notice to Mariners:** A weekly notice issued by each Coast Guard District to distribute important information affecting navigational safety within the district. The "Local Notice to Mariners" (LNM) reports changes to and deficiencies in aids to navigation maintained by and under the authority of the Coast Guard.

88. **Low Member (Low Steel, Low Chord):** That point on a bridge which is the lowest part of the superstructure.

89. **Lowerable:** For Bridge Program terms, means a non-structural vessel appurtenance that is or can be made flexible, hinged, collapsible, or telescopic so that it can be mechanically or manually lowered.

90. **Maneuverability:** The ability of a ship to change course or to move off track while underway by the application of steering and engine controllers.

91. **Maintenance of Traffic (MOT) Plan:** A MOT plan developed in support of a transportation project; may include highway, rail and waterway traffic alternatives to be employed while building a road or bridge project.

92. **Margin of Channel:** The outside limits of a channel when it does not extend from pier to pier because of the depth of the water or structural impediments. The margin(s) of channel beneath a bridge span are usually marked with red lights suspended just below the outermost edge of the bridge span structure.

93. **Marine Information for Safety and Law Enforcement (MISLE):** An electronic data system established in December 2001 into which all pertinent information and activities associated with each bridge is located. MISLE is also utilized to capture activities for many other Coast Guard missions.

94. **Marine Navigational Lighting:** The lights maintained on a bridge for the protection of marine navigation.

95. **Mean High Water (MHW):** The average of the height of the diurnal high waters at a particular location measured over a lunar cycle of 19 years.

96. **Mean Low Water (MLW):** The average of the height of diurnal low waters at a location measured over a lunar cycle of 19 years.

97. **Mean Sea Level (MSL):** The average height of the sea surface for all tide stages over a 19-year period. The datum for topographic maps and most land elevation references.

98. **Meandering Stream:** A stream that follows a turning and winding course.

99. **Milepoint:** Bridge location by reference to milepoint on the waterway, usually calculated from the mouth of the waterway and expressed in statute miles (not nautical miles) and metric equivalent in kilometers. See also item j, Figure 4-1, Form CG-4599, Bridge Completion Report instructions.

100. **Modification:** A bridge is modified when the configuration of the existing bridge is changed by adding new parts or replacing some parts of the existing bridge, and some parts of the existing bridge remain intact.

101. **Modifications to the Bridge:** Deviations from the approved bridge location or plans that require a new or amended bridge permit. This requirement applies to "modifications" required both before and after the bridge is constructed.

102. **Movable Bridge: A structur**e across a waterway that through manual or electronic means can 'open' deck to allow for passage of vessels requiring greater vertical clearance than in the closed position.

103. **Navigability Determination:** For Bridge Program terms, means an examination of the attributes and location of a waterway to determine whether it is navigable (generally through the district legal officer).

104. **Nautical Mile:** A distance of 6,076 feet, or 1.85197 kilometers.

105. **Navigable Waters of the United States:** For Bridge Program purposes: waters subject to tidal influence, waterways with a history of substantial commercial navigation, waterways that presently have commercial navigation, or waterways susceptible to commercial development.

106. **Navigation:** The theory and practice of operating vessels, usually commercial vessels, in water bodies, charting the course for a ship movement.

107. **Navigation Traffic Pattern:** The use of established channels by vessels in one-way and two-way traffic patterns, including, but not limited to, the use of traffic separation schemes.

108. **Navigational Lighting:** The lights installed and maintained on a bridge by the owner as private aids to navigation. If lighting is required, the Coast Guard District Commander must approve "navigational lighting" prior to the construction of a bridge.

109. **New Permanent Bridge:** A newly constructed bridge which is to remain at a site where a temporary bridge is constructed as part of the bridge project.

110. **Nonstructural:** For Bridge Program terms, means that the item is not rigidly fixed to the vessel and can be relocated or altered**.**

111. **Notices to Mariners:** Coast Guard District Offices issue Notices to Mariners as circumstances prescribe. These notices include information about changes or deficiencies in aids to navigation, deficiencies in bridge navigation lights, notices of work in progress in the waterway and cautionary information. Written notices, called Local Notices to Mariners, are published weekly or as circumstances require. Broadcast notices are made when immediate dissemination of marine information is necessary for the safety of navigation. Broadcast Notices to Mariners are broadcast over Coast Guard radio stations. Broadcast notices are later confirmed by repetition in published Local Notices to Mariners when the original subject is still valid.

112. **Not Essential to Navigation:** For Bridge Program terms, means that a nonstructural vessel appurtenance, when in the lowered position, would not adversely affect the vessel's piloting, propulsion, control, or collision-avoidance capabilities.

113. **Normal Pool Elevation:** Height in feet above sea level at which a section of the river is normally maintained behind a dam.

114. **NPRM:** Notice of Proposed Rulemaking (NPRM) is usually the first Federal Register publication in the rulemaking process. This document provides public notice that a change is being proposed and it requests public comment on the proposal. The NPRM does not change the operating schedule of the bridge or the regulations contained in the CFR.

115. **Open River:** Any river or reach of a river having no obstructions, such as dams.

116. **Open River Conditions:** Certain rivers are impounded by movable dams with wickets. When the river stage is high enough for traffic to clear the dam, the wickets are lowered for the passage of river traffic over the dam bypassing the lock and the river is said to be in "open river conditions."

117. **Order to Alter (OTA):** Authorization signed by the Commandant if a bridge is eligible for funding under the Truman-Hobbs (T-H) Act. The OTA specifies the navigational clearance alterations required to meet the reasonable needs of navigation. The OTA amends the 'Bridge Permit' document. If the bridge in question is not eligible for T-H funding, the OTA, signed by the Administrator, Bridge Program, will specify the navigational clearance alterations required to meet the reasonable needs of navigation and will prescribe a reasonable time to accomplish them.

118. **Pier:** A structure composed of stone, concrete, brick, steel, or wood built in shaft or block-like form to support the ends of the spans of a multi-span superstructure at an intermediate location between its abutments.

119. **Pile:** A rod or shaft-like linear member of timber, steel, concrete, or composite materials driven into the earth to carry structure loads through weak soil strata to soil strata capable of supporting such loads.

120. **Pivot Point:** The point about which a ship actually turns. The pivot point varies as the ship is maneuvered and depends on all forces and movements acting on the ship.

121. **Preamble:** A series of paragraphs in the bridge permit document which states its purpose and authorizations, and introductory information. The preamble precedes the permit body.

122. **Proposed Bridge:** The permitted bridge as identified in a permit action. Use "proposed permanent bridge" when a temporary bridge is included in the permit action.

123. **Protection Cell:** A steel sheet-piling cell, usually round and filled with stone, sand, or concrete, that is part of the bridge protective system. The cell is strategically located to protect a bridge.

124. **Public Notice:** Coast Guard District published document advising the public of proposed bridge projects, environmental or regulatory actions. Mailing lists of public notices are distributed by watershed and geographic locations.

125. **Public Vessel:** For Bridge Program terms, means a vessel that is owned and operated by the United States Government or a government of a foreign country and is not engaged in commercial service, as defined in 46 U.S.C. 2101.

126. **Riprap:** Brick bats, stones, concrete blocks, or other protective covering material deposited on river and stream beds and banks, or lake, tidal or other shores to prevent erosion and scour.

127. **RIN:** Regulatory Identification Number (RIN). Generally each individual rule needs a unique RIN. However, because the Coast Guard publishes so many of the same types of rules every year, GSA and OMB's Office of Information and Regulatory Affairs have designated certain categories of rules as "routine and frequent" and assigned permanent RINs for them. The permanent RIN for 33 CFR Part 117 (Bridges) is 1625-AA09.

128. **Remotely Operated drawbridge:** For Bridge Program terms, means a drawbridge that is operated by remote control from a location away from the drawbridge.

129. **Removable Span Bridge:** For Bridge Program terms, means a bridge that requires the complete removal of a span by means other than machinery installed on the bridge to open the bridge to navigation.

130. **Shallow-draft Waterways:** Navigation channels provided for the movement of self- propelled vessels with drafts of 15 feet or less.

131. **Shallow Water:** A descriptive term to characterize navigation in waterways where the depth of water is shallow enough to cause significant ship hydrodynamic responses.

132. **Sheerboom:** A longitudinal structural elements generally positioned at a small angle to the direction of steam flow, placed to protect portions of bridge exposed to possible damage from impacts by floating debris or vessels. Sheer booms are generally positioned and anchored to accommodate fluctuations in water level and deflect the debris or vessel past the bridge substructure.

133. **Sheerfence:** Usually a timber fence that extends from a protective system element to or past a bridge pier to protect portions of bridge exposed to possible damage from impacts by floating debris or vessels and facilitates navigation through a span.

134. **Special Condition:** A provision in a bridge permit stating the permittee's obligations relating to a certain issue not normally existing in every bridge permit.

135. **Standard condition:** A provision in a permit stating the permittee's obligation to a situation common to all bridge projects with only minor adjustments.

136. **Standard Datums**: (For datums not listed, please contact the local Coast Guard District for assistance.)

    a. **High Water (HW):** The maximum height reached by a rising tide.
    b. **International Great Lakes Datum (IGLD):** Height, in feet, above Low Water Datum (LWD) at a location in the Great Lakes basin.
    c. **Mean High Water (MHW):** The average of the height of diurnal high waters at a particular location measured over a period of 19 years.
    d. **Mean Low Water (MLW):** The average of the height of diurnal low waters at a location measured over a period of 19 years.
    e. **Mean Sea Level (MSL):** The average height of the surface of the sea for all stages of the tide over a 19-year period. The datum for topographic maps and most land elevation references.
    f. **Normal Pool Elevation:** Height in feet above sea level at which a section of the river is to be maintained behind a dam (impoundment design elevation).
    g. **Two-Percent Flowline:** The statistical water surface elevation not expected to be exceeded more than two percent of the time at a particular location.

137. **Statute Mile:** A distance of 5,280 feet, equivalent to 1.60935 kilometers.

138. **Superstructure:** The structure of a bridge above the piers.

139. **Swept Path:** A single trace of the path of the extremities of the vessel platform as it makes its track while it transits the waterway. Account is taken of drift, drift angle and yaw.

140. **Temporary Bridge:** A temporary bridge is one constructed for a specific temporary purpose and is required to be removed by a certain time. There are temporary bridges but no temporary permits.

141. **Template:** A series of guides available to assist district bridge offices in drafting deviations and regulations. Bridge templates contain specific terminology used by the Bridge Program to ensure that all necessary sections of the rule have been addressed; available in Coast Guard intranet.

142. **Tidal Currents:** The reversing horizontal movement of water associated with the rise and fall of the tide caused by astronomical tide-producing forces.

143. **Tow (Noun):** An assembly of barges or other floating vessels being towed (pushed or pulled) by a self-propelled vessel (towboat) and under the charge of the vessel (towboat). A “tow” may be a towboat and one or more barges.

144. **Tow (Verb):** On the inland waterway system the verb “tow” usually means pushing barges.

145. **Towboat:** On the inland waterway system the word “towboat” usually means a self- propelled vessel designed to push barges. Small towboats are often called “switchboats.”

146. **Track:** A trace or trajectory of the path of a vessel as it makes its transit of a waterway. A vessel’s line of travel or course made good.

147. **Trench Channel:** Dredged or open-type restricted channels, intermediate between canals and shallow water, with submerged banks on each side, usually provided with range markers and channel edge buoys or beacons.

148. **Untended:** For Bridge Program terms, means that there is no drawtender at the drawbridge.

149. **Unused Bridge:** For Bridge Program terms, means any bridge no longer used for a land transportation purpose.

150. **Vertical Lift Bridge:** For Bridge Program terms, the drawspan opens by being lifted vertically.

151. **Vessel:** A general term referring to all types of self-propelled watercraft including ships, towboats, barges, tugs, yachts, and small boats.

152. **Yaw:** A nautical term to describe when a vessel swerves sideways or off course momentarily or temporarily.

153. **100-Year Flood:** The water surface elevation with a one-percent chance of being exceeded in any given year, commonly known as a base flood.

APPENDIX D – IDEM GUIDANCE

401 NWP – NATIONWIDE PERMIT - CONDITIONS

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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April 5, 2012

VIA CERTIFIED MAIL 91 7190 0005 2710 0020 7012

Mr. James Townsend
U.S. Army Corps of Engineers
Louisville District
P.O. Box 59
Louisville, Kentucky 40201-0059

Dear Mr. Townsend:

Re: Section 401 Water Quality Certification
Project: 2012 Reissuance of Nationwide Permits

The Indiana Department of Environmental Management (IDEM) has reviewed the notice in the Federal Register dated February 21, 2012, which begins the 60 day Clean Water Act Section 401 Water Quality Certification process for the reissuance of Nationwide Permits. We have also reviewed your correspondence dated February 24, 2012, stating the notice in the Federal Register is the Corps of Engineers application for Water Quality Certification under Section 401 of the Clean Water Act for the Nationwide Permits that will result in a discharge in the State of Indiana. The Nationwide Permits and general conditions became effective on March 19, 2012. The U.S. Army Corps of Engineers has reissued certain Nationwide Permits (NWPs), modified several existing NWPs, and introduced 2 new NWPs.

The Louisville, Detroit, and Chicago Districts of the U.S. Army Corps of Engineers developed the existing Indiana Regional General Permit No. 1 (RGP #1) to replace several NWPs. As a consequence of this action, the following NWPs have been, and will continue to be suspended for the State of Indiana and do not require Section 401 Water Quality Certification:

NWP 7 Outfall Structures and Associated Intake Structures
NWP 11 Temporary Recreational Structures
NWP 13 Bank Stabilization
NWP 14 Linear Transportation Projects
NWP 15 U.S. Coast Guard Approved Bridges
NWP 18 Minor Discharges
NWP 19 Minor Dredging
NWP 25 Structural Discharges
NWP 29 Residential Developments
NWP 36 Boat Ramps

NWP 39 Commercial and Institutional Developments
NWP 40 Agricultural Activities
NWP 41 Reshaping Existing Drainage Ditches
NWP 42 Recreational Facilities
NWP 43 Stormwater Management Facilities
NWP 44 Mining Activities

It is the judgment of this office that NWPs 1, 2, 3, 4, 5, 6, 9, 10, 12, 21, 22, 24, 27, 28, 30, 33, 37, 45, 46, 49, 50, 51, 52 will comply with applicable provisions of state law (including 327 IAC 2) and Sections 301, 302, 303, 306, and 307 of the Clean Water Act subject to the conditions set forth in this Certification. IDEM hereby grants Section 401 Water Quality Certification for these NWPs with the following General Conditions and Nationwide Permit Specific conditions:

GENERAL CONDITIONS

The following conditions shall apply to any permittee whose project qualifies under any NWP approved by this certification. All activities that do not meet these conditions require an individual Water Quality Certification from the IDEM and are not authorized under this WQC.

1) The permittee shall deposit any dredged material in a contained upland disposal area to prevent sediment runoff to any waterbody.

2) This WQC does not authorize the discharge of pollutants, principally sediment, associated with storm water. These discharges are regulated through the storm water general permit program and are applicable to land disturbing activities of one or more acres in size or are part of a larger common plan. Currently, this Water Quality Certification incorporates the conditions at 327 IAC 15-5-7(b)(1), 7(b)(5), and 7(b)(8) through 7(b)(20) as general conditions for all construction sites regardless of size. Compliance with the general permits at 327 IAC 15-5 or 327 IAC 15-6 (commonly referred to as a Rule 5 and Rule 6 respectively) is sufficient to demonstrate compliance with this condition of the WQC.

3) The permittee shall allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials to conduct the following activities:

   a) enter upon the permittee's property;
   b) have access to and copy at reasonable times any records that must be kept under the conditions of these permits or this certification;
   c) inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation site; and
   d) sample or monitor any discharge of pollutants or any mitigation site.

4) This granting of WQC does not relieve the recipient of the certification from the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person.

5) This WQC does not:

   a) authorize impacts or activities outside the scope of this certification;
   b) authorize any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
   c) convey any property rights of any sort, or any exclusive privileges;
   d) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
   e) authorize changes in the plan design detailed in the application.

6) This WQC does not authorize point source discharges of pollutants other than clean fill[1] and uncontaminated dredged material.

7) This WQC does not authorize activities on or in any of the State's waters that have been designated as salmonid waters (cold water streams), tributaries of salmonid waters within a two river mile reach upstream from the confluence with the salmonid water, or Outstanding State and/or National Resource Waters *(see Attachment #1)*.

8) This WQC does not authorize activities on or in any critical wetland or critical special aquatic sites (*see Attachment #2*).

9) The permittee must demonstrate, via letter from the Indiana Department of Natural Resources, Division of Nature Preserves, that no state endangered, threatened, or rare species are documented on a permanent or seasonal basis within a 1/2-mile radius of the proposed project site by the Indiana Natural Heritage Data Center, or must provide documentation from the Indiana Department of Natural Resources that states that the activities proposed will not constitute a violation of state laws protecting these species.

10) This WQC does not authorize activities associated with the establishment of a mitigation bank.

11) This WQC allows the use of multiple NWPs on the same project as long as the cumulative effect for the entire project is less than the specified impact thresholds identified in the approved NWP or as specified in this WQC. If a project exceeds

[1] Clean fill, for the purpose of this Water Quality Certification, means uncontaminated rocks, bricks, concrete without rebar road demolition waste materials other than asphalt, or earthen fill.

the specified impact thresholds, the activities are not authorized by this WQC and an individual WQC is required. The IDEM may certify several federal permits or licenses under one individual WQC.

12) In order to verify that a given project will qualify under the terms and conditions of this certification, IDEM may require additional information from the applicant. If the applicant fails to provide any information requested by IDEM, then the project is not authorized.

13) All stream pump-around activities must be discharged in a manner that does not cause erosion at the outlet. Cofferdam dewatering activities must use filter bags, upland sediment basins/traps, or a combination of other appropriate sediment control measures to minimize the discharge of sediment-laden water into waters of the U.S. All sediment control measures must be installed and maintained in good working order. For stream pump-around activities, the in-stream material used to construct the dam must be constructed of non sediment producing sources. Examples include sand bags and sheet pile walls.

14) Ensure all discharges of riprap into streams are flush with the upstream and downstream bank and stream channel elevations and grades.

15) The activity would not result in a permanent secondary effect to waters of the U.S. (e.g., dredging, excavation, damming, creation of in-channel ponds) that when combined with the primary effect exceeds the area and length thresholds specified above.

16) Notification to IDEM is required for any project authorized by a NWP for which the District Engineer has issued a waiver for intermittent and stream impacts greater than 300 feet. IDEM will review the notification within 30 days to determine whether or not IDEM will elevate the NWP to an Individual Water Quality Certification or authorize it as submitted.

17) The department, for any project that qualifies under the terms and conditions of this certification, may choose to require an individual Water Quality Certification if it determines that the project would have more than minimal impacts to water quality, either viewed individually or collectively with other projects that may affect the same waterbody affected by the proposed project.

NATIONWIDE PERMIT #3, MAINTENANCE, SPECIFIC CONDITIONS

The following conditions apply to NWP #3. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) For activities involving the replacement of a stream encapsulation:
   a) The replacement will not reduce the cross-sectional area under bank full elevation;
   b) The replacement will not increase the length of the total encapsulation to over 150 feet;
   c) The replacement will have either the same slope as the existing encapsulation, or will more closely match the slope of the stream[2] immediately upstream and downstream;
   d) The type of encapsulation is the same as the existing type of encapsulation;
   e) Bank stabilization and channel bottom stabilization do not exceed either one bank full width upstream and downstream of the replacement encapsulation or ten linear feet whichever is greater;
   f) Any channel bottom stabilization is flush with the existing grade of the stream bottom; and
   g) Existing encapsulations over 150 feet may be replaced under this NWP as long as the structure length does not change more than 20 feet upstream and 20 feet downstream.

2) For activities undertaken by the Indiana Department of Transportation (INDOT) that involve the placement of thermal plastic liners or other liner types into existing structures.
   a) The activity is reviewed and approved by the INDOT Office of Hydraulics;
   b) The liner size must be the largest size approved by the INDOT Office of Hydraulics; and
   c) Riprap scour protection is flush with the upstream and downstream bank and stream channel elevations and grades.

3) For all other maintenance activities:
   a) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
   b) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation or the slope of a stream;

[2] Stream, for the purpose of this Water Quality Certification, means waters of the U.S. that have a defined bed and bank and convey water ephemerally, intermittently or perennially. This term includes natural streams, relocated streams, channelized streams, artificial channels, encapsulated channels and ditches.

c) The activity will permanently affect 300 linear feet or less of stream channel, streambank, or lake shoreline;

d) In the case of bank stabilization activities, the permittee demonstrates that the bank or shoreline in question is unstable;

e) The activity will not result in a permanent secondary effect to waters of the United States (e.g., dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above; and

f) Any channel bottom stabilization is installed flush with the existing stream grade.

NATIONWIDE PERMIT # 12, UTILITY LINE ACTIVITIES, SPECIFIC CONDITIONS

The following conditions apply to NWP #12. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) The permittee notifies the IDEM at least 30 days prior to the activity unless the only regulated activity is the construction of a stream crossing where the crossing is constructed using directional boring or other related technique that does not involve the placement of fill materials within a regulated waterbody. Other forms of crossings, such as trenching, pipeline armoring, etc., require notification to IDEM;

2) Notification to the IDEM is required for any pipeline project that involves crossing wetlands and will involve restoring the wetlands to pre-construction grade, contours, and vegetative conditions. A copy of the restoration plan must be submitted with the Notification Form;

3) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;

4) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;

5) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline;

6) In the case of bank stabilization activities or new lake and reservoir shoreline stabilization activities, the permittee demonstrates that the bank or shoreline in question is unstable;

7) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above;

8) The activity will not result in a permanent cumulative conversion of forested wetlands or scrub shrub wetlands greater than one-tenth (0.1) of an acre;

9) For in-stream utility line stabilization activities, the use of articulated or other matting is only authorized if the utility is only partially (<10%) exposed. Fully exposed utility stabilization activities are not authorized by this WQC; and

10) If a utility line is placed beneath the bed of a river or stream, the following conditions must be met:

    a) Cover of at least three (3) feet, measured perpendicularly to the line, between the lowest point of the stream bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials; and

    b) Cover of at least one (1) foot, measured perpendicularly to the line, between the lowest point of the bed and the top of the utility or its encasement, whichever is higher, if the bed is composed of consolidated materials.

NATIONWIDE PERMIT #27, AQUATIC HABITAT RESTORATION, ESTABLISHMENT, AND ENHANCEMENT ACITIVITIES, SPECIFIC CONDITIONS

This WQC authorizes activities under NWP #27 when they have a minimal effect on water quality, are a component of a restoration program previously approved by the IDEM, or involve certain activities undertaken by the Abandoned Mine Land (AML) Program administered by the IDNR. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) An activity qualifies for this NWP because it will have a minimal effect if:

    a) The activity will permanently affect one-tenth (0.1) of an acre or less of Waters of the United States;

    b) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and

    c) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.

2) An activity qualifies for this NWP because it is a component of a restoration program previously approved by the IDEM if:

a) The activity occurs within the same sub-watershed[3] as a water that the IDEM has identified as impaired; and

b) The IDEM identified the activity as beneficial for reducing or eliminating the impairment in a Total Maximum Daily Load (TMDL), an IDEM approved Watershed Plan or a Memorandum of Agreement or Memorandum of Understanding with the agency sponsoring the restoration or enhancement activities.

3) An activity qualifies for this NWP because it is a qualifying AML project if:

a) The activity is undertaken by the IDNR, Division of Reclamation, AML Program;

b) The activity is designed to improve water quality in an impaired water of the United States where the source of impairment is acid mine contamination;

c) The activity facilitates the treatment of acid mine drainage or covers a source of impairment[4]; and

d) The activity does not result in the discharge of dredged or fill material into any wetland, stream, or other Waters of the United States that are unimpaired by acid mine drainage unless that discharge qualifies under specific condition #1 above.

4) The permittee notifies the IDEM at least 30 days prior to the activity for all projects which require the installation or removal of any water control structures, dikes, berms, or accumulated sediment. IDEM will review the notification within 30 days to determine whether or not IDEM will elevate the NWP to an Individual Water Quality Certification or authorize it as submitted.

NATIONWIDE PERMIT #37, EMERGENCY WATERSHED PROTECTION AND REHABILITATION, SPECIFIC CONDITIONS

The following conditions apply to NWP #37. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) The activity is consistent with a Memorandum of Agreement or Memorandum of Understanding between the IDEM and the Natural Resources Conservation Service, the United States Forest Service, the Department of the Interior, the Farm Services Agency, or the IDNR. This agreement must be in place prior to the emergency

[3] For the purpose of this WQC, sub-watershed means the U.S. Geological Survey's 14-digit Hydrologic Unit Code (HUC).

[4] AML projects that qualify generally consist of damming or relocating waters carrying acid mine contamination to divert flow into constructed treatment systems.

situation and must ensure that the emergency activities authorized under NWP #37 will not cause or contribute to permanent water quality degradation or impairment.

NATIONWIDE PERMIT #46, DISCHARGES TO DITCHES, SPECIFIC CONDITIONS

The following condition applies to NWP #46. All activities that do not meet this condition require an individual WQC from the IDEM and are not authorized under this WQC.

1) The activity will not permanently change the velocity, cross sectional area under the bank full elevation or the slope of the ditch.

NATIONWIDE PERMIT #51, LAND-BASED RENEWABLE ENERGY GENERATION FACILITIES, SPECIFIC CONDITIONS

The following conditions apply to NWP 51. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) The permittee notifies the IDEM at least 30 days prior to the activity;
2) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
3) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;
4) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and
5) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.

NATIONWIDE PERMIT #52, WATER-BASED RENEWABLE ENERGY GENERATION PILOT PROJECTS, SPECIFIC CONDITIONS

The following conditions apply to NWP 52. All activities that do not meet these conditions require an individual WQC from the IDEM and are not authorized under this WQC.

1) The permittee notifies the IDEM at least 30 days prior to the activity;

2) The activity will permanently affect one-tenth (0.1) of an acre or less of waters of the United States;
3) The activity will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation of the slope of a stream;
4) The activity will permanently affect 300 linear feet or less of streambank or lake shoreline; and
5) The activity will not result in a permanent secondary effect to waters of the United States (e.g. dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds specified above.

Any changes in the language or scope of any NWP not detailed in the Federal Register notice dated February 21, 2012, are not authorized by this certification. Additionally, the Indiana Department of Environmental Management retains the right to review, modify, terminate, replace or amend this certification as needed to ensure that the federal permits or licenses certified do not result in violations of Indiana's Water Quality Standards or other applicable state laws. In the absence of another action by IDEM that would alter the termination date of this certification, this certification shall expire with the expiration of the federal permits it certifies.

Summary of Section 401 Water Quality Certification Decisions and Conditions for Nationwide Permits.

NWP	Activity	Decision	Conditions
1	Aids to Navigation	Approve	General
2	Structures in Artificial Channels	Approve	General
3	Maintenance	Approve	General & Specific
4	Fish and Wildlife Harvesting, Enhancement, and Attraction Devices	Approve	General
5	Scientific Measurement Devices	Approve	General
6	Survey Activities	Approve	General
8	Oil and Gas Structures on Outer Continental Shelf	Deny	N/A
9	Structures in Fleeting and Anchorage Areas	Approve	General
10	Mooring Buoys	Approve	General
12	Utility Line Activities	Approve	General & Specific
16	Return Water from Upland Contained Disposal Areas	Deny	N/A
17	Hydropower Projects	Deny	N/A
20	Response Operations for Oil and Hazardous Substances	Deny	N/A
21	Surface Coal Mining Activities	Approve	General
22	Removal of Vessels	Approve	General
23	Approved Categorical Exclusions	Deny	N/A
24	Indian Tribe or State Administered Section 404 Program	Approve	General

26	Reserved	N/A	N/A
27	Aquatic Habitat Restoration, Establishment, and Enhancement Activities	Approve	General & Specific
28	Modifications to Existing Marina	Approve	General
30	Moist Soil Management for Wildlife	Approve	General
31	Maintenance of Existing Flood Control Facilities	Deny	N/A
32	Completed Enforcement Actions	Deny	N/A
33	Temporary Construction, Access, and Dewatering	Approve	General
34	Cranberry Production Activities	Deny	N/A
35	Maintenance Dredging of Existing Basins	Deny	N/A
37	Emergency Watershed Protection and Rehabilitation	Approve	General & Specific
38	Cleanup of Hazardous and Toxic Waste	Deny	N/A
45	Repair of Uplands Damaged by Discrete Events	Approve	General
46	Discharges to Ditches	Approve	General & Specific
47	Reserved	N/A	N/A
48	Existing Commercial Shellfish Aquaculture Activities	Deny	N/A
49	Coal Remining Activities	Approve	General
50	Underground Coal Mining Activities	Approve	General
51	Land-Based Renewable Energy Generation Facilities	Approve	General & Specific
52	Water-Based Renewable Energy Generation Pilot Projects	Approve	General & Specific

This certification does not relieve the recipient of the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from IDEM or any other agency or person. You may wish to contact the Indiana Department of Natural Resources at 317-232-4160 (toll free at 877-928-3755) concerning the possible requirement of natural freshwater lake or floodway permits. In addition, you may wish to contact IDEM's Storm Water Permits program at 317-233-1864 concerning the possible need for a 327 IAC 15-5 (Rule 5) permit if you plan to disturb greater than one (1) acre of land.

This certification does not:

(1) authorize impacts or activities outside the scope of this certification;
(2) authorize any injury to persons or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
(3) convey any property rights of any sort, or any exclusive privileges;
(4) preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
(5) authorize changes in the plan design detailed in the application.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in enforcement action against the recipient of the certification. If an enforcement action is pursued, the recipient of the certification could be assessed up to $25,000 per day in civil penalties. The recipient of the certification may also be

subject to criminal liability if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

This certification is effective eighteen (18) days from the mailing of this notice unless a petition for review and a petition for stay of effectiveness are filed within this 18-day period. If a petition for review and a petition for stay of effectiveness are filed within this period, any part of the certification within the scope of the petition for stay is stayed for fifteen (15) days, unless or until an Environmental Law Judge further stays the certification in whole or in part.

This decision may be appealed in accordance with IC 4-21.5, the Administrative Orders and Procedures Act. The steps that must be followed to qualify for review are:

1. You must petition for review in writing that states facts demonstrating that you are either the person to whom this decision is directed, a person who is aggrieved or adversely affected by the decision, or a person entitled to review under any law.

2. You must file the petition for review with the Office of Environmental Adjudication (OEA) at the following address:

   Office of Environmental Adjudication
   100 North Senate Avenue
   IGCN Room N501
   Indianapolis, IN 46204

3. You must file the petition within eighteen (18) days of the mailing date of this decision. If the eighteenth day falls on a Saturday, Sunday, legal holiday, or other day that the OEA offices are closed during regular business hours, you may file the petition the next day that the OEA offices are open during regular business hours. The petition is deemed filed on the earliest of the following dates: the date it is personally delivered to OEA; the date that the envelope containing the petition is postmarked if it is mailed by United States mail; or, the date it is shown to have been deposited with a private carrier on the private carrier's receipt, if sent by private carrier.

Identifying the certification, decision, or other order for which you seek review by number, name of the applicant, location, or date of this notice will expedite review of the petition.

Note that if a petition for review is granted pursuant to IC 4-21.5-3-7, the petitioner will, and any other person may, obtain notice of any prehearing conferences, preliminary hearings, hearings, stays, and any orders disposing of the proceedings by requesting copies of such notices from OEA.

If you have procedural questions regarding filing a petition for review you may contact the Office of Environmental Adjudication at 317-232-8591.

If you have any questions about this certification, please contact Mr. Jason Randolph, Project Manager, at 317-233-0467, or you may contact the Office of Water Quality through the IDEM Environmental Helpline (1-800-451-6027).

Sincerely,

Mary E. Hollingsworth, Branch Chief
Surface Water, Operations & Enforcement Branch
Office of Water Quality

cc: Norma Condra, USACE-Louisville
Kerrie Kuhne, USACE-Detroit
Paul Leffler, USACE-Chicago
Mike Litwin, USFWS
Liz McCloskey, USFWS
Peter Swenson, USEPA Region 5
Matt Buffington, IDNR
Nathan Saxe, INDOT

Attachment 1: Indiana Waters Designated for Special Protection

Designated Salmonid Waters:
[327 IAC 2-1.5-5(a)(3)]

- Trail Creek and its tributaries downstream to Lake Michigan, LaPorte County
- East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch, Porter and LaPorte Counties
- Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County
- Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County
- The Galena River and its tributaries, LaPorte County
- The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County
- The Indiana portion of the open waters of Lake Michigan
- Those waters designated by the Indiana Department of Natural Resources (IDNR) for put-and-take trout fishing[5]

Waterbodies which have been designated all or partially as Outstanding State Resource Waters: [327 IAC 2-1-2(3) and 327 IAC 2-1.5-19(b)]

- The Blue River in Washington, Crawford, and Harrison Counties, from river mile 57.0 to river mile 11.5
- The North Fork of Wildcat Creek in Carroll and Tippecanoe Counties, from river mile 43.11 to river mile 4.82
- The South Fork of Wildcat Creek in Tippecanoe County, from river mile 10.21 to river mile 0.00
- Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to its confluence with the St. Joseph River
- The Indiana portion of the open waters of Lake Michigan
- All waters incorporated in the Indiana Dunes National Lakeshore.

Waterbodies which have been designated all or partially as Exceptional Use Streams[6]: [listed in: 327 IAC 2-1-11(b) and IC 13-11-2-72.5 (before its repeal)]

- Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River
- Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek
- Fall Creek in Warren County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek
- Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek
- Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve
- Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River

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[5] Available on the internet at: http://www.in.gov/dnr/fishwild/files/fw-Trout_Stocking_Locations.pdf
[6] As per IC 13-18-3-2(u): "Each exceptional use water (as defined in IC 13-11-2-72.5, before its repeal) designated by the board before June 1, 2009, becomes an outstanding state resource water on June 1, 2009, by operation of law."

- Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek
- The small tributary to Bear Creek in Fountain County within the Portland Arch Nature Preserve which enters Bear Creek at the sharpest bend and has formed the small natural bridge called Portland Arch
- Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River
- The South Fork of Blue River in Washington County from the Horner's Chapel Road bridge downstream to its confluence with Blue River.
- Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.

Attachment 2: Critical Wetlands and Critical Special Aquatic Sites

In the interest of maintaining consistency with the State Regulated (Isolated) Wetland program established at 327 IAC 17, IDEM defines Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B):

- **Acid bog:** Acid bog is an acidic wetland of kettle holes in glacial terrain. Bogs can be graminoid (Carex spp. and Sphagnum spp.) or low shrub (Chamaedaphne calyculata and Betula pumila). The graminoid bog can be a floating, quaking mat. The soils in acid bogs are saturated and acidic peat. Bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. When a sphagnum mat floats, it rises and falls with the water table. Acid bogs can be found in northern Indiana.
- **Acid seep:** Acid seep is a bog-like wetland typically found in unglaciated hill regions. This community is a small groundwater-fed wetland located primarily in upland terrain. A thin layer of muck may lie over a mineral substrate. The soil reaction is acid. This seep community is characterized by flowing water during at least part of the year. Acid seeps are located primarily in southern Indiana.
- **Circumneutral bog:** Circumneutral bog is a bog-like wetland that receives groundwater. Circumneutral bogs can be a mosaic of tall shrub bog, graminoid bog, and other communities. The graminoid bog often occurs on a quaking or floating mat. Although a few bogs occur in unglaciated regions, most are found in glacial ice-block depressions. The soils in circumneutral bogs are usually peat, or other low nutrient organic substrates, which are saturated and circumneutral to slightly acid. Circumneutral bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. Circumneutral bogs are usually found in northern Indiana.
- **Circumneutral seep:** The circumneutral seep (or seep-spring) is a groundwater-fed wetland on organic soil. It is primarily herbaceous. Species typically include marsh marigold (Caltha palustris) and skunk cabbage (Symplocarpus foetidus) with a scattered tree canopy. Circumneutral seep is typically situated on or near the base of a slope. The soil is typically circumneutral muck. This seep community is characterized by slowly flowing water during at least part of the year. Circumneutral seeps can be found scattered throughout Indiana.
- **Cypress swamp:** Bald cypress swamps are seasonally to permanently inundated wetlands found in depressions and sloughs of large bottomlands associated with the Wabash/Ohio River system. Poorly to very poorly drained soils characterize this environment. Bald cypress (Taxodium distichum) is present, and green ash (Fraxinus pennsylvanica), silver maple (Acer saccharinum), and overcup oak (Quercus lyrata) are also usually present. This community is restricted to extreme southwest Indiana.
- **Dune and swale:** Dune and swale is an ecological system consisting of a mixture of upland (black oak sand savanna, dry to mesic sand prairie) and wetland (pond, panne, sedge meadow, marsh, wet prairie) natural communities. These communities occur in long, narrow, linear complexes, with the dry communities occupying sand ridges, and the wet communities occurring in the intervening swales. Black oak (Quercus velutina), paper birch

(Betula papyrifera), jack pine (Pinus banksiana), and prairie vegetation typically occur on the ridges, and sedges, reeds, and marsh/aquatic vegetation line are found in the swales. Water levels are directly influenced by ground water, with the interdunal swales controlled largely by lateral flow through porous beach ridges. Dune and swale is restricted to extreme northwest Indiana, near Lake Michigan.

- **Fen:** Fen is a calcareous, groundwater-fed wetland. Fens are often a mosaic of grassy areas, sedgy areas, graminoid-shrubby cinquefoil, and tall shrub areas. The extent of the tall shrub component of fens may be determined by fire frequency and/or soil moisture. Drying of the soil increases the growth of shrubs. Fens typically occur in the vicinity of glacial moraines. Fens typically have a muck or peat substrate. The water level fluctuates seasonally and is fed by groundwater. Fens can be found in central and northern Indiana.
- **Forested fen:** Forested fen is a tree-dominated wetland on organic soil which receives groundwater. Forested fens are often a mosaic of treed areas, tall shrub areas, and herbaceous areas. A tall shrub layer is often well developed in forested fens. Indicative species typically include tamarack (Larix laricina), black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), poison sumac (Toxicodendron vernix), and red maple (Acer rubrum). Forested fens occur in wet lowlands, where moraines meet outwash features or depressions. Forested fens have saturated, poorly to very poorly drained soils that are often muck, but some seasonal flooding can occur in forested fens that are especially level. This community is a late successional stage of fen or circumneutral bog. Forested fens occur in northern Indiana.
- **Forested swamp:** Forested swamp is a seasonally inundated to intermittently exposed wetland of large river bottoms. Forested swamps do not receive direct flow from river flooding except under exceptional circumstances. Forested swamps occur in depressions, sloughs and large bottomlands, typically dominated by tree species such as swamp cottonwood (Populus heterophylla), green ash (Fraxinus pennsylvanica), and swamp white oak (Quercus bicolor). In northern Indiana important tree species include black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), and red maple (Acer rubrum). Poorly to very poorly drained and aerated soils characterize the swamp environment. Soils usually are mineral not muck or peat. This community type is found throughout Indiana.
- **Marl beach:** Marl beach is a fen-like community located on the marly muck shorelines of lakes. Marl precipitate is evident. A thin layer of water is present in spring, but dries down in summer. Draw-down of a lake creates additional area for this community to develop on. Marl beaches can be found in extreme northern Indiana, primarily in the northeast.
- **Muck flat:** Muck flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a peat substrate. The muck flats can float on the water surface, but during high water periods are usually inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Muck flats are found in northern Indiana.
- **Panne:** Panne is a groundwater fed herbaceous wetland occupying interdunal swales near Lake Michigan. Pannes are located on the lee side of the first or second line of dunes from

the lakeshore. The soil is wet, calcareous sand. Pannes are located in counties bordering Lake Michigan.

- **Sand flat:** Sand flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a sand substrate. During high water periods sand flats at the margins of lakes or ponds are inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Sand flats occur in northern Indiana, and in the Plainville Sand Section of southwest Indiana.
- **Sedge meadow:** Sedge meadow is an herbaceous wetland typically dominated by graminoid species such as flat sedge (Cyperus spp.), spike rush (Eleocharis spp.), rushes (Juncus spp.) and sedges (Carex spp.). Sedge meadow is an herbaceous wetland of stream margins and river floodplains, and lake margins or upland depressions. Streamside sedge meadows are frequently flooded in the spring and early summer. Sedge meadows of lake margins and depressions often contain standing water during wet months and after heavy rains; during dry periods, the water level is at or just below the substrate. Sedge meadow usually occupies the ground between a marsh and the uplands, or a shrub swamp or wet forest. Periodic high water can kill trees and shrubs invading sedge meadows. Sedge meadows can be found in the northern half of the state.
- **Shrub swamp:** Shrub swamp is a shrub-dominated wetland that is seasonally inundated to intermittently exposed. This community occurs in depressions and the substrate in either mineral soils or muck, as opposed to peat which is characteristic of bogs. Shrub swamp is characterized by non-flowing or very slowly flowing water with levels that fluctuate seasonally. Shrub swamps are persistent, though considered successional. Two opportunistic native shrubs, sandbar willow (Salix exigua) and gray dogwood (Cornus racemosa), by themselves, are not indicative of shrub swamps. This community type is found throughout Indiana.
- **Sinkhole pond:** Sinkhole ponds are water-containing depressions in karst topography. Sinkhole ponds are found in the Mitchell Karst Plain in south-central Indiana.
- **Sinkhole swamp:** Sinkhole swamps are depressions in karst topography dominated by tree or shrub species. Sinkhole swamps are found in the Mitchell Karst Plain in south-central Indiana.
- **Wet floodplain forest:** Wet floodplain forest is a broadleaf deciduous forest of river floodplains. Wet floodplain forests occur in depressions and flats on narrow to wide floodplains and also on recently exposed substrates that are frequently flooded. Wet floodplain forests are frequently flooded and may have standing water seasonally to permanently present. Wet floodplain forests occur statewide.
- **Wet prairie:** Wet prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet prairies occur in deep swales and the substrate ranges from very deep black mineral soils (which are high in organic matter) to muck. Ponding in spring lasts for several weeks prior to drainage. Wet

prairies commonly occur in the Grand Prairie Natural Region, the Tipton Till Plain and the Bluffton Till Plain, with a few examples found in the Northern Lakes Natural Region.

- **Wet sand prairie:** Wet sand prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet lowland prairies occur in deep swales and the substrate is sand, sometimes mixed with muck. Flooding is a regular springtime occurrence in wet sand prairie and may last several weeks. This community occurs in a mosaic with marsh and other wetlands, and with upland prairies and sand savannas. Fire was frequent occurrence, but more common in the fall when waters had receded. This community occurs in northwest Indiana and in the Plainsville Sands area.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

December 12, 2014

VIA CERTIFIED MAIL 91 7190 0005 2710 0036 9499

Ms. Lee Anne Devine
U.S. Army Corps of Engineers
Louisville District
P.O. Box 59
Louisville, KY 40201-0059

Dear Ms. Devine:

Re: Section 401 Water Quality Certification
Project: 2014 Reissuance of Regional
General Permit No. 1 for Indiana

The Office of Water Quality has reviewed the Joint Public Notice/Application for Section 401 Water Quality Certification (WQC) dated September 11, 2014. According to the application, the U.S. Army Corps of Engineers (USACE) proposes to reissue the Regional General Permit No. 1 (RGP #1) for the state of Indiana. The RGP #1 is intended to authorize categories of activities that are similar in nature and cause minimal individual and cumulative impacts to the aquatic environment.

The Louisville, Detroit, and Chicago Districts of the USACE developed the existing Indiana RGP to replace several Nationwide Permits (NWPs). As a consequence of this action, the following NWPs have been suspended and will not be in effect for the state of Indiana. The USACE proposes to suspend the following:

- NWP 13 Bank Stabilization
- NWP 14 Linear Transportation Projects
- NWP 18 Minor Discharges
- NWP 29 Residential Developments
- NWP 36 Boat Ramps
- NWP 39 Commercial and Institutional Developments
- NWP 40 Agricultural Activities
- NWP 41 Reshaping Existing Drainage Ditches
- NWP 42 Recreational Facilities
- NWP 43 Storm Water Management Facilities
- NWP 44 Mining Activities

Since these NWPs are suspended in Indiana, no Section 401 WQC decision is required.

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Based on available information, it is the judgment of this office that the RGP #1 will comply with the applicable provisions of 327 IAC 2 and Sections 301, 302, 303, 306, and 307 of the Clean Water Act if the recipient of the certification complies with the conditions set forth below. Therefore, subject to the following terms and conditions, the Indiana Department of Environmental Management (IDEM) hereby grants Section 401 WQC for the RGP #1. Any changes in the language or scope of the RGP #1 not detailed in the Joint Public Notice/Application, or as modified by the conditions below, are not authorized by this certification.

APPLICANT RESPONSIBILITIES:

(1) An applicant seeking coverage under this Section 401 WQC must:

(a) Demonstrate, via letter from the Indiana Department of Natural Resources (IDNR), Division of Nature Preserves, that no state endangered, threatened, or rare species are documented on a permanent or seasonal basis within ½-mile radius of the proposed project site by the Indiana Natural Heritage Data Center, or provide documentation from the IDNR that states that the activities proposed will not constitute a violation of state laws protecting these species.

(b) Submit a complete Section 401 WQC Regional General Permit Notification Form (most current State Form 51937) at least 30 days prior to the activity. The notification must at a minimum provide applicant information, project location, existing project site conditions, project impacts, and a proposed plan. Failure to submit all required information will result in the project being considered out-of-scope and not authorized.

(c) Provide any additional information required by the IDEM to verify that a given project will qualify under the terms and conditions of this Section 401 WQC. If the applicant fails to provide any requested information, the project is not authorized.

(d) Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials, to enter upon the applicant's property to inspect the project site during the review of a proposed project.

(e) Notify IDEM of any project for which the USACE District Engineer has issued a waiver for the linear feet of stream impact in order to authorize the project under the RGP. IDEM will review the notification within 30 days to determine whether or not IDEM will also waive the linear feet of stream impact limit.

PERMITEE RESPONSIBILITIES

(1) Permitees qualifying for impacts under this Section 401 WQC must:

(a) Allow the commissioner or an authorized representative of the commissioner (including an authorized contractor), upon the presentation of credentials to:

1. Enter upon the permittee's property.
2. Access and copy at reasonable times any records that must be kept under the conditions of this certification.
3. Inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation wetland site.
4. Sample or monitor any discharge of pollutants or any mitigation site.

(b) Obtain any other permits or authorizations required for this project or related activities from IDEM or any other local, state, or federal agency or person. Land disturbing activities of one (1) acre or more or disturbances of less than an acre that are part of a larger common plan will require permit coverage for discharges associated with construction site run-off. Additional information should be obtained through the IDEM Storm Water Program at 317-233-1864. In addition, the Indiana Department of Natural Resources (317-232-4160 or toll free at 877-928-3755) should be contacted concerning the possible requirement of natural freshwater lake or floodway permits.

(c) Deposit any dredged material in a contained upland disposal area and implement appropriate measures to prevent sediment run-off to any waterbody.

(d) Install run-off and sediment control measures prior to any land disturbance to manage storm water and to minimize sediment from leaving the project site or entering a waterbody. All operations must phase project activities to minimize the impact of sediment to the receiving waterbody(ies). Erosion and sediment control measures shall be implemented using an appropriate order of construction (sequencing) relative to the land disturbing activities. Wetlands and/or water bodies that are adjacent to land disturbing activities must be protected with appropriate sediment control measures. As work progresses, all areas void of protective cover shall be re-vegetated or stabilized as described in the plan. Areas that are to be re-vegetated must utilize mulch that is anchored or, under more severe conditions, the erosion control blankets. Erosion control blankets or other armament shall be used for all areas associated with concentrated flow. Standards and specifications for storm water management, including erosion and sediment control can be obtained in the Indiana Storm Water Quality Manual or similar guidance documents.

TERMS OF THIS SECTION 401 WQC:

(1) IDEM, for any project that qualifies under the terms and conditions of this certification, may choose to require an individual Section 401 WQC if the agency determines that the project would have more than minimal impacts to water quality, either viewed individually or collectively with other projects that may impact the same waterbody affected by the proposed project.

(2) IDEM retains the right to review, modify, terminate, replace or amend this certification as needed to ensure that the federal permits or licenses certified do not result in violations of Indiana's Water Quality Standards or other applicable state laws. In the absence of another action by IDEM that would alter the termination

date of this certification, this certification shall expire with the expiration of the federal permit it certifies.

SPECIFIC CONDITIONS OF THIS SECTION 401 WQC

(1) This Section 401 WQC does not :

(a) Convey any property rights of any sort, or any exclusive privileges.
(b) Preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities.

(2) This Section 401 WQC does not authorize:

(a) Impacts or activities that do not meet the terms and conditions of this Section 401 WQC. Such activities require an individual Section 401 WQC from the IDEM.
(b) Any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations.
(c) Changes to the original plan design detailed in the notification.
(d) The discharge of pollutants, principally sediment, associated with storm water run-off.
(e) Point source discharges of pollutants other than clean fill[1] and uncontaminated dredged material.
(f) Activities on or in any of the State's waters that have been designated as salmonid waters (cold water streams), tributaries of salmonid waters within a two river mile reach upstream from the confluence with the salmonid water, or Outstanding State and/or National Resource waters (see Attachment #1).
(g) Activities on or in any critical wetland or critical special aquatic sites (see Attachment #2).
(h) Activities associated with the establishment of a mitigation bank.

(3) This Section 401 WQC authorizes:

(a) Activities that will permanently impact one-tenth (0.10) of an acre or less of waters of the U.S.
(b) Activities that will have a cumulative permanent impact of 300 linear feet or less of waters of the U.S.
(c) Activities that will not permanently change the sinuosity, flow path, velocity, cross-sectional area under the Ordinary High Water Mark (OHWM), or the slope of a stream[2] except as specified in Conditions (3)(d), (3)(g), and (3)(i).

[1] Clean fill, for purposes of this WQC, means uncontaminated rocks, bricks, concrete without rebar, road demolition waste materials other than asphalt, or earthen material.
[2] Stream, for the purposes of this WQC, means waters of the U.S. that have a defined bed and bank and convey water ephemerally, intermittently or perennially. This term includes natural streams, relocated streams, channelized streams, artificial channels, encapsulated channels and ditches.

(d) Minimal changes to stream morphology, including minor relocations, which result in a net benefit to the aquatic ecosystem. Stream relocations may be authorized, provided the activity:
   1. Is associated with the installation of a stream crossing or replacement of an existing crossing, and results in a net benefit to the stream morphology.
   2. Does not reduce the cross-sectional area under the OHWM.
   3. Is accompanied by an acceptable restoration/stabilization plan.
   4. Does not accelerate stream instability. Examples of instability include, but are not limited to, stream bank erosion, channel enlargement, channel incision, degradation, aggradation, meander migration (down-valley and lateral accretion), avulsion and base-level shifts.

(e) Stream bank stabilization activities or new lake and reservoir shoreline stabilization that will permanently affect 300 linear feet or less and the applicant demonstrates that the bank or shoreline in question is unstable. Natural shoreline stabilization methods are required where there is no pre-existing seawall or other shoreline hard armament on a lake or reservoir. Natural shoreline stabilization methods include bank stabilization practices that benefit the aquatic environment by incorporating organic materials to produce functional structures, provide wildlife habitat, and provide areas for revegetation.

(f) Placement of riprap or other bank stabilization materials provided the design and installation is flush with the upstream and downstream bank and stream channel/lake bed elevations and grades.

(g) New bridge piers, piles, shafts or other support structures and their associated scour protection measures that do not significantly reduce the cross-sectional area of the stream and are located below the OHWM and outside the low flow channel of the stream.

(h) Activities that do not result in a permanent secondary effect to waters of the U.S. Potential secondary effects include, but are not limited to damming, loss of hydrology, and creation of in-channel ponds.

(i) New permanent stream encapsulations that are for the purpose of constructing a crossing must:
   1. Allow the passage of aquatic organisms in the waterbody.
   2. Not exceed 150 cumulative linear feet of encapsulation.
   3. Have a cross-sectional area at least twenty percent (20%) larger than the area under the OHWM of the stream immediately upstream and downstream of the encapsulation in the form of a single opening.
   4. Have a streambed slope within the encapsulation that matches the slope of the bed both immediately upstream and downstream.
   5. Not create or accelerate stream instability. Examples of stream instability include, but are not limited to head cutting, stream bank erosion, channel enlargement, channel incision, degradation, aggradation, meander migration, (down-valley and lateral accretion), avulsion and base-level shifts.

6. Either have no bottom (e.g., three sided culvert) or are embedded (sumped)[3] into the stream channel based on the following structure sizes and substrate types:
   a. Stream bed of sand
      - Structure < four (4) feet wide: Six (6) inch sump
      - Structure four (4) feet wide to 12 feet wide: 12 inch sump
      - Structure 12 feet to 20 feet wide: 18 inch sump
   b. Stream bed of other soil or unconsolidated till [4]
      - Structure < four (4) feet wide: Three (3) inch sump
      - Structure four (4) feet wide to 12 feet wide: Six (6) inch sump
      - Structure 12 feet to 20 feet wide: 12 inch sump
   c. Stream bed of bedrock or consolidated till [5]
      - Inside elevation of the structure bottom shall be a minimum of three (3) inches below the surface of the bedrock or consolidated till
7. Meet the following requirements when installed in perennial streams with OHWM width of 12 feet or greater. These encapsulations must:
   a. Be sumped to a greater depth if needed for the design of the streambed inside the encapsulation.
   b. Have a width equal to or wider than the existing OHWM.
   c. Have a natural stream bottom. If the stream bottom will be disturbed during construction (e.g. four sided box culverts or pipe culverts or because of footer work for three sided culverts), natural stream substrate must be placed in the encapsulation in accordance with the Federal Highway Administration Hydraulic Engineering Circular No. 26: Culvert Design for Aquatic Organism Passage.
   d. Have a low flow channel constructed or restored through the encapsulation. The low flow channel shall have the same width, depth, and side slope as the natural upstream and downstream low flow channel. If the upstream and downstream channels are highly degraded a V-shaped channel with 5:1 slopes within the structure may be substituted.

(j) Stream pump-around activities, provided:
1. The discharge from the activity does not cause erosion at the outlet.
2. Cofferdam dewatering activities are directed to a filter bag(s), upland sediment basins/traps, or a combination of other appropriate sediment control measures to minimize the discharge of sediment-laden water into waters of the U.S.
3. All sediment control measures are installed and maintained in good working order.
4. Any materials used for an in-stream dam are constructed using non erodible materials. Examples include sand bags and sheet pile walls.

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[3] Sump, for the purpose of this Water Quality Certification, means the inside elevation of the bottom of the structure is placed at a specified depth below the grade of the stream.

[4] Other soil and unconsolidated till includes substrates that are more cohesive and less mobile (e.g. clay, silt, gravel, and cobble substrates).

[5] Consolidated till includes dense hard materials such as hardpan.

(k) The installation of temporary work causeways when the activity is conducted in a manner that maintains near normal downstream flows and is constructed of material that can be expected to withstand high flow events.

(l) The use of temporary structures provided the structures are removed in their entirety and the stream channel restored to preconstruction grades, contours, and vegetative conditions.

(m) Multiple impacts on a project as long as the cumulative amount of those impacts are less than the most restrictive thresholds of this Section 401 WQC.

Failure to comply with the terms and conditions of this Section 401 Water Quality Certification may result in an enforcement action. If an enforcement action is pursued, civil penalties could be assessed up to $25,000 per day. Criminal liability may apply if it is determined that the Section 401 Water Quality Certification was violated willfully or negligently.

This certification is effective eighteen (18) days from the mailing of this notice unless a petition for review and a petition for stay of effectiveness are filed within this 18-day period. If a petition for review and a petition for stay of effectiveness are filed within this period, any part of the certification within the scope of the petition for stay is stayed for fifteen (15) days, unless or until an Environmental Law Judge further stays the certification in whole or in part.

This decision may be appealed in accordance with IC 4-21.5, the Administrative Orders and Procedures Act. The steps that must be followed to qualify for review are:

(1) You must petition for review in writing that states facts demonstrating that you are either the person to whom this decision is directed, a person who is aggrieved or adversely affected by the decision, or a person entitled to review under any law.

(2) You must file the petition for review with the Office of Environmental Adjudication (OEA) at the following address:

Office of Environmental Adjudication
100 North Senate Avenue
IGCN Room N501
Indianapolis, IN 46204

(3) You must file the petition within eighteen (18) days of the mailing date of this decision. If the eighteenth day falls on a Saturday, Sunday, legal holiday, or other day that the OEA offices are closed during regular business hours, you may file the petition the next day that the OEA offices are open during regular business hours. The petition is deemed filed on the earliest of the following dates: the date it is personally delivered to OEA; the date that the envelope containing the petition is postmarked if it is mailed by United States mail; or, the date it is shown to have been deposited with a private carrier on the private carrier's receipt, if sent by private carrier.

Identifying the certification, decision, or other order for which you seek review by number, name of the applicant, location, or date of this notice will expedite review of the petition.

Note that if a petition for review is granted pursuant to IC 4-21.5-3-7, the petitioner will, and any other person may, obtain notice of any prehearing conferences, preliminary hearings, hearings, stays, and any orders disposing of the proceedings by requesting copies of such notices from OEA.

If you have procedural questions regarding filing a petition for review you may contact the Office of Environmental Adjudication at 317-232-8591.

If you have any questions about this certification, please contact Jason Randolph, Project Manager, of my staff by phone at 317-233-0467, or by e-mail at jrandolp@idem.in.gov.

Sincerely,

Martha Clark Mettler

Martha Clark Mettler
Deputy Assistant Commissioner
Office of Water Quality

cc: Norma Condra, USACE-Louisville
Kerrie Kuhne, USACE-Detroit
Paul Leffler, USACE-Chicago
Scott Pruitt, USFWS
Matt Buffington, IDNR
Randy Braun, IDEM

Attachment 1: Indiana Waters Designated for Special Protection

Designated Salmonid Waters:
[327 IAC 2-1.5-5(a)(3)]

- Trail Creek and its tributaries downstream to Lake Michigan, LaPorte County
- East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch, Porter and LaPorte Counties
- Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County
- Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County
- The Galena River and its tributaries, LaPorte County
- The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County
- The Indiana portion of the open waters of Lake Michigan
- Those waters designated by the Indiana Department of Natural Resources (IDNR) for put-and-take trout fishing[6]

Waterbodies which have been designated all or partially as Outstanding State Resource Waters: [327 IAC 2-1.3-3 and 327 IAC 2-1.5-19(b)]

- The Blue River in Washington, Crawford, and Harrison Counties, from river mile 57.0 to river mile 11.5
- The North Fork of Wildcat Creek in Carroll and Tippecanoe Counties, from river mile 43.11 to river mile 4.82
- The South Fork of Wildcat Creek in Tippecanoe County, from river mile 10.21 to river mile 0.00
- Cedar Creek in Allen and DeKalb counties, from river mile 13.7 to its confluence with the St. Joseph River
- The Indiana portion of the open waters of Lake Michigan
- All waters incorporated in the Indiana Dunes National Lakeshore.

Waterbodies which have been designated all or partially as Exceptional Use Streams[7]: [listed in: 327 IAC 2-1-11(b) and IC 13-11-2-72.5 (before its repeal)]

- Big Pine Creek in Warren County downstream of the State Road 55 bridge near the town of Pine Village to its confluence with the Wabash River
- Mud Pine Creek in Warren County from the bridge on the County Road between Brisco and Rainsville to its confluence with Big Pine Creek
- Fall Creek in Warren County from the old C.R. 119 bridge in the NW quarter of Section 21, Township 22N, Range 8W downstream to its confluence with Big Pine Creek
- Indian Creek in Montgomery County from the County Road 650 West bridge downstream to its confluence with Sugar Creek
- Clifty Creek in Montgomery County within the boundaries of Pine Hills Nature Preserve
- Bear Creek in Fountain County from the bridge on County Road 450 North to its confluence with the Wabash River

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[6] Available on the internet under trout stocking locations at: http://www.in.gov/dnr/fishwild/3622.htm.
[7] As per IC 13-18-3-2(u): "Each exceptional use water (as defined in IC 13-11-2-72.5, before its repeal) designated by the board before June 1, 2009, becomes an outstanding state resource water on June 1, 2009, by operation of law."

- Rattlesnake Creek in Fountain County from the bridge on County Road 450 North to its confluence with Bear Creek
- The small tributary to Bear Creek in Fountain County within the Portland Arch Nature Preserve which enters Bear Creek at the sharpest bend and has formed the small natural bridge called Portland Arch
- Blue River from the confluence of the West and Middle Forks of the Blue River in Washington County downstream to its confluence with the Ohio River
- The South Fork of Blue River in Washington County from the Horner's Chapel Road bridge downstream to its confluence with Blue River.
- Lost River and all surface and underground tributaries upstream from the Orangeville Rise (T2N, R1W, Section 6) and the Rise of Lost River (T2N, R1W, Section 7) and the mainstem of the Lost River from the Orangeville Rise downstream to its confluence with the East Fork of White River.

Attachment 2: Critical Wetlands and Critical Special Aquatic Sites

In the interest of maintaining consistency with the State Regulated (Isolated) Wetland program established at 327 IAC 17, IDEM defines Critical Wetlands and Critical Special Aquatic Sites to be synonymous with Rare and Ecologically Important Wetland Types under 327 IAC 17-1-3(3)(B):

- **Acid bog:** Acid bog is an acidic wetland of kettle holes in glacial terrain. Bogs can be graminoid (Carex spp. and Sphagnum spp.) or low shrub (Chamaedaphne calyculata and Betula pumila). The graminoid bog can be a floating, quaking mat. The soils in acid bogs are saturated and acidic peat. Bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. When a sphagnum mat floats, it rises and falls with the water table. Acid bogs can be found in northern Indiana.
- **Acid seep:** Acid seep is a bog-like wetland typically found in unglaciated hill regions. This community is a small groundwater-fed wetland located primarily in upland terrain. A thin layer of muck may lie over a mineral substrate. The soil reaction is acid. This seep community is characterized by flowing water during at least part of the year. Acid seeps are located primarily in southern Indiana.
- **Circumneutral bog:** Circumneutral bog is a bog-like wetland that receives groundwater. Circumneutral bogs can be a mosaic of tall shrub bog, graminoid bog, and other communities. The graminoid bog often occurs on a quaking or floating mat. Although a few bogs occur in unglaciated regions, most are found in glacial ice-block depressions. The soils in circumneutral bogs are usually peat, or other low nutrient organic substrates, which are saturated and circumneutral to slightly acid. Circumneutral bogs have non-flowing or very slow flowing water. The water level fluctuates seasonally. Circumneutral bogs are usually found in northern Indiana.
- **Circumneutral seep:** The circumneutral seep (or seep-spring) is a groundwater-fed wetland on organic soil. It is primarily herbaceous. Species typically include marsh marigold (Caltha palustris) and skunk cabbage (Symplocarpus foetidus) with a scattered tree canopy. Circumneutral seep is typically situated on or near the base of a slope. The soil is typically circumneutral muck. This seep community is characterized by slowly flowing water during at least part of the year. Circumneutral seeps can be found scattered throughout Indiana.
- **Cypress swamp:** Bald cypress swamps are seasonally to permanently inundated wetlands found in depressions and sloughs of large bottomlands associated with the Wabash/Ohio River system. Poorly to very poorly drained soils characterize this environment. Bald cypress (Taxodium distichum) is present, and green ash (Fraxinus pennsylvanica), silver maple (Acer saccharinum), and overcup oak (Quercus lyrata) are also usually present. This community is restricted to extreme southwest Indiana.
- **Dune and swale:** Dune and swale is an ecological system consisting of a mixture of upland (black oak sand savanna, dry to mesic sand prairie) and wetland (pond, panne, sedge meadow, marsh, wet prairie) natural communities. These communities occur in long, narrow, linear complexes, with the dry communities occupying sand ridges, and the wet communities occurring in the intervening swales. Black oak (Quercus velutina), paper birch (Betula papyrifera), jack pine (Pinus banksiana), and prairie vegetation typically occur on the ridges, and sedges, reeds, and marsh/aquatic vegetation line are found in the swales. Water levels are directly influenced by ground water, with the interdunal swales controlled largely by lateral flow through porous beach ridges. Dune and swale is restricted to extreme northwest Indiana, near Lake Michigan.

- **Fen:** Fen is a calcareous, groundwater-fed wetland. Fens are often a mosaic of grassy areas, sedgy areas, graminoid-shrubby cinquefoil, and tall shrub areas. The extent of the tall shrub component of fens may be determined by fire frequency and/or soil moisture. Drying of the soil increases the growth of shrubs. Fens typically occur in the vicinity of glacial moraines. Fens typically have a muck or peat substrate. The water level fluctuates seasonally and is fed by groundwater. Fens can be found in central and northern Indiana.
- **Forested fen:** Forested fen is a tree-dominated wetland on organic soil which receives groundwater. Forested fens are often a mosaic of treed areas, tall shrub areas, and herbaceous areas. A tall shrub layer is often well developed in forested fens. Indicative species typically include tamarack (Larix laricina), black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), poison sumac (Toxicodendron vernix), and red maple (Acer rubrum). Forested fens occur in wet lowlands, where moraines meet outwash features or depressions. Forested fens have saturated, poorly to very poorly drained soils that are often muck, but some seasonal flooding can occur in forested fens that are especially level. This community is a late successional stage of fen or circumneutral bog. Forested fens occur in northern Indiana.
- **Forested swamp:** Forested swamp is a seasonally inundated to intermittently exposed wetland of large river bottoms. Forested swamps do not receive direct flow from river flooding except under exceptional circumstances. Forested swamps occur in depressions, sloughs and large bottomlands, typically dominated by tree species such as swamp cottonwood (Populus heterophylla), green ash (Fraxinus pennsylvanica), and swamp white oak (Quercus bicolor). In northern Indiana important tree species include black ash (Fraxinus nigra), yellow birch (Betula alleghaniensis), and red maple (Acer rubrum). Poorly to very poorly drained and aerated soils characterize the swamp environment. Soils usually are mineral not muck or peat. This community type is found throughout Indiana.
- **Marl beach:** Marl beach is a fen-like community located on the marly muck shorelines of lakes. Marl precipitate is evident. A thin layer of water is present in spring, but dries down in summer. Draw-down of a lake creates additional area for this community to develop on. Marl beaches can be found in extreme northern Indiana, primarily in the northeast.
- **Muck flat:** Muck flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a peat substrate. The muck flats can float on the water surface, but during high water periods are usually inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Muck flats are found in northern Indiana.
- **Panne:** Panne is a groundwater fed herbaceous wetland occupying interdunal swales near Lake Michigan. Pannes are located on the lee side of the first or second line of dunes from the lakeshore. The soil is wet, calcareous sand. Pannes are located in counties bordering Lake Michigan.
- **Sand flat:** Sand flat is a shoreline and lake community possessing a unique flora of sedges and annual plants, many of which are also found on the Atlantic and Gulf Coastal Plains. This community is found at the margins of lakes or covering shallow basins. This community has a sand substrate. During high water periods sand flats at the margins of lakes or ponds are inundated. The water level of a basin fluctuates during a season or from year to year in response to the amount of precipitation. This exposes bare substrate needed for germination by species of the community. Sand flats occur in northern Indiana, and in the Plainville Sand Section of southwest Indiana.

- **Sedge meadow:** Sedge meadow is an herbaceous wetland typically dominated by graminoid species such as flat sedge (Cyperus spp.), spike rush (Eleocharis spp.), rushes (Juncus spp.) and sedges (Carex spp.). Sedge meadow is an herbaceous wetland of stream margins and river floodplains, and lake margins or upland depressions. Streamside sedge meadows are frequently flooded in the spring and early summer. Sedge meadows of lake margins and depressions often contain standing water during wet months and after heavy rains; during dry periods, the water level is at or just below the substrate. Sedge meadow usually occupies the ground between a marsh and the uplands, or a shrub swamp or wet forest. Periodic high water can kill trees and shrubs invading sedge meadows. Sedge meadows can be found in the northern half of the state.
- **Shrub swamp:** Shrub swamp is a shrub-dominated wetland that is seasonally inundated to intermittently exposed. This community occurs in depressions and the substrate in either mineral soils or muck, as opposed to peat which is characteristic of bogs. Shrub swamp is characterized by non-flowing or very slowly flowing water with levels that fluctuate seasonally. Shrub swamps are persistent, though considered successional. Two opportunistic native shrubs, sandbar willow (Salix exigua) and gray dogwood (Cornus racemosa), by themselves, are not indicative of shrub swamps. This community type is found throughout Indiana.
- **Sinkhole pond:** Sinkhole ponds are water-containing depressions in karst topography. Sinkhole ponds are found in the Mitchell Karst Plain in south-central Indiana.
- **Sinkhole swamp:** Sinkhole swamps are depressions in karst topography dominated by tree or shrub species. Sinkhole swamps are found in the Mitchell Karst Plain in south-central Indiana.
- **Wet floodplain forest:** Wet floodplain forest is a broadleaf deciduous forest of river floodplains. Wet floodplain forests occur in depressions and flats on narrow to wide floodplains and also on recently exposed substrates that are frequently flooded. Wet floodplain forests are frequently flooded and may have standing water seasonally to permanently present. Wet floodplain forests occur statewide.
- **Wet prairie:** Wet prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet prairies occur in deep swales and the substrate ranges from very deep black mineral soils (which are high in organic matter) to muck. Ponding in spring lasts for several weeks prior to drainage. Wet prairies commonly occur in the Grand Prairie Natural Region, the Tipton Till Plain and the Bluffton Till Plain, with a few examples found in the Northern Lakes Natural Region.
- **Wet sand prairie:** Wet sand prairie is an herbaceous wetland typically dominated by graminoid species such as prairie cordgrass (Spartina pectinata), bluejoint (Calamagrostis canadensis), and sedges (Carex spp.). Vegetation height is often 2-3 m. The species diversity of wet prairies is lower than that of mesic prairies. Wet lowland prairies occur in deep swales and the substrate is sand, sometimes mixed with muck. Flooding is a regular springtime occurrence in wet sand prairie and may last several weeks. This community occurs in a mosaic with marsh and other wetlands, and with upland prairies and sand savannas. Fire was frequent occurrence, but more common in the fall when waters had receded. This community occurs in northwest Indiana and in the Plainsville Sands area.

401 IDEM RGP FORM 51937

Reset Form

SECTION 401 WQC REGIONAL GENERAL PERMIT NOTIFICATION

State Form 51937 (R3 / 8-08)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS: *1. Familiarize yourself with the terms and conditions and read the instructions before filling out this form.*
2. All applicable sections of this two page form must be completed.

FOR IDEM USE ONLY	***Date Received:***	***IDEM ID:***

APPLICANT INFORMATION

Applicant:	Agent:
Contact person:	Contact person:
Address (*number and street, city, state and ZIP code*):	Address (*number and street, city, state and ZIP code*):
Telephone number:	Telephone number:
E-mail address:	E-mail address:

PROJECT LOCATION

County:		Nearest Town:	
Quad Name:	Section:	Township:	Range:
Project Address and Driving Directions:			

EXISTING CONDITIONS ON THE PROJECT SITE

LAKE: ☐ YES ☐ NO	LAKE NAME:
STREAM: ☐ YES ☐ NO	STREAM NAME:

WETLAND(S): ☐ YES ☐ NO Acreage on the site by wetland type(s): _____ **emergent** _____ **scrub-shrub** _____ **forested**

Date of Wetland Delineation? _____/_____/_____ Date of U.S. Army Corps of Engineers jurisdiction correspondence? _____/_____/_____

PROJECT IMPACTS

Activity Description:

Purpose of project:

FOR LAKE IMPACT; *(acceptable fill defined in instructions)*

Linear feet of shoreline impact (example - seawall): _____

Type of fill below the Ordinary High Water Mark: _____ Volume *(cubic yds.)*: _____ Acres: _____

Does the shoreline or open water area have vegetation present? ☐ YES ☐ NO

Open water fill beyond shoreline: (examples - boat well, underwater beach) Type of fill: _____ Acres: _____

Page 1 of 5

FOR STREAM IMPACT: *(acceptable fill defined in instructions)*

Total linear feet of stream impact (examples - bank stabilization, bridge construction or culvert placement, seawall work): _____

Type of fill below the Ordinary High Water Mark: _____ Volume *(cubic yds.)*: _____

Proposed Start Date of work in the Stream (MM/DD/YY): _____ Proposed End Date of work in the Stream (MM/DD/YY): _____

Channel width in feet (*see instructions*): _____ Channel depth in feet (*see instructions*): _____

For stream crossings, type of structure proposed to be installed (examples: three-sided or four-sided culvert, bridge, pipe): _____

For stream crossings, width of culvert structure/diameter of pipe to be installed (feet): _____ Length of culvert structure/pipe (feet): _____

Open water fill that projects beyond the streambank: Type of fill: _____ Acre(s) of impact: _____

FOR WETLAND IMPACT: *(acceptable fill defined in instructions)*

Type of fill: _____

Acre(s) of impact: _____ **emergent** _____ **scrub-shrub** _____ **forested**

SIGNATURE OF APPLICANT - STATEMENT OF AFFIRMATION

I certify that I am familiar with the information contained in this notification form and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities exactly as described in this notification form. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a Water of the U.S. are not authorized, and that I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Signature of applicant: _____ **Date:** _____ (mm/dd/yyyy)

Printed name of applicant: _____ **Title:** _____

Enclose copies of the following documents *(ALL enclosures must be on 8.5" by 11" paper)*:

- ☐ Location map
- ☐ Drawings of existing site and proposed project
- ☐ Cross sections of proposed activities showing extent of fill waterward (*for seawall, shoreline, and streambank stabilization impacts*)
- ☐ Cross sections of proposed activities showing the bankfull width or Ordinary High Water Mark of the stream (*for stream encapsulation impacts*)
- ☐ At least three photos of the site, labeled
- ☐ Copy of wetland delineation report (*for projects with wetland impacts*)
- ☐ Copies of all correspondence from the U.S. Army Corps of Engineers (*for projects with wetland impacts*)
- ☐ Copies of all correspondence from the Indiana Department of Natural Resources, Division of Nature Preserves

Mail this form and attachments via certified mail to:

Indiana Department of Environmental Management
Office of Water Quality
Section 401 WQC/State Isolated Wetlands Program
MC 65-42 IGCN 1255
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Please note:

1. Send this form and the attachments via certified mail to IDEM at the above referenced address. IDEM will not notify you when this form is received.
2. IDEM will review this form and all attachments for completeness and accuracy. **You will not be contacted by IDEM unless problems are identified with your application.** IDEM may require additional information to verify that the project meets all conditions of the Regional General Permit and the Section 401 Water Quality Certification (WQC). If you are not contacted by IDEM within thirty (30) days of the date IDEM receives this notification form, your project is authorized, subject to the terms and conditions of the Section 401 Water Quality Certification and its conditions. **You will not receive a written confirmation of authorization.**
3. Read **all** the terms and conditions of this IDEM Regional General Permit Notification Form, including all U.S. Army Corps of Engineers and IDEM conditions. The terms and conditions of this general permit as instituted by IDEM are included as part of the instructions. Do not submit this notification form or commence work on the proposed project until you understand and are familiar with the limitations and restrictions of the IDEM Regional General Permit Notification Form.
4. Consult this webpage for more information: http://www.in.gov/idem/4870.htm

TERMS AND CONDITIONS OF THE IDEM REGIONAL GENERAL PERMIT NOTIFICATION FORM

1. The applicant shall deposit any dredged material in a contained upland disposal area to prevent sediment runoff to any waterbody. The discharge of return water from upland contained disposal areas is not authorized by this general permit. Such discharges are regulated by the IDEM's National Pollutant Discharge Elimination System (NPDES) Permitting Program.

2. This general permit does not authorize the discharge of storm water or the discharge of pollutants (such as sediment) associated with storm water. This general permit incorporates the conditions at 327 IAC 15-5-7 as general conditions of this Water Quality Certification (WQC). Compliance with the general permits at 327 IAC 15-5, or 327 IAC 15-6 (commonly referred to as a Rule 5 and Rule 6, respectively) is sufficient to demonstrate compliance with this condition of the WQC.

3. The permittee shall allow the commissioner or an authorized representative of the IDEM commissioner (including an authorized contractor), upon the presentation of credentials to:
   a) Enter upon the permittee's property;
   b) Have access to and copy at reasonable times any records that must be kept under the conditions of these permits or this certification;
   c) Inspect, at reasonable times, any monitoring or operational equipment or method; collection, treatment, pollution management or discharge facility or device; practices required by this certification; and any mitigation site; and
   d) Sample or monitor any discharge of pollutants or any mitigation site.

4. This granting of WQC does not relieve the permittee from the responsibility of obtaining any other permits or authorizations that may be required for this project or related activities from the IDEM or any other agency or person.

5. This WQC does not:
   a) Authorize impacts or activities outside the scope of this certification;
   b) Authorize any injury to permittees or private property or invasion of other private rights, or any infringement of federal, state or local laws or regulations;
   c) Convey any property rights of any sort, or any exclusive privileges;
   d) Preempt any duty to obtain federal, state or local permits or authorizations required by law for the execution of the project or related activities; or
   e) Authorize changes in the plan design detailed in the notification form.

6. This general permit cannot authorize point source discharges of pollutants other than clean fill and uncontaminated dredged material.

7. This general permit cannot authorize activities on or in any of the State's waters that have been designated by the Water Pollution Control Board as: salmonid waters (cold water streams), Outstanding State and/or National Resource Waters, and Exceptional Use waters.

8. This general permit cannot authorize activities on or in any critical wetland or critical special aquatic site.

9. This general permit cannot authorize activities on or in any non-salmonid stream between April 1 and June 30 unless the IDNR has granted a waiver for that activity. Contact information for the IDNR-Division of Fish and Wildlife is as follows:
   IDNR - Division of Fish and Wildlife
   Attn: Environmental Supervisor
   402 W. Washington St., Room W273
   Indianapolis, IN 46204
   FAX: (317) 232-8150

10. You must submit, with this notification form, correspondence from the IDNR, Division of Nature Preserves, which states that no state endangered, threatened, or rare species is documented on a permanent or seasonal basis within a ½ (0.50) mile radius of the proposed project site by the Indiana Natural Heritage Data Center. Alternately, you may provide written documentation from the IDNR, Division of Nature Preserves, which states that the proposed activities will not constitute a violation of state laws protecting state endangered, threatened, or rare species if they are documented on a permanent or seasonal basis within a ½ (0.50) mile radius of the proposed project site. Additional information regarding how to request Indiana Natural Heritage Data, including fees, required information, and timeframes, is available at the following website: http://www.in.gov/dnr/3242.htm . Contact information for the IDNR-Division of Nature Preserves is as follows:
    IDNR - Division of Nature Preserves
    Attn: Ronald Hellmich
    402 W. Washington St., Room W267
    Indianapolis, IN 46204
    Fax # 317-233-0133

11. This general permit does not authorize activities associated with the establishment of a mitigation bank.

12. Multiple impacts associated with the same project may be included on the same notification form. However, the cumulative acreage and linear footage of effect on Waters of the U.S. must be equal to or less than the most restrictive thresholds of the notification form. (Threshold limits of the notification form are listed in conditions 16-21.) For example, a road project may include several stream crossings. If the cumulative effect of these crossings is less than 0.10 acre and 300 linear feet and each crossing meets the other requirements of the notification form, then the activities can be authorized by the general permit. If, however, the cumulative effect of these crossings is greater than 0.10 acre or 300 linear feet, then the activities are not authorized by this general permit and an individual site-specific WQC is required.

13. In order to verify that a given project will qualify under the terms and conditions of this general permit, IDEM may require additional information from the applicant. If the applicant fails to provide any information requested by IDEM, then the project is not authorized.

14. The IDEM, for any project that qualifies under the terms and conditions of this general permit, may choose to require an individual site-specific WQC if it determines that the project would have more than minimal impacts to water quality, either viewed individually or collectively with other projects that may affect the same waterbody affected by the proposed project.

15. The permittee must submit the notification form at least 30 days prior to the commencement of the proposed activity.

16. The notification form is for activities proposing permanent impacts of one-tenth (0.10) of an acre <u>or less</u> of Waters of the U.S. Proposed impacts to Waters of the U.S. exceeding 0.10 acre cannot be authorized by this general permit and will require an individual site-specific WQC.

17. This notification form is for activities that will not permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation or the slope of any stream. Proposed activities that will permanently change the sinuosity, flow path, velocity, cross sectional area under the bank full elevation, or the slope of the stream cannot be authorized by this general permit and will require an individual site-specific WQC.

18. This notification form is for activities proposing permanent impacts to 300 linear feet or less of streambank or lake shoreline. Proposed impacts to streambanks or shorelines in excess of 300 linear feet cannot be authorized by this general permit and will require an individual site-specific WQC.

19. In the case of streambank stabilization activities or new lake and reservoir shoreline stabilization activities, the permittee must demonstrate that the streambank or shoreline in question is unstable.

20. Projects that propose stream encapsulation activities meet the following limitations:
    a) Must be for the purpose of constructing a crossing;
    b) Must not exceed 150 feet;
    c) The cross sectional area of the encapsulation is at least twenty percent (20%) larger than the bank full area of the stream immediately up and downstream of the encapsulation;
    d) The cross sectional area of the encapsulation is in the form of a single opening (double culverts are not authorized unless at least one of the culverts meets the cross sectional area requirement);
    e) Encapsulations either have no bottom (e.g., three sided culvert) or are twenty percent (20%) imbedded into the streambed (note that the area imbedded must be subtracted from the cross sectional area for the cross section area requirement above); and
    f) The slope of the bed within the encapsulation matches the slope of the bed both immediately upstream and downstream.

    Projects proposing an encapsulation activity that do not meet the aforementioned limitations cannot be authorized by this general permit and will require an individual site-specific WQC.

21. The activities proposed in the notification form cannot result in a permanent secondary effect to Waters of the U.S. (e.g., dredging, excavation, damming, creation of in-channel ponds) that, when combined with the primary effect, exceeds the area and length thresholds in previous conditions. Projects that result in permanent secondary effects to Waters of the U.S. that, when combined with the primary effect, exceeds the aforementioned area and length thresholds, cannot be authorized by this general permit and will require an individual site-specific WQC.

Instructions for Completing the IDEM Regional General Permit Notification Form

Please read these instructions carefully before completing the notification form. Sections labeled as mandatory must be completed accurately and completely in order for IDEM to process this notification form. IDEM will reject your notification form should you fail to complete all mandatory sections of the form.

DO NOT use this form if your project will impact ANY isolated wetlands. Consult with IDEM staff to determine the correct application form for use with your project.

If you have any questions or are unsure if your project qualifies for or requires this authorization, contact IDEM:

Indiana Department of Environmental Management
Office of Water Quality
Section 401 Water Quality Certification/State Isolated Wetlands Program
MC 65-42 IGCN 1255
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Telephone: (317) 233-8488

Print clearly or type.
Attach additional information on 8.5" x 11" sheets or folded 11" x17" sheets only

BLOCK 1 – APPLICANT INFORMATION

1. **MANDATORY:** Provide the applicant's name, address, email address, and telephone number. Applicants MUST provide a contact name.

2. **OPTIONAL:** Provide the agent's address and telephone information (an agent is anyone representing the applicant on the project, such as an attorney or consultant). Applicants are not required to have an agent. This information should be included if a person other than the applicant is submitting the form and that person is designated as the contact point for questions regarding the proposed project.

BLOCK 2 – PROJECT LOCATION

MANDATORY: Complete all blocks within this section. Most information required in this section can be obtained from the United States Geological Survey (USGS) 7.5-Minute Series Topographic Quadrangle maps, your local Soil and Water Conservation District (SWCD) office, or similar computer desktop mapping software. An address or descriptive location must be provided in order to allow for compliance inspections of the project.

BLOCK 3 – EXISTING CONDITIONS ON THE PROJECT SITE

1. **MANDATORY:** This section provides information on the types of aquatic resources present on the project site PRIOR TO any proposed impacts. Check the appropriate box as to whether or not lakes, streams, or wetlands are present on the site. For wetlands, provide the acreage of each wetland type – your wetland delineation report will state the acreage of each wetland type delineated on the site.

2. For wetlands, acreages and types must be confirmed with a wetland delineation conducted in accordance with the 1987 U.S. Corps of Engineers Wetland Delineation Manual. Please attach a copy of this delineation and letter of confirmation from the U.S. Corps of Engineers for all projects that will impact wetlands. Correspondence from the U.S. Army Corps of Engineers confirming that the Waters in question are regulated under the Clean Water Act must be provided. Any letter or email from the U.S. Army Corps of Engineers that describes the extent of Waters of the U.S. on the site will be considered acceptable by IDEM. Common examples include: a jurisdictional determination verification letter, a U.S. Army Corps of Engineers Public Notice, an "RGP pending" letter.

BLOCK 4 – PROJECT IMPACTS

1. **MANDATORY:** Complete both "Activity Description" and "Purpose of Project" blocks within this section. Attach additional sheets if needed. **Activity description** refers to WHAT you intend to do – examples include filling a certain acreage of wetland, placing a certain quantity of riprap into a stream, constructing bridge piers, or installing a specific type of culvert. **Project description** refers to WHY you need to do this activity – to create a driveway, to stabilize a streambank, to install a bridge or culvert in a stream to access a site, to develop a site for commercial use, for example.

2. When calculating stream impacts, all areas that are affected by placement of fill, bank armoring, piping, installing culverts, excavation, or any other activity must be counted. Any proposed project involving the creation of dams or in-channel pools CANNOT use this notification form.

3. When calculating impacts, all areas within lakes, rivers, streams and the like must be counted. This includes areas under new bridge piers, footprints of underwater beaches, and footprints of boat ramps, as examples.

4. The Ordinary High Water Mark means that line on the shore of a waterbody established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, natural destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

5. Channel width means the average distance from one bank of the stream to the other bank measured on the level at the bankfull stage elevation. IDEM will accept the Ordinary High Water Mark as a surrogate measurement for the bankfull stage elevation.

   Channel depth means the average distance from the bankfull stage elevation to the deepest part of the channel (thalwag). IDEM will accept the Ordinary High Water Mark as a surrogate measurement for the bankfull stage elevation.

6. Bankfull stage elevation means the elevation where any additional increase in stage elevation would result in water leaving the channel and entering the floodplain. The bankfull discharge is the same as the *effective discharge*. Determining the bankfull stage elevation from field indicators is also acceptable. The U.S. Environmental Protection Agency has provided tools for determining the bankfull stage elevation through the Watershed Assessment of River Stability and Sediment Supply (WARSSS) website **at** http://www.epa.gov/warsss/pla/box03.htm. IDEM will also accept the Ordinary High Water Mark as a surrogate measurement for the bankfull stage elevation. Note that IDEM does not require that a responsible party survey the bankfull stage elevation, but rather requires that width and depth measurements be taken relative to this elevation.

7. Acceptable fill material must be clean earthen fill that is free from any hazardous waste or regulated solid waste. Examples: clean earthen fill dirt, glacial stone, riprap, sand, freshly poured concrete.

BLOCK 5 – SIGNATURE OF APPLICANT - STATEMENT OF AFFIRMATION

MANDATORY: The name and signature must match the name of the applicant on the first page. Notification forms signed by any person other than the applicant will not be approved.

NOTE - The listed supplemental information must be provided in order to verify that your project qualifies for the terms and conditions of this regional general permit.

You may wish to hire a private environmental consultant to assist you with the completion of this form, assessing impact totals, and the creation of all required submittals (maps, photos, plans, cross-sections, IDNR and U.S. Army Corps of Engineers correspondence, etc.). Upon request, IDEM can provide you with a list of private environmental consultants that work in Indiana. If you are proposing impacts to wetlands, you will need to hire an environmental consultant to complete a wetland delineation for your property.

401 IDEM WQC – FORM 51821

Application for Authorization to Discharge Dredged or Fill Material to Isolated Wetlands and/or Waters of the State

State Form 51821 (R / 10-04)

Indiana Department of Environmental Management

INSTRUCTIONS: *1. Read the instruction sheet before filling out this form.*
2. You must complete all applicable sections of this form

1. Applicant Information	2. Agent Information
Name of Applicant:	Name of Agent:
Mailing address: (Street/ PO Box/ Rural Route, City, State, ZIP Code)	Mailing address: (Street/ PO Box/ Rural Route, City, State, ZIP Code)
Daytime Telephone Number:	Daytime Telephone Number:
Fax Number:	Fax Number:
E-mail address: (optional)	E-mail address: (optional)
Contact person: (required)	Contact person:

3. Project/Tract Location			
County:		Nearest city or town:	
U.S.G.S. Quadrangle map name (Topographic map):		Project street address (if applicable):	
Quarter:	Section:	Township:	Range:
Type of aquatic resource(s) to be impacted: (Attach Worksheet One)		Project name or title: (if applicable)	
Other location descriptions or driving directions:			

4. Project Purpose and Description (*Use additional sheet(s) if required*)	
Has any construction been started? ☐ Yes ☐ No	Anticipated start date:
If yes, how much work is completed?	
Purpose of project and overview of activities:	

Page 1 of 9

5. Avoidance, Minimization, and Mitigation Information: Applicants must answer all of the following questions
(*Use additional sheet(s) if necessary - provide a detailed response to all applicable questions*).

A. For projects with Class II isolated wetlands –

1. Is there a reasonable alternative to the proposed activity?

2. Is the proposed activity reasonably necessary or appropriate?

B. For projects with Class III wetlands, adjacent wetlands, and/or streams, rivers, lakes or other water bodies –

1. Is there a practicable alternative to the proposed activity?

.

2. Have practicable and appropriate steps to minimize impacts to water resources been taken?

Describe all compensatory mitigation required for unavoidable impacts.

6. Drawing/Plan Requirements *(applicants must provide the following)*

a. Top/aerial/overhead views of the project site showing existing conditions and proposed construction.
b. Cross sectional view of areas of fill or alterations to streams and other waters.
c. North arrow, scale, property boundaries.
d. Include wetland delineation boundary (if applicable). Label all wetlands (jurisdictional, isolated and exempt) as I-1, I-2, I-3, etc. and the mitigation areas as M-1, M-2, etc.
e. Location of all surface waters, including wetlands, erosion control measures, existing and proposed structures, fill and excavation locations, disposal area for excavated material, including quantities, and wetland mitigation site (if applicable).
f. Approximate water depths and bottom configurations (if applicable).

7. Supplemental Application Materials *(applicants must provide the following)*

a. A wetland delineation of all wetlands on the project site (for projects with wetland impacts).
b. At least three photographs of the project site. Indicate the photo locations on the project plans.
c. If isolated wetlands are present, a letter from the Corps of Engineers verifying this statement.
d. Wetland mitigation plan and monitoring report.
e. Classification of all isolated wetlands on the tract (if isolated wetlands are present onsite).
f. Copies of all applicable local permits and/or resolutions pertaining to the project or tract.
g. Tract history (see instructions).

8. Additional information that MAY be required *(IDEM will notify you if needed)*

a. Erosion control and/or storm water management plans.
b. Sediment analysis.
c. Species surveys for fish, mussels, plants and threatened or endangered species.
d. Stream habitat assessment.
e. Any other information IDEM deems necessary to review the proposed project.

9. Permitting Requirements

a. Does this project require the issuance of a Department of the Army Section 404 Permit from the US Army Corps of Engineers? ☐ Yes ☐ No

If no, you do not need to answer Part b.

b. Have you applied for an Army Corps of Engineers Section 404 permit? ☐ Yes ☐ No

If yes, please supply the Corps of Engineers ID Number, the Corps of Engineers District, the project manager, and a copy of any correspondence with the Corps. **If no, contact** the Army Corps of Engineers regarding the possible need for a permit application.

A Section 404 Permit will be submitted to the Army Corps of Engineers.

c. Have you applied for, received, or been denied a permit from the Department of Natural Resources for this project? ☐ Yes ☐ No

Please give the permit name, permit number, and date of application, issuance or denial.

A Construction in a Floodway Permit will be submitted to the IDNR.

d. Have you applied for, received, or been denied any other federal, state, or local permits, variances, licenses, or certifications for this project? ☐ Yes ☐ No

Please give the permit name, agency from which it was obtained, permit number, and date of issuance or denial.

10. Adjoining Property Owners and Addresses

List the names and addresses of landowners adjacent to the property on which your project is located and the names and addresses of other persons (or entities) potentially affected by your project. Use additional sheet(s) if required.

Name Address City State ZIP Code	Name Address City State ZIP Code
Name Address City State ZIP Code	Name Address City State ZIP Code
Name Address City State ZIP Code	Name Address City State ZIP Code
Name Address City State ZIP Code	Name Address City State ZIP Code
Name Address City State ZIP Code	Name Address City State ZIP Code
Name Address City State ZIP Code	Name Address City State ZIP Code

11. Signature - Statement of Affirmation

I certify that I am familiar with the information contained in this application and, to the best of my knowledge and belief, such information is true and accurate. I certify that I have the authority to undertake and will undertake the activities as described in this application. I am aware that there are penalties for submitting false information. I understand that any changes in project design subsequent to IDEM's granting of authorization to discharge to a water of the state are not authorized and I may be subject to civil and criminal penalties for proceeding without proper authorization. I agree to allow representatives of the IDEM to enter and inspect the project site. I understand that the granting of other permits by local, state, or federal agencies does not release me from the requirement of obtaining the authorization requested herein before commencing the project.

Applicant's Signature: _____ **Date:** _____
(mm/dd/yyyy)

Print Name: _____ **Title:** _____

Worksheet – Summary of Onsite Water Resources and Project Impacts

A. Jurisdictional Wetlands (Existing Conditions)		Jurisdictional Wetlands (Proposed Impacts)			
Wetland Type	Size of wetland (acreage)	To be Impacted?	Acreage	Fill quantity (cys)	ATF
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			
☐ EM ☐ SS ☐ FO		☐ YES ☐ NO			

Describe the type and composition of fill material to be placed in wetlands on the project site:

Describe the type and composition and quantity (cubic yards) of material proposed to be dredged or excavated from wetlands on the project site:

B. Isolated Wetlands (Existing Conditions)			Isolated Wetlands (Proposed Impacts)			
Wetland Class	Type	Size of wetland (acreage)	To be Impacted?	Acreage	Fill quantity (cys)	ATF
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			
☐ 1 ☐ 2 ☐ 3	☐ NF ☐ F		☐ YES ☐ NO			

Describe the type and composition of fill material to be placed in isolated wetlands on the project site:

Describe the type and composition and quantity (cubic yards) of material proposed to be dredged or excavated from isolated wetlands on the project site:

C. Bridges and Stream Crossings - provide the following information for EACH structure (*Use additional sheet(s) if required*)		
Stream name:		
Description of impacts:		
Length of upstream bank impacts	Left side:	Right side:
Length of downstream bank impacts	Left side:	Right side:
Bank protection fill placed below the Ordinary High Water Mark:	Volume per running foot:	
Bank protection fill placed below the Ordinary High Water Mark:	Area of coverage:	

Page 5 of 9

D. Bank Stabilization – provide the following information for EACH segment (*Use additional sheet(s) if required*)
Water body name:
Description of impacts:
Length of shoreline or bank protection:
Volume (cubic yards) of bank protection fill placed below the Ordinary High Water Mark per running foot:
Area (square feet) of bank protection fill placed below the Ordinary High Water Mark:

E. Stream Relocation	
Water body name:	
Description of impacts:	
Length of existing channel to be relocated: (linear feet)	
Length of new channel to be constructed: (linear feet)	
Existing channel to be backfilled: ☐ Yes ☐ No	Type of relocation: ☐ Piping ☐ Open Channel ☐ Other:
Type of fill and volume: (cubic yards)	

F. Open Water Fill
Water body name:
Description of impacts:
Area of water body to be filled: (acres)
Type of fill and volume: (cubic yards)

Notes and Instructions for Authorization to Discharge Dredged or Fill Material to a State Regulated Wetland and/or Waters of the State Permit Application Form and Worksheet

Note to applicants:

This form is to be used by all persons who intend to discharge dredged or fill materials into wetlands, isolated wetlands, or any other water body regulated under state and federal law. Specifically, this form is to be used for the following:

1. Application for Section 401 Water Quality Certification for any project not covered by the Indiana Regional General Permit
2. Application for a State Regulated Wetland Permit authorized under HEA 1798 and HEA 1277, excluding any activities authorized under any of the State Regulated Wetland General Permits

Consult the Office of Water Quality Web site for information on the types of authorizations and requirements for projects regulated under these laws –

http://www.in.gov/idem/water/planbr/401/401home.html

Do not submit this form until you are familiar with the various authorizations and proper forms for obtaining these authorizations. An application submitted on the incorrect form may result in delays in processing.

Applicants should also contact the Indiana Department of Natural Resources (DNR) regarding potential permit requirements associated with construction in a floodway or a public freshwater lake. You can reach the DNR Division of Water at (317) 232-4160 or toll free at (877) WATER-55.

Instructions for Completing the Application and Worksheet

Address all applications or questions to:

Indiana Department of Environmental Management
Office of Water Quality
Section 401 Water Quality Certification/State Isolated Wetlands Program
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Telephone: (800) 451-6027 or (317) 233-8488

Print clearly or type
Attach additional 8.5" x 11" sheets as necessary

APPLICATION

Note: Some wetland activities may impact both U.S. navigable waters and state regulated isolated wetlands. In those situations, the project will require a Section 401 Water Quality Certification and Section 404 U.S. Corps of Engineers permit AND approval under the new State Isolated Wetland Regulatory Program. When IDEM receives an application that involves an activity that may impact both intrastate navigable waters and a state regulated wetland, current state law requires that we evaluate each activity using different authorities. IDEM will, at the request of an applicant, evaluate a project with multi-jurisdictional wetlands under the §401 certification framework and will provide one authorization for the project, applying the state regulated isolated wetlands law and federal Clean Water Act §401authorities. If an applicant prefers that all IDEM approvals occur within one streamlined review process, a separate letter specifically requesting a combined review of the entire project should be submitted concurrently with the application.

Block 1 - Applicant Information
Provide your name, address, and telephone number. You MUST provide a contact name. For complex projects or projects with multiple contractors and responsible parties, designation of a single point of contact will speed up the review process and enable more timely responses to requests for information.

Block 2 - Agent Information
If you choose to be represented by an agent, provide the agent's address and telephone information. You are not required to have an agent.

Block 3 - Project Location
Provide specific information relating to the location of your proposed project. Provide accurate maps depicting the project location. Try to keep detail on maps to a minimum, focusing instead on the location of structures and associated water bodies. Consult the USGS Quadrangle maps for information on the quarter, section, township and range of the project. IDEM may require that you submit full size plans to supplement the 8 1/2" by 11" map sheets if the project is large or complex.

Block 4 - Project Purpose and Description
Provide the proposed or actual start date and the anticipated completion date. If you have started your project before obtaining authorization, you may be in violation of federal and/or state law. Give a narrative description of the proposed project. You should include any supplemental environmental reports, assessments, or other documents that explain or justify the proposed configuration of the project. Describe the purpose of the project (that is, what goal or outcome will be met by the construction of the project).

Block 5 - Avoidance, Minimization, and Mitigation Information
You must describe possible alternatives to the proposed project that would avoid impacts to the aquatic resource that were considered during the project planning process. You must also describe ways to minimize impacts considered during the project planning process, including a description of how you plan to contain any dredged/excavated material to prevent re-entry into waterways or wetlands. Examples of alternatives include construction on the upland portions of the property; rerouting a roadway to avoid a wetland; or alternate design plans. Minimization of the impacts may decrease any mitigation requirements that might otherwise apply. Minimization may include reduction of the amount of dredging, filling, or vegetative clearing. For isolated wetlands only, enclosure of a copy of (1) a resolution of the executive of the county or municipality in which the wetland is located or (2) a permit or other approval from a local government entity having authority over the proposed use of the property on which the wetland is located; that includes a specific finding that the wetland activity is part of a legitimate use proposed by the applicant on the property, substitutes for the information required on avoidance and minimization.

Answer all the questions in detail, providing example, drawings, or other supporting information to illustrate the steps taken to consider alternatives. Provide reasons why various alternatives were or were not considered.

In general, all impacts to wetlands or other waters that require the use of this form will require some form of compensatory mitigation. A detailed description of the mitigation plan must be provided, including: the location of the mitigation site, the size and type of mitigation to be performed, the construction sequence or timing of the mitigation, information on post construction monitoring, mitigation techniques, and success criteria of the mitigation site. A mitigation plan, with overview drawings, planting lists, cross sectional views, and other relevant information is recommended as a supplement to answer this question.

Block 6 - Drawing/Plan Requirements
You must submit drawings/plans that are consistent with the listed specifications. Your project will be delayed if these materials are not submitted in the formats specified in the application.

Block 7 – Supplemental Application Materials
All projects involving impacts to wetlands must be accompanied by a wetland delineation using the procedures established in the U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1 (January 1987). This delineation must be approved or reviewed by the Corps of Engineers in order for IDEM to determine the impacts to water bodies associated with the project. DO NOT submit an application involving impacts to wetlands without a wetland delineation. For projects that involve impacts to isolated wetlands, a letter from the Corps of Engineers that specifically makes this determination must be provided or the application will not be processed. Submittal of photographs depicting the project site is highly encouraged. Photos must be clearly labeled with the direction of the shot, the area depicted, and notes on relevant features. A map depicting the location of photos on the project site is also useful and should be included whenever photos are submitted.

For project sites with isolated wetlands, a tract history is also required. This history provides information on all the wetlands on the site prior to January 1, 2004, and describes any and all activities within these wetlands, including impacts allowed to wetlands exempt from regulation under the various provisions of federal and state law. Direct questions regarding this requirement to IDEM staff for clarification.

Block 8 - Additional Information That May Be Required
You are not required to submit the information specified in this section unless directed to do so by IDEM. However, you may submit the information if you anticipate that such information will be required. For example, if you are aware of issues on the proposed project site which may impact water resources, such as the presence of contaminated soils or sediments, endangered species, well field protection areas, or previously permitted activities on the project site, information regarding these points must be submitted with the certification application.

Block 9 - Permitting Requirements
Provide information regarding your application to the Corps of Engineers. If you have not yet contacted the Corps of Engineers, you must do so as soon as possible (SEE BLOCK 7). Provide information regarding any other federal, state, or local permits, variances, licenses, or certifications required for your project. Please indicate whether they were approved, denied, or are pending.

Block 10 - Adjoining Property Owners and Addresses
List the names and addresses of landowners adjacent to the property on which your project is located. Adjacent property owners are persons who share property lines with your property. Inclusion of names and addresses of other persons (or entities) potentially affected by your project must include persons within your neighborhood, lake association, or in the general vicinity that may have an interest in your project. Consult with IDEM for further clarification.

Block 11 - Signature - Statement of Affirmation
You must sign and date the application. If the applicant is a corporation, a responsible person from that corporation must sign. No other signatures will be accepted. The application will not be processed without the appropriate signature.

WORKSHEET

Note: When calculating any type of impact, all areas that are affected by placement of fill, bank armoring, culverting, excavation, or any other activity must be counted. When calculating open water impact, all areas within lakes, rivers, streams and the like must be counted. This includes areas under new bridge piers, beaches, and boat ramps, as examples. The Ordinary High Water Mark means that line on the shore of a water body established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, natural destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

- Fill out only the sections of this worksheet that apply to your project -

Section A - Wetlands
This section is for wetlands determined to be under the jurisdiction of the U.S. Army Corps of Engineers (Corps) and require a Section 404 permit as well as a Section 401 Water Quality Certification from IDEM. List the type of wetland as Emergent (EM), Scrub shrub (SS), or Forested (FO). "Emergent wetland" means a wetland characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. "Scrub shrub wetland" means a wetland dominated by woody vegetation having a height greater than three, two-tenths (3.2) feet, and a stem diameter less than three (3) inches. This includes true shrubs, young trees, and trees and shrubs stunted by environmental conditions. "Forested wetland" means a wetland dominated by woody vegetation that has a diameter, at breast height, greater than three (3) inches, regardless of total height. The size of the wetland must be determined by conducting a wetland delineation consistent with the protocols established in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The applicant must list whether or not the wetland will be impacted, the acreage of the impact, and the quantity of fill to be discharged into the wetland. The applicant must identify whether or not this is an after-the-fact (ATF) permit. An ATF permit is for impacts to wetlands or other water bodies under the jurisdiction of IDEM that did not receive authorization before the impacts occurred. Additionally, the applicant must describe the type and composition of material proposed to be discharged or removed from the wetland.

Section B - Isolated Wetlands
This section is for wetlands the Corps has determined to be isolated an no longer under their jurisdiction. The Corps jurisdictional determination letter must be included with the application. Isolated wetlands are considered State Regulated Wetlands and proposed impacts to these wetlands will be reviewed pursuant to IC 13-18-22. The class of wetland must be determined by the definitions outlined in IC-13-11-2-25.8. This is determined by assessing the vegetation type, hydrologic function, habitat functions, values of the wetland, and disturbances to the wetland. The applicant must determine the type of wetland by designating the wetland as either Non-Forested (NF) or Forested (F). The size of the wetland must be determined by conducting a wetland delineation consistent with the protocols established in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual. The applicant must list whether or not the wetland will be impacted, the acreage of the impact, and the quantity of fill to be discharged into the wetland. The applicant must identify whether or not this is an after-the-fact

(ATF) permit. An ATF permit is for impacts to wetlands or other water bodies under the jurisdiction of IDEM that did not receive authorization before the impacts occurred. Additionally, the applicant must describe the type and composition of material proposed to be discharged or removed from the wetland.

Section C - Bridges and Stream Crossings

This section is for projects that impact streams in order to construct, maintain, or protect structures used to cross the stream. The applicant must list the name of the stream to be impacted by the proposed project. The stream name can be found on the USGS Topographic map. If the stream does not have a name, identify it as a tributary to the next stream or water body with a name. Describe the proposed impacts in detail. Include the lengths of bank impacts to both banks upstream and downstream. Determination of left and right banks is made in the following manner- at the point furthest upstream on the project site, face downstream - the left bank is on your left and the right bank is on your right. Identify the volume per running foot of material to be discharged below the Ordinary High Water Mark (OHWM). Identify the total area below the OHWM to receive a discharge of fill material.

Section D - Bank Stabilization

This section is for projects that discharge fill material in order to stabilize eroding land along streams, lakes, or other water bodies. The applicant must list the name of the water body to be impacted by the proposed project. The name of the water body can be found on the USGS Topographic map. If the water body does not have a name, identify it as a tributary to the next stream or water body with a name. Provide the length of shoreline or bank impact. Identify the volume per running foot of material to be discharged below the Ordinary High Water Mark (OHWM). Identify the total area below the OHWM to receive a discharge of fill material.

Section E - Stream Relocation

This section is for projects that propose to relocate a stream from its existing banks either by open channel construction or by stream piping. The applicant must list the name of the stream to be impacted by the proposed project. The stream name can be found on the USGS Topographic map. If the stream does not have a name, identify it as a tributary to the next stream or water body with a name. Describe the impacts to the stream. Provide the linear feet of existing channel to be relocated and the length of new channel to be constructed. The applicant must state whether the old channel is proposed to be filled and describe the type and quantity of fill to be used to fill the old channel. The applicant must also provide the type of relocation – new channel or piping.

Section F - Open Water Fill

This is for projects where the fill material extends beyond the edge of the shoreline into open water. Some examples include the filling of pit mines, borrow pits, and other land reclamation projects. Provide the name of the water body to be impacted. If the water body does not have a name, identify it as unnamed open water body. Describe the impacts to the water body including the area to be filled and the type and quantity of fill material to be discharged.

401 IDEM WQC – INDIVIDUAL PERMIT - CHECKLIST

401 Water Quality Certification (WQC) Checklist | 2013

INDOT Environmental Services (ES), Ecology and Waterway Permitting Office (EWPO)

1. PROJECT SPECIFIC INFORMATION	
Project Route/Type	
INDOT Des. Number	
County	
Letting Date	

2. APPLICATION BACKGROUND			
Designer/Firm			
Submittal Date		Submittal Number	
ES Reviewer/Contact Info.			
Review Date			

Review columns are abbreviated as follows: Sufficient (S), Deficient (D), and Not Applicable (NA). All items marked deficient require resolution from the designer prior to INDOT acceptance of the application.

3. WQC VERIFICATION			
S	D	NA	NWP and RGP Requirements*
			A) This project does not meet the requirements of the Nationwide Permit (NWP) Program or the Regional General Permit (RGP) Program (refer to the 404/401 RGP checklist and NWP checklist). *Reviewer Notes:*

***If the project does meet the requirements of the NWP or RGP programs, the designer must revise their submittal to include the correct application form. Further review of the application is not required until a revised application has been submitted to INDOT-ES.**

Comments:_____

4. STATE FORM 51821			
S	D	NA	General Application Requirements
			A) Was the most recent State Form 51821 application used (version *R/10-04*)? If your project is in USACE Chicago District, was Corps Form 4345 included in the designer's submittal for the 404 application? The USACE Chicago District will not accept application on the state's form. *Reviewer Notes:*
			B) Was a waters of the U.S. report and/or wetland delineation included with the application and did this include the appropriate approved JD or pre-JD form signed by the preparer of the report or a representative of INDOT-ES? *Reviewer Notes:*
			C) Does the application reflect the waters report and/or wetland delineation prepared for this project? This includes:
			☐ Is the waters report and/or wetland delineation less than five years old ;
			☐ Accounting of all streams, wetlands, and/or other waters located within the project limits (including confirmation of any non-impacted waters);
			☐ Correct wetland boundary (or boundaries) used to calculate impacts;
			☐ Correct ordinary high water mark/s (OHWMs) noted in plans and used to calculate impacts;
			☐ Correct wetland type(s) (emergent, scrub-shrub, forested) referenced in the application. *Reviewer Notes:*
			D) Does your project impact more than 1,500' of a single stream or 1.0 acre of any waters of the U.S. and if so was USACE Form 4345 included in the designer's submittal (i.e. a 404 Individual Permit is

			required)? Note that in some cases the USACE can make a cumulative determination for impacts (waters in close proximity to each other, multiple impacts to the same stream, etc.). *Reviewer Notes:*
			E) Was a summary table provided for projects with multiple impacts to the same type of resources (for example: a project with multiple stream crossing impacts)? Did this table meet the following requirements:
			☐ Itemization of the impacts to each individual stream (total length and total acres below OHWM);
			☐ Volume of fill below OHWM (cubic yards) at each location;
			☐ Existing structure dimensions (length, width, and height);
			☐ Proposed structure dimensions (length, width, and height);
			☐ Length of the existing stream that will be impacted;
			☐ Length of the proposed stream channel;
			☐ Acres of impact and volume of fill that will be placed in each wetland. *Reviewer Notes:*
			F) Were temporary impacts included in the application attachments (only permanent impacts are quantified in the application worksheets)? The following must be included:
			☐ Type of temporary fill material (should be non-erosive);
			☐ Volume (cubic yards) and area (acres) associated with temporary measures below OHWM;
			☐ Plan or drawing showing the approximate location and dimensions of the proposed measure(s);
			☐ Expected amount of time the temporary measures will be in place;
			☐ Number and dimensions (diameter and length) of pipes required for a temporary stream crossing;
			☐ Acres of temporary impact to any wetland(s);
			☐ Restoration plan including an appropriate seed mix. Note that temporary measures should be designed to handle a two-year storm event. *Reviewer Notes:*
			G) If the project will impact wetlands, was any correspondence from the USACE indicating the jurisdictional status of these features (approved JD, USACE signed pre-JD form, RGP pending letter, or USACE email correspondence) provided? If not, the application must be submitted to the USACE first so that this correspondence can be obtained prior to submitting the 401 application. *Reviewer Notes:*
			H) Are there any additional INDOT projects that IDEM will consider "*single and complete*" with the proposed project (impacts considered cumulatively)? In general, a project is considered cumulatively if it is located in close proximity (same 8-digit watershed) and will be under construction at or around the same time. *Reviewer Notes:*
			I) Was documentation provided that demonstrates the project will not affect a property listed, or eligible for listing, in the National Register of Historic Places (i.e. Section 106 must be satisfied). *Reviewer Notes:*

S	D	NA	**Block 1: Applicant Information**
			A) Does the applicant contact information reflect the appropriate EWPO Team Lead or Manager? *Reviewer Notes:*

S	D	NA	**Block 2: Agent Information**
			A) Is the agent contact information provided and does it appear to be accurate? *Reviewer Notes:*

S	D	NA	**Block 3: Project/Tract Location**
			A) Are the boxes in this section complete and accurate? *Reviewer Notes:*

[2]

			B) Are the type of aquatic resource(s) to be impacted accurately referenced (each applicable worksheet section should be referenced)? *Reviewer Notes:*
			C) Do the driving directions include distances (mileage)? *Reviewer Notes:*

S	D	NA	Block 4: Project Purpose and Description
			A) Is the appropriate box checked indicating whether or not construction has started? *Reviewer Notes:*
			B) Does the anticipated start date reflect the project's current letting schedule? *Reviewer Notes:*
			C) Does the "*purpose of project and overview of activities*" box meet the following requirements:
			☐ Overall description clarifies the waters resource(s) that will be impacted and is not solely focused on the roadway or structure work;
			☐ Existing structure dimensions (length, width, and height);
			☐ Proposed structure dimensions (length, width, and height);
			☐ Total cumulative impacts to streams (linear feet);
			☐ Net gain or net loss of stream length associated within any stream relocation (linear feet);
			☐ Net increase or decrease in encapsulation (linear feet);
			☐ Total cumulative impacts to streams and wetlands (acres);
			☐ A short description of any temporary impacts associated with the project and a brief statement regarding the restoration of any areas impacted by temporary fill. Note that this information can be included as an attachment if adequate space is not available. *Reviewer Notes:*

S	D	NA	Block 5: Avoidance, Minimization, and Mitigation Information
			A) Are the two questions regarding Class II isolated wetlands (Part A) adequately answered? Note that a response is required in the application for each question even if it is "*not applicable*." *Reviewer Notes:*
			B) Are the two questions in Part B regarding all other wetland, stream, and lake impacts adequately answered? This includes:
			☐ Listing a practicable alternative or alternatives (Note that an alternative to construction will always be a no-build scenario so this should never be left blank in the application) and a brief description on why these alternatives were not feasible;
			☐ Statement(s) regarding all avoidance and minimization of impacts that has occurred (Note that this can include a statement regarding Rule 5 compliance during construction). *Reviewer Notes:*
			C) Is the block labeled "*Describe all compensatory mitigation required for unavoidable impacts*" adequate? Requirements include:
			☐ Reference to any attached mitigation and monitoring plan with a brief summary of the proposed mitigation; OR
			☐ A statement that mitigation is not provided and reasoning behind this conclusion. *Reviewer Notes:*

S	D	NA	Block 6: Drawing/Plan Requirements
			A) Have the requirements for Part A been adequately addressed (aerial/overhead views of the project site showing existing/proposed construction)? This should be provided for each impact. *Reviewer Notes:*
			B) Have the requirements for Part B been adequately addressed (cross sections of any areas of fill or alterations to all waters)? *Reviewer Notes:*

[3]

			C) Have the requirements for Part C been adequately addressed? Location maps should include:
			☐ Project location displayed sufficiently for the regulatory agency to locate the project (should include a landmark such as an intersection);
			☐ Property boundaries;
			☐ A north arrow, scale bar, title block, and appropriate references included on the map. *Reviewer Notes:*
			D) Have the requirements for Part D been adequately addressed (wetland boundary and labels)? *Reviewer Notes:*
			E) Have the requirements for Part E been adequately addressed? This includes the location of all:
			☐ Surface waters (jurisdictional waters labeled on the plans with the appropriate USGS 7.5 minute series name);
			☐ Erosion control measures that will be used to protect each impacted waters;
			☐ Existing/proposed structures;
			☐ Fill/excavation locations (including a note on the plans regarding the length of fill placement);
			☐ Disposal areas for excavated material including quantities (INDOT standard specifications can be referenced as appropriate);
			☐ Wetland or stream mitigation site (if applicable). *Reviewer Notes:*
			F) Have the requirements for Part F been adequately addressed (water depths and bottom configurations)? This includes:
			☐ Cross sections provided for all stream impacts with a label for the OHWM elevation and flow-line elevation;
			☐ Cross sections provided for all wetland impacts showing the boundary of the wetland. *Reviewer Notes:*
			G) All plans are submitted on 8.5" x 11" pages. Larger detailed plans can be submitted additionally if folded in half to be 8.5" x 11" pages. *Reviewer Notes:*

S	D	NA	Block 7: Supplemental Application Materials
			A) Have the requirements for Part A been adequately addressed (wetland delineation for all wetlands on the project site)? This document should be included as an attachment. *Reviewer Notes:*
			B) Have the requirements for Part B been adequately addressed (project photographs)? The following must be provided in the application:
			☐ At least three photographs of each impacted resource should be provided. Captions for each photograph must include the direction taken, a statement of the image's content, and a description of any unusual circumstances shown in the photograph;
			☐ Photo locations are shown on the project plans or a photo-orientation map is provided. Any map must contain a north arrow, scale bar, title block, and appropriate references. *Reviewer Notes:*
			C) To meet Part C, was a letter from the USACE provided to verify the presence of any isolated wetlands (if applicable)? This is required for all projects with wetland impacts. This can be in the form of an approved JD, a pre-JD signed by the USACE, RGP pending letter, or some other form of correspondence from the USACE stating the jurisdiction status of all wetlands involved. *Reviewer Notes:*
			D) Per Part D, a mitigation plan and monitoring report are provided (if applicable) that meets the 2008 USACE mitigation rule requirements. These include:
			☐ A description of the resource type(s) and amounts(s) that will be compensated for by the mitigation plan and the method (s) of compensation (restoration, enhancement, preservation, etc.);

[4]

			☐ A description of the factors considered during the site selection process;
			☐ A description of the site protection instrument;
			☐ Baseline information of the proposed mitigation site (including a waters report and/or wetland delineation, QHEI assessments, etc.);
			☐ A brief summary of the number of credits provided at the mitigation site and a rationale for this determination;
			☐ An explanation on how the mitigation site will provide adequate compensation for unavoidable impacts to waters associated with the construction project;
			☐ Written specifications, construction methods, timing, and plans for the mitigation site (this should include quantities of plantings, planting rates, and spacing of plantings);
			☐ Maintenance requirements for the site;
			☐ Performance standards that will be used to determine whether or not the site is succeeding (Note that these should be provided for each planting area if multiples are included such as emergent and forested within a wetland mitigation);
			☐ A schedule of monitoring and reports to be sent to IDEM and USACE;
			☐ A long-term management plan indicating how the site will be managed after performance standards have been met;
			☐ Planting lists reflect the regional species recommended by IDNR for the north, central, and south planting zones. *Reviewer Notes:*
			E) A classification of all isolated wetlands is provided as required in Part E (if applicable). *Reviewer Notes:*
			F) Copies of all applicable local permits or resolutions pertaining to the project are included in the application per Part F. *Reviewer Notes:*
			G) A tract history is provided per Part G if the project will impact isolated wetlands. *Reviewer Notes:*

S	D	NA	Block 8: Additional Information That May Be Required

IDEM will notify the applicant if any of the items in Block 8 are required. This information is typically not included in the original INDOT submittal unless early coordination has occurred with IDEM indicating it should be submitted. This information could include but is not limited to the following: erosion control or storm water management plans, sediment analysis, species surveys for endangered, threatened, or rare (ETR species), and/or stream habitat surveys).

S	D	NA	Block 9: Permitting Requirements
			A) In Part A, is the appropriate box checked for the 404 permitting needs of the project? *Reviewer Notes:*
			B) In Part B, is the appropriate box checked indicating the application status for any necessary 404 permit? This should be checked "Yes" if the submittal will be concurrent with the 401 application submittal with a note to this affect included within the box. *Reviewer Notes:*
			C) In Part C, is the appropriate box checked regarding any IDNR permit needed for the project? If "Yes" was checked, is the remaining information in this block accurate (permit number; issuance date, etc.)? *Reviewer Notes:*
			D) In Part D, is the appropriate box checked for any other federal, state, or local permits/licenses required for the project? If "Yes" was checked, is the remaining information in this block accurate? *Reviewer Notes:*

[5]

S	D	NA	Block 10: Adjoining Property Owners and Addresses
			A) Was only the information for property owners located directly adjacent to any waters impacts provided? *Reviewer Notes:*
			B) Were addresses provided in a label format if attached on a separate page? Note that IDEM processing times can be reduced if this information is provided digitally. *Reviewer Notes:*

S	D	NA	Block 11: Signature – Signature of Affirmation

This block is left blank and will be completed by the appropriate INDOT-ES EWPO Manager or Team Lead.

Comments:_____

S	D	NA	Worksheet Block A: Jurisdictional Wetlands (if applicable)
			A) Is the appropriate wetland type (emergent, shrub-scrub, or forested) noted for each wetland that is present within the project limits? *Reviewer Notes:*
			B) Does the total size of the wetland reflect the acreage listed in the wetland delineation? *Reviewer Notes:*
			C) Is the appropriate box checked in the column "*To Be Impacted*?" for each wetland? *Reviewer Notes:*
			D) Are the acreage and fill quantity columns completed and do the impacts agree with the cumulative totals listed in Block 4? *Reviewer Notes:*
			E) Is the column "*ATF*" noted for any after-the-fact impacts (if applicable)? *Reviewer Notes:*
			F) Is a description of the type of fill material to be placed in the wetland(s) provided in the appropriate box? *Reviewer Notes:*
			G) Is a description of the type and quantity of material proposed to be dredged/excavated from the wetland(s) provided? *Reviewer Notes:*

S	D	NA	Worksheet Block B: Isolated Wetlands (if applicable)
			A) Is the appropriate box checked in regards to wetland class (I, II, or III) for each isolated wetland? *Reviewer Notes:*
			B) Is the column "*Type*" correct for each isolated wetland (non-forested versus forested)? *Reviewer Notes:*
			C) Does the total size of the wetland reflect the acreage listed in the wetland delineation? *Reviewer Notes:*
			D) Is the appropriate box checked in the column "*To Be Impacted*?" for each wetland?

[6]

			Reviewer Notes:
			E) Are the acreage and fill quantity columns completed and do the impacts agree with the cumulative totals listed in Block 4? *Reviewer Notes:*
			F) Is the column "*ATF*" noted for any after-the-fact impacts (if applicable)? *Reviewer Notes:*
			G) Is a description of the type of fill material to be placed in the wetland(s) provided in the appropriate box? *Reviewer Notes:*
			H) Is a description of the type and quantity of material proposed to be dredged/excavated from the wetland(s) provided? *Reviewer Notes:*

S	D	NA	**Worksheet Block C: Bridges and Stream Crossings (if applicable)**
			A) Does the stream name (or names) reflect the correct USGS 7.5 minute series name and are all crossing impacts accounted for in the worksheet*. *Reviewer Notes:*
			B) Does the "*Description of Impacts*" box include the following:
			☐ Existing structure dimensions (length, width, and height);
			☐ Proposed structure dimensions (length, width, and height);
			☐ Reference to any temporary fill associated with crossing (Note: this should be quantified in an attachment). *Reviewer Notes:*
			C) Is the length of upstream bank impacts provided (as referenced from the center of the structure) and does this seem to match what is presented in the attached plans? The scale bar can be used to visually estimate impacts. *Reviewer Notes:*
			D) Is the length of downstream bank impacts provided (as referenced from the center of the structure) and does this seem to match what is presented in the attached plans? The scale bar can be used to visually estimate impacts. *Reviewer Notes:*
			E) Are the volume and area of bank protection fill below the OHWM provided? *Reviewer Notes:*
			F) Are the lengths and acreage impacts in Block C consistent with the cumulative totals listed in Block 4? *Reviewer Notes:*

*** Separate worksheets for Block C can be completed for each stream impact. As an alternative, the cumulative impacts can be listed in this block and a summary table itemizing impacts to each stream can be attached to the application.**

S	D	NA	**Worksheet Block D: Bank Stabilization (if applicable)**
			A) Does the water body name (or names) reflect the correct USGS 7.5 minute series name and are all bank stabilization impacts accounted for in the worksheet*. *Reviewer Notes:*
			B) Does the description of impacts adequately detail the proposed stabilization activity (or activities) and does it reference any temporary fill associated with this work (Note: temporary fill should be quantified in an attachment)? *Reviewer Notes:*
			C) Is the length of shoreline or bank protection provided and does this seem to match what is presented in the attached plans? The scale bar can be used to visually estimate impacts. *Reviewer Notes:*
			D) Are the volume and area of bank protection fill placed below the OHWM provided? *Reviewer Notes:*

[7]

			E) Are the lengths and acreage impacts in Block D consistent with the cumulative totals listed in Block 4? *Reviewer Notes:*

*** Separate worksheets for Block D can be completed for each stream impact. As an alternative, the cumulative impacts can be listed in this block and a summary table itemizing impacts to each stream can be attached to the application**

S	D	NA	Worksheet Block E: Stream Relocation (if applicable)
			A) Does the water body name (or names) reflect the correct USGS 7.5 minute series name and are all stream relocation impacts accounted for in the worksheet*. Stream relocation is defined as any shift to the existing center-line of a stream. *Reviewer Notes:*
			B) Does the description of impacts adequately outline the following for each stream relocation activity
			☐ Total length of impact;
			☐ Any net loss or gain in stream length;
			☐ Acres of impact below OHWM;
			☐ Reference any temporary fill associated with this work (Note: temporary fill should be quantified in an attachment)? *Reviewer Notes:*
			C) Is the length of existing stream channel provided and does this seem to match what is presented in the attached plans? The scale bar can be used to visually estimate impacts? *Reviewer Notes:*
			D) Is the length of new channel to be constructed provided and does this seem to match what is presented in the attached plans? The scale bar can be used to visually estimate impacts? *Reviewer Notes:*
			E) Are the appropriate boxes checked for backfilling of the existing stream channel (yes or no) and the type of relocation (piping, open channel, or other)? *Reviewer Notes:*
			F) Are the types of fill and volume of fill associated with the stream relocation provided? *Reviewer Notes:*
			G) Are the lengths and acreage impacts in Block E consistent with the cumulative totals listed in Block 4? *Reviewer Notes:*

*** Separate worksheets for Block E can be completed for each stream impact. As an alternative, the cumulative impacts can be listed in this block and a summary table itemizing impacts to each stream can be attached to the application**

S	D	NA	Worksheet Block F: Open Water Fill (if applicable)
			A) Does the water body name (or names) reflect the correct USGS 7.5 minute series name and are all open water fill impacts accounted for in the worksheet*? *Reviewer Notes:*
			B) Does the description of impacts adequately outline the proposed open water fill activity (or activities) and does it reference any temporary fill associated with this work (Note: temporary fill should be quantified in an attachment)? *Reviewer Notes:*
			C) Is the area of the water body to be filled provided (acres)? *Reviewer Notes:*
			D) Is the type and volume fill provided? *Reviewer Notes:*

*** Separate worksheets for Block F can be completed for each stream impact. As an alternative, the cumulative impacts can be listed in this block and a summary table itemizing impacts to each stream can be attached to the application.**

[8]

Comments:

5. DOCUMENTATION

S	D	NA	I: Database Updates
			A) Have all databases been updated (**Reference SOP for database updates after application submittal**):
			☐ EWPS;
			☐ Milestones;
			☐ PSCS;
			☐ Projectwise.
			Reviewer Notes:

Version: 20130507

[9]

IDEM RULE 5 – NOTICE OF INTENT – FORM 47487

RULE 5 - NOTICE OF INTENT (NOI)
State Form 47487 (R5 / 10-05)
Indiana Department of Environmental Management
Office of Water Quality
Approved by State Board of Accounts, 2005

Type of Submittal (Check Appropriate Box):
☐ Initial ☐ Amendment ☐ Renewal

Permit Number:

(Note: The initial submittal does not require a permit number; the Department will assign a number. A permit number is required when filing an amendment, applying for renewal, or correspondence related to this permit).

Note: Submission of this Notice of Intent letter constitutes notice that the project site owner is applying for coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit Rule for Storm Water Discharges Associated with Construction Activity. Permitted project site owners are required to comply with all terms and conditions of the General Permit Rule 327 IAC 15-5 (Rule 5).

Project Name and Location

Project Name: | County:

Brief Description of Project Location:

Project Location: *Describe location in Latitude and Longitude (Degrees, Minutes, and Seconds or Decimal representation) and by legal description (Section, Township, and Range, Civil Township)*

Latitude: | Longitude:

Quarter: Section: Township: Range: Civil Township:

Does ☐ all or ☐ part of this project lie within the jurisdictional boundaries of a Municipal Separate Storm Sewer System (MS4) as defined in 327 IAC 15-13?
☐ Yes ☐ No If yes, name the MS4(s):

Project Site Owner and Project Contact Information

Company Name *(If Applicable)*:

Project Site Owner's Name: *(An Individual)* | Title/Position:

Address:

City: | State: | ZIP Code:

Phone: | FAX: | E-Mail Address: *(If Available)*

Ownership Status *(check one)*:
Governmental Agency: ☐ Federal ☐ State ☐ Local Non-Governmental: ☐ Public ☐ Private ☐ Other: *(Explain)*

Contact Person: | Company Name: *(If Applicable)*

Affiliation to Project Site Owner:

Address: *(if different from above)*

City: | State: | ZIP Code:

Phone: | FAX: | E-Mail Address: *(If Available)*

Project Information

Project Description:
☐ Residential-Single Family ☐ Residential-Multi-Family ☐ Commercial ☐ Industrial ☐ Other: *(Explain)*

Name of Receiving Water:

(Note: If applicable, name of municipal operator of storm sewer and the ultimate receiving water. If a retention pond is present on the property, the name of the nearest possible receiving water receiving discharge must be provided).

Project Acreage
Total Acreage: Proposed Land Disturbance: *(in acres)*
Total Impervious Surface Area: *(in square feet, estimated for completed project)*

Project Duration
Estimated Start Date: Estimated End Date for all Land Disturbing Activity:

(Continued on Reverse Side)

Construction Plan Certification

By signing this Notice of Intent letter, I certify the following:

A. The storm water quality measures included in the Construction Plan comply with the requirements of 327 IAC 15-5-6.5, 327 IAC 15-5-7, and 327 IAC 15-5-7.5;
B. the storm water pollution prevention plan complies with all applicable federal, state, and local storm water requirements;
C. the measures required under 327 IAC 15-5-7 and 327 IAC 15-5-7.5 will be implemented in accordance with the storm water pollution prevention plan;
D. if the projected land disturbance is One (1) acre or more, the applicable Soil and Water Conservation District or other entity designated by the Department, has been sent a copy of the Construction Plan for review;
E. storm water quality measures beyond those specified in the storm water pollution prevention plan will be implemented during the life of the permit if necessary to comply with 327 IAC 15-5-7; and
F. implementation of storm water quality measures will be inspected by trained individuals.

In addition to this form, I have enclosed the following required information:

☐ Verification by the reviewing agency of acceptance of the Construction Plan.

☐ Proof of publication in a newspaper of general circulation in the affected area that notified the public that a construction activity is to commence, including all required elements contained in 327 IAC 15-5-5 (9). The Proof of Publication **Must** include company name and address, project name, address/location of the project, and the receiving stream to which storm water will be discharged. Following is a sample Proof of Publication:

"XERT Development Inc. (10 Willow Lane, Indianapolis, Indiana 46206) is submitting a Notice of Intent to the Indiana Department of Environmental Management of our intent to comply with the requirements of 327 IAC 15-5 to discharge storm water from construction activities associated with Water Garden Estates located at 24 Washout Lane, Indianapolis, Indiana 46206. Runoff from the project site will discharge to the White River. Questions or comments regarding this project should be directed to Walter Water of XERT Development Inc."

☐ $100 check or money order payable to the Indiana Department of Environmental Management. A permit fee is required for all NOI submittals (initial and renewal). A fee is not required for amendments.

Project Site Owner Responsibility Statement

By signing this Notice of Intent letter, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information or violating the provisions of 327 IAC 15-5, including the possibility of fine and imprisonment for knowing violations.

Printed Name of Project Owner: _____

Signature of Project Owner: _____ Date: _____

This Notice of Intent must be signed by an individual meeting the signatory requirements in 327 IAC 15-4-3(g).
All NOI submittals must include an original signature (FAX and photo copies are not acceptable).

Note: Within 48 hours of the initiation of construction activity, the project site owner must notify the appropriate plan review agency and IDEM, Office of Water Quality of the actual project start date if it varies from the date provided above.

Note: A permit issued under 327 IAC 15-5 is granted by the commissioner for a period of five (5) years from the date coverage commences. Once the five (5) year permit term duration is reached, a general permit issued under this rule will be considered expired, and as necessary for construction activity continuation, a new Notice of Intent letter (Renewal) is required to be submitted ninety (90) days prior to the termination of coverage. The submittal must include the NOI Letter, Proof of Publication, Fee, and verification that the plan for the project was approved (original verification of plan approval is acceptable provided the scope of the project has not changed from the original submittal).

Mail this form to: Indiana Department of Environmental Management
Cashiers Office - Mail Code 50-10C
100 North Senate Avenue
Indianapolis., IN 46204-2251

327 IAC 15-5-6 (a) also requires a copy of the completed Notice of Intent letter be submitted to the local Soil and Water Conservation District or other entity designated by the Department, where the land disturbing activity is to occur.

Questions regarding the development or implementation of the Construction Plan/Storm Water Pollution Prevention Plan should be directed to the local county Soil and Water Conservation District (SWCD). If you are unable to reach the SWCD or have other questions please direct those inquiries to the IDEM Rule 5 Coordinator at 317/233-1864 or 800/451-6027 ext.3-1864.
For information and forms visit:http://www.in.gov/idem/permits/water/wastewater/wetwthr/storm/rule5.html

RULE 5 GUIDANCE FOR CONSTRUCTION PLAN (SWPPP)

Storm Water Pollution Plan Development

Rule 5 requires the development of a Construction Plan. An integral part of the Construction Plan includes a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention Plan addresses several issues. First, the plan outlines how erosion and sedimentation will be controlled on the project site to minimize the discharge of sediment off-site or to a water of the state. Second the plan addresses other pollutants that may be associated with construction activity. This can include disposal of building materials, management of fueling operations, etc. Finally, the plan should also address pollutants that will be associated with the post construction land use.

The Construction Plan requirements can be found in 327 IAC 15-5-6.5 [PDF] (Scroll to Page 10) of the Rule. The following information is an outline of items that are required to be contained in a Construction Plan that is submitted pursuant to 327 IAC 15-5. The items within this document have been divided into three distinct categories, including:

1. Basic Plan Elements,
2. Active Construction Component, and
3. Post Construction Component.

Each item is identified with a letter and number that can be directly related back to the review sheet that is utilized by staff reviewing a set of Construction Plans that have been submitted for 327 IAC 15-5. Each item also contains information that explains the expectation for each plan element and the level to which it should be described or represented within the plans.

Guidance on Each of the 23 Basic Plan Elements:

A1 - Plan Index showing locations of required items

The plan index should include a list of the required items in the rule and where they occur in the plan. Plan preparers often have their plan index mirror items in the IDEM standard plan review checklist.

A2 - 11 X 17 inch plat showing building lot numbers/boundaries and road layout/names

The reduced size plat of the project is intended to be a basic representation of the project layout. At a minimum it should include building lot boundaries, lot numbers, road layout, and road names. It is not intended to be a complete representation of the Construction Plan or the Storm water pollution prevention plan. The purpose of the reduced plat is primarily to provide staff a simplified layout of the project that can be used as an aide when conducting an inspection of the project site. The plat should be legible, therefore based on the size of the project it is acceptable to have multiple sheets of 11 X 17. (This item is not required for single-family residential developments of 4 lots or less and single-family residential strip developments)

A3 - Narrative describing project nature and purpose:

IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 1 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 The plan should include information regarding the nature and purpose of the project. Typically this information would appear in a narrative; however it is also acceptable for the narrative to include other plan requirements.

A4 - Vicinity map showing project location:

The plan should include a map that depicts the site in relation to other areas in the city or county and should be sufficient for someone not familiar with the area to find the project site location. Acceptable map types include USGS topographic maps, county road maps, city street maps, custom drawn maps, etc. (as long as they adequately depict the site location).

A5 - Legal Description of the Project Site:

The legal description of the project site should be identified to the nearest quarter section and include township and range coordinates, and Civil Township name. While the longitude and latitude coordinates are not a requirement of the plan; the checklist does mention these items to encourage inclusion by the plan preparer.

A6 - Location of all lots and proposed site improvements:

Lot boundaries and numbers are required to be shown on the plan. In addition, the plan should show all proposed site improvements, including but not limited to utilities, roads (names, if available), structures, and common areas. Single lot projects should show the location of any proposed structures.

A7 - Hydrologic unit code:

The hydrologic unit code should be identified to the14 digit code. The code identified in the plan should represent the watershed(s) in which the project is located. One resource to obtain this information is available at: http://igs.indiana.edu/arcims/statewide/index.html.

A8 - Notation of any State or Federal water quality permits:

The plan should identify any permits required related to water quality, such as Construction in a Floodway from DNR, 401 Water Quality Certification from IDEM, 404 permits from US Army Corps of Engineers, etc. It is not necessary for the project site owner to possess permits applicable to his/her project to receive approval of their plan pursuant to 327 IAC 15-5.

A9 - Specific points where Storm water discharge will leave the site:

The plan should clearly identify where Storm water will exit the site. It is not necessary that the location be identified with a note on the plan, unless it is not clear from the topographic or storm drainage system information.

A10 - Location and name of all wetlands, lakes, and water courses on and adjacent to the site:

IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 2 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 This information is important in evaluating the proposed Storm water pollution prevention measures to insure that they are adequate and appropriate to reduce the impact to natural areas associated with the project site. Identification of nearby watercourses and lakes may place an additional importance on sediment control in a particular area of the project.

A11 - Identify all Receiving Waters:

The plan should identify all named streams, or other water bodies that will potentially receive runoff from the project site. If the discharge is to a municipal storm sewer, the plan should identify the owner of the storm drain system as well as the ultimate receiving water for the storm drain system.

A12 - Identification of potential discharges to groundwater:

The plan should include the location of all areas where Storm water may be potentially discharged to groundwater. These areas include sinkholes or uncapped abandoned wells, which may be located on the project site or downstream of the project site and could potentially be impacted by Storm water discharge. It could also include Storm water infiltration practices such

as drywells, which may be planned as part of the project. These areas need to be clearly located in the plan, with adequate protection measures to prevent contaminated runoff from entering the groundwater. Abandoned wells should be properly capped.

A13 - 100 Year Floodplains, floodways, and floodway fringes:

This information is relevant to the project if a stream is located on or near the property. If applicable to the project site, the plan should at a minimum include a discussion of their existence and to further extent delineation on the plan. If this element is not applicable to the project, the plan preparer should make reference to this in the plan.

A14 - Pre-construction and post construction estimate of Peak Discharge:

This information is a required element of the plan and has been included to place emphasis on the impact projects can have related to runoff quantities and velocities. There are several acceptable methods of calculating these figures, including the rational method, TR55, etc. (This item is not required for single-family residential developments of 4 lots or less and single family residential strip developments)

A15 - Adjacent land use, including upstream watershed:

This information provides a basis to evaluate the overall project including potential downstream impacts, but also other contributing factors that are discharging onto the project site. It is important to have an understanding of the impact the project may have on surrounding properties and sensitive areas, but also have an understanding of the runoff and other potential pollutants that may be discharged from areas in the watershed above the project. The intent of this element is to identify the types of land use, such as single-family residential, multi-family residential, commercial, agricultural, forested, etc.

A16 - Locations and approximate boundaries of all disturbed areas:

IDEM: Rule 5 Guidance for Construction Plan/Storm
Water Pollution Plan Development Page 3 of 10 http://www.in.gov/idem/4909.htm 9/16/2010

The plan should identify the construction limits of the project. The extent of disturbance has a profound impact on what practices may be necessary to adequately control erosion and the resulting sediment. If disturbance boundaries are not identified inside of the property boundary, the plan reviewer will consider the entire site as being disturbed for the purposes of evaluating the proposed Storm water quality measures.

A17 - Identification of existing vegetative cover:

The plan should delineate the boundaries of major vegetative cover types, such as grass, brush, trees, etc. It is not necessary for the plan to identify individual vegetative species.

A18 - Soils map including descriptions and limitations:

Each plan should provide a soil map for the project site. The map should be accompanied by descriptions of each soil type that occurs on the site. A legible copy of the appropriate soil map from the USDA soil survey for the county is sufficient. Boring logs and a geotechnical report or site mapping by a soil scientist should also be considered acceptable means of satisfying this requirement. In addition to a soil map and a description of the soil types, the plan should include a discussion of the soil characteristics and limitations associated with the project site and the measures that will be integrated into the project to overcome any limitations. For example, if sanitary sewer does not service the site and on-site septic systems will be used for waste disposal, the plan preparer should provide information concerning the suitability of the soil and the type of systems that will be required to overcome soil limitations.

A19 - Locations, size and dimensions of proposed Storm water systems:

All proposed Storm water systems, including swales, channels, piping, culverts, etc. should be clearly shown in the plan. In addition to location, the plan should include the size and dimensions of the specific Storm water systems.

A20 - Plan for any off-site construction activities associated with this project:

Any off-site services such as sanitary sewers, waterlines, other utilities, roads, etc. which are off of the proposed project site, but are necessary to provide service to the project must be included in the plan submitted for the project, if the project site owner is responsible for paying for the off-site service. If the utility or local government is paying for the construction of the off-site tie-in, then they do not need to be included as part of the project submittal, but should be submitted separately, if the disturbance will be one (1) acre or more. It is important that the project site owner realize that all land disturbance associated with their project is subject to compliance with the rule. The same burden of compliance is necessary for these off-site areas as they are for the project site itself. If there are not off-site activities, or others are conducting the off-site activities, a simple note to that affect should be sufficient to satisfy this requirement.

A21 - Locations of proposed soil stockpiles, borrow and/or disposal areas:

IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 4 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 Similar to item A20, this information needs to be submitted as part of the plan. Often times borrow and disposal areas occur off of the project site. Unless these areas are commercially operated facilities, they need to be included as part of the plan submittal. These areas must also be included when they occur on site. If there are no stockpile, borrow or disposal areas planned, a simple note to that affect should be sufficient to satisfy this requirement.

A22 - Existing site topography at an interval appropriate to show detailed drainage patterns:

This information is critical to properly evaluate the adequacy of the proposed Storm water pollution prevention measures. Site topography may be depicted in multiple ways such as continuous contour lines and spot elevations (as long as there are a sufficient number of locations to be able to visualize the site topography). A graphical profile of the project may also be acceptable for highway, road, utility and other lineal projects.

A23 - Proposed final topography at an interval appropriate to show detailed drainage patterns:

This information is critical to properly evaluate the adequacy of the proposed Storm water pollution prevention measures. Site topography may be depicted in multiple ways such as continuous contour lines and spot elevations (as long as there are a sufficient number of locations to be able to visualize the site topography. A graphical profile of the project may also be acceptable for highway, road, utility and other lineal projects.

Assessment of Storm water Pollution Prevention – Construction Component (Section B)

B1 - Description of potential pollutant sources associated with the

construction activities:
This item is included in the rule to place an emphasis on identification of pollutants that are associated with construction activity. In the past, the emphasis has been on sediment reduction; however the rule requires the plan preparer to identify other potential pollutants and their sources. Potential pollutant sources include material and fuel storage areas, fueling locations, exposed soils, leaking vehicles and equipment, etc. To satisfy this item, the plan needs to contain a written description of the expected pollutants that could enter Storm water during the construction operation, and where those potential pollutants might be generated. In addition, the plan preparer should include and discussion of measures or operational activities that will be initiated to minimize the danger of pollutants entering Storm water. (This item is not required for single-family residential developments of 4 lots or less and single family residential strip developments)

B2 - Sequence describing Storm water quality measure implementation relative to land disturbing activities:
Each plan should contain multiple Storm water pollution prevention measures. All measures will not be installed at the same time. Various measures will be installed at different times throughout the construction process. Some will installed prior to any land disturbance, such as the construction entrance and some initial perimeter sediment control measures. Others may not be necessary until work at the site progresses to an area where they are necessary. Each proposed measure should be IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 5 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 indentified in the sequence as to when it is to be installed in relation to land disturbing activities. Specific dates of installation are not necessary or the intent of this requirement.

B3 - Stable construction entrance locations and specifications:
All projects with the exception of some lineal projects and residential strip developments should have a stable construction entrance. All access points to a project must have a stabilized entrance. The plan should clearly show the location of all proposed stable entrance locations, as well as specifications and construction details regarding how the stable entrance is to be constructed and maintained.

B4 - Sediment control measures for sheet flow areas:

This item is intended to evaluate the areas of the site where runoff will be primarily in a sheet flow condition. The reviewer should evaluate these areas and the proposed sediment control measures to insure that the proposed measures are adequate for the situation. Each proposed measure must be accompanied by construction details and specifications.

B5 - Sediment control measures for concentrated flow areas:
This item is intended to evaluate the areas of the site where runoff will be primarily in a concentrated flow condition. The reviewer should evaluate these areas and the proposed sediment control measures to insure that the proposed measures are adequate for the situation. Each proposed measure must be accompanied by construction details and specifications. In addition to the typical sediment control measures used to minimize sedimentation associated with surface water runoff, provisions should be made to address any dewatering and/or directional boring operations.

B6 - Storm sewer inlet protection measure locations and specifications:
If surface inlets, including curb inlets, are present, the plan should include protection measures to prevent sediment from entering the storm drain system. The proposed practices should be

appropriate for the type of inlet it is proposed to protect. Alternate measures, such as seeding and curbside protection may be considered as adequate protection, if sufficient to prevent sediments from entering the street and curb inlets. Each proposed measure must be accompanied by construction details and specifications.

B7 - Runoff control measures:

This item refers to measures such as diversions, rock check dams, slope drains, etc. These types of measures may not be necessary on every project. However, if the plan reviewer feels that they are necessary, the plan should be evaluated as to whether the issue was adequately addressed in the plan. Each proposed measure must be accompanied by construction details and specifications.

B8 - Storm water outlet protection specifications:

All Storm water discharge locations need to be adequately protected to prevent scour erosion. The plan should specify protection measures appropriate for the situation. Each proposed measure must be accompanied by construction details and specifications.

B9 - Grade Stabilization structure locations and specifications:

This item refers to measures such as rock chutes, toe wall and drop structures, etc. These types of IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 6 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 measures may not be necessary on every project. However, if the plan reviewer feels that they are necessary, the plan should be evaluated as to whether the issue was adequately addressed in the plan. Each proposed measure must be accompanied by construction details and specifications.

B10 - Location, dimensions, specifications and construction details of each Storm water quality measure:

Each proposed measure should be clearly located in the plan. Some plans may not provide the location in a pictorial format on the plan drawings, but may provide clear text or a table to depict where various practices should be located. This should be adequate to satisfy the requirement as long as the reviewer can determine the location in the plan. Each proposed measure must also be accompanied by construction details and specifications. Temporary or permanent surface stabilization is required on any bare or thinly vegetated area that is scheduled or likely to remain inactive for a period of 15 days or more.

B11 - Temporary surface stabilization methods appropriate for each season:

The plan should provide detailed specifications, including sequencing information, regarding which stabilization methods are to be employed. There should be multiple methods, as the various seasons need to be considered. Even if the project is expected to be short lived, these seasonal options must be supplied. Delays are common in the construction industry and projects take longer than expected. The plan needs to cover these contingencies. For applications that include seeding, the plan preparer should provide application rates for soil amendments and seed mixtures. The type and application rate for anchored mulch.

B12 - Permanent surface stabilization specifications:

The permanent stabilization methods should be clearly specified, including sequencing information, in the plan. The plan preparer should provide application rates for soil amendments and seed mixtures and the type and application rate for anchored mulch.

B13 - Material handling and spill prevention plan:

The plan should include a list of expected materials that may be present on the site during construction operations. A written description of how these materials will be handled to minimize

the potential the materials will enter Storm water runoff should accompany the list of materials. There should also be procedures directing the contractor on the required response to any spills that may occur during construction operations. (This item is not required for single-family residential developments of 4 lots or less and single family residential strip developments)

B14 - Monitoring and maintenance guidelines for each proposed pollution prevention measure:

Each proposed measure must be accompanied by instructions for evaluating the practice for maintenance needs once installed. The maintenance guidelines for the project should also include instructions on how the monitoring and maintenance procedures are to be carried out. The Phase II IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 7 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 version of the rule requires that the project site owner or their representative, knowledgeable in erosion and sediment control, inspect the site for Storm water pollution prevention deficiencies at least weekly and again within 24 hours of every ½ inch rain event. The plan should clearly describe these required maintenance procedures.

B15 - Erosion & Sediment control specifications for individual building lots:

If the project has multiple lots where independent activities are likely to occur, the plan should provide clear guidance as to the required minimum standards for erosion and sediment control during construction operations on the individual lots. The Phase II version of the rule places specific requirements on activities conducted on individual building lots. The minimum standards in the plan should meet the minimum lot requirements established in Section 7.5 of the rule, and should follow the standards set forth in the “Erosion and Sediment Control for Individual Building Lots” brochure available on the Division of Soil Conservation's website. The plan reviewer should also take into account the relative size of the lots and steepness of the lots when determining whether provisions in the plan appear to be adequate.

Assessment of Storm Water Pollution Prevention – Post Construction Component (Section C)

There are several new requirements in the revised version of 327 IAC 15-5. Several of these new requirements involve the potential pollutants that will be generated from the completed project. Every land use has certain pollutants that are generated simply based on the facility or the activities being conducted on the property. The intent of the Clean Water Act rules established by US EPA is to minimize pollutants generated from new construction projects, including the post construction pollutants that will be generated by the proposed land use change. 327 IAC 15-5 has incorporated requirements to address these issues. The post construction Storm water pollution prevention plan must include the implementation of storm water quality measures to address pollutants that will be associated with the final land use of the project. Post construction Storm water quality measures should be functional upon completion of the project. Long-term functionality of the measures is critical to their performance and should be monitored and maintained. The intent of these provisions in the regulation is not to just simply plug in practices to treat the expected post construction pollutants. Emphasis should be on designing the project, or modifying the design of a project, to minimize the generation of pollutants in the first place. It will be impossible for current and future landowners to eliminate all potential pollutants. Once design considerations have been made to minimize the generation, then additional practices may need to be added to the project to treat the runoff and trap the pollutants that could not be prevented. The main objective is that everyone realizes that all types of land use carry with them pollutants and pollutant sources, and that it is possible to modify the project site design to reduce the pollutant sources and, with additional treatment practices, reduce the amount of pollutants potentially impacting the environment. (This section of items is not required for

single-family residential developments of 4 lots or less and single-family residential strip developments)

C1 - Description of pollutants and their sources associated with the proposed land use.

(This checklist item relates to 327 IAC 15-5-6.5(a)(8)(A) - A description of potential pollutant sources from the proposed land use, which may reasonably be expected to add a significant amount IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 8 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 of pollutants to Storm water discharges.) The plan should include a narrative description that discusses the proposed project and the expected pollutants that typically are generated by this type of land use. The description should also discuss the sources of these pollutants within the finished project site (e.g., oil, grease, antifreeze, brake fluid, brake dust, rubber fragments, gasoline, diesel fuel and other hydrocarbons, and metals from vehicular and other sources, grit (sediment) from wearing of the road surface and falling or washing off of vehicles, trash (including bacteria and other biological agents contained in the trash) from littering and other types of improper disposal or storage, and elevated receiving water temperatures from Storm water runoff contact with impervious surfaces).

C2 - Sequence describing storm water quality measure implementation.

This checklist item relates to 327 IAC 15-5-6.5(a)(8)(D) - A sequence describing when each post construction Storm water quality measure will be installed.) The plan should provide a sequence of when the proposed post construction Storm water quality measures will be installed. Pay close attention to practices, like basins or ponds that could be utilized during construction for sediment control. They should not be installed late in the project simply to reduce cleanout burdens.

C3 - Description of proposed post construction storm water quality measures.

(This checklist item relates to 327 IAC 15-5-6.5(a)(8)(C) A description of measures that will be installed to control pollutants in Storm water discharges that will occur after construction activities have been completed. Such practices include infiltration of run-off, flow reduction by use of open vegetated swales and natural depressions, buffer strip and riparian zone preservation, filter strip creation, minimization of land disturbance and surface imperviousness, maximization of open space, and Storm water retention and detention ponds, 327 IAC 15-5-6.5(a)(8)(E) Storm water quality measures that will remove or minimize pollutants from Storm water run-of, and 327 IAC 15-5-6.5 (a)(8)(F) Storm water quality measures that will be implemented to prevent or minimize adverse impacts to stream and riparian habitat.) Items C, E & F from the rule listed above require similar information and may be provided in a single narrative description within the plan. The plan should include a narrative description that discusses how the project was designed to minimize the generation of post construction pollutants, and how the proposed post construction Storm water quality measures will improve the quality of the Storm water discharge from the finished project. Many times, it will be possible for a project to comply without installing elaborate and expensive treatment systems. Reducing impervious surfaces and increasing vegetative surfaces to trap pollutants may be sufficient. Sometimes, management practices, such as more frequent street sweeping or reduced fertilizer and pesticide applications, may have a significant positive impact on Storm water quality.

C4 - Location, dimensions, specifications and construction details of each Storm water quality measure.

(This checklist item relates to 327 IAC 15-5-6.5(a)(8)(B) Location, dimensions, detailed specifications, and construction details of all post construction Storm water quality measures.)

All proposed post construction Storm water quality measures should be clearly shown on the plan, and should include specifications and construction details similar to those that have long been required for erosion and sediment control measures during construction.

C5 - Description of maintenance guidelines for proposed post

IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 9 of 10 http://www.in.gov/idem/4909.htm 9/16/2010 **construction water quality measures.**

(This checklist item relates to 327 IAC 15-5-6.5(a)(8)(G) A narrative description of the maintenance guidelines for all post construction Storm water quality measures to facilitate their proper long term function. This narrative description shall be made available to future parties who will assume responsibility for the operation and maintenance of the post construction Storm water quality measures.) All proposed measures must be accompanied by guidelines for monitoring and maintenance. If manufactured products are involved, the manufacturer should be able to provide detailed information about monitoring and maintenance procedures and frequencies. The plan should also identify the parties or individuals that will be responsible for the future long-term maintenance. This identification does not need to be a name of an individual, as they may not be known at the time of plan submittal. A description of the entity (e.g., homeowner's association, name of the government department, if the measures will be turned over to the local government, etc.) should be sufficient. IDEM: Rule 5 Guidance for Construction Plan/Storm Water Pollution Plan Development Page 10 of 10 http://www.in.gov/idem/4909.htm 9/16/2010

DNR

INDIANA DEPARTMENT OF NATURAL RESOURCES

IDNR LIST OF INDIANA WATERWAYS DECLARED NAVIGABLE

LISTED BY COUNTY NAME

A

Adams County

(1) [St. Marys River: Nonnavigable.] (2) [Wabash River: Nonnavigable.]

Allen County

(1) Little River: Navigable from its junction with the Wabash River 20.2 river miles to Ellison Road.
(2) Maumee River: Navigable from the Indiana-Ohio state line 27.05 river miles to the Hosey Dam (Fort Wayne).
(3) [St. Mary's River: Nonnavigable.]

B

Bartholomew County

(1) Driftwood River: Navigable from its junction with the East Fork of the White River (Columbus) to the county line.
(2) East Fork of White River: Navigable from the county line to its junction with the Driftwood and Flatrock Rivers (Columbus).
(3) Flatrock River: Navigable from its junction with the East Fork of the White River (Columbus) to the county line.

Benton County

No waterway has been declared navigable or nonnavigable.

Blackford County

No waterway has been declared navigable or nonnavigable.

Boone County

No waterway has been declared navigable or nonnavigable.

Brown County

(1) North Fork of Salt Creek: Navigable from its junction with Salt Creek for 36.7 river miles to its junction with David Branch (near Nashville).
(2) Salt Creek: Navigable from its junction with the East Fork of the White River into Lake Monroe.

C

Carroll County

(1) Tippecanoe River: Navigable throughout the county. (2) Wabash River: Navigable throughout the county.

Cass County

(1) Wabash River: Navigable throughout the county.

Clark County

(1) Bull Creek: Navigable from its junction with the Ohio River for 1.1 river miles. (2) Camp Creek: Navigable from its junction with the Ohio River for 1.7 river miles.
(3) Fourteen Mile Creek: Navigable from its junction with the Ohio River for 2.9 river miles. (4) Lancassange Creek: Navigable from its junction with the Ohio River for 0.3 river miles. (5) Ohio River: Navigable throughout the county.
(6) Silver Creek: Navigable from its junction with the Ohio River for 3.0 river miles.

Clay County

(1) Eel River: Navigable throughout the county.

Clinton County

No waterway has been declared navigable or nonnavigable.

Crawford County

(1) Big Blue River: Navigable throughout the county.
(2) Dry Run Creek: Navigable from its junction with the Big Blue River for 1.4 river miles. (3) Little Blue River: Navigable from its junction with the Ohio River for 10.6 river miles. (4) Mill Creek: Navigable from its junction with the Little Blue River for 1.4 river miles.
(5) Ohio River: Navigable throughout the county.

D

Daviess County

(1) East Pork of the White River: Navigable throughout the county. (2) West Fork of the White River: Navigable throughout the county.

Dearborn County

(1) Great Miami River: Navigable throughout the county.
(2) Hogan Creek (including North Fork and South Fork): Hogan Creek (Main Stem) is navigable from its junction with the Ohio River for the entire length (0.4 river miles). The North Fork of Hogan Creek is navigable from its

junction with Hogan Creek for 4.9 river miles. The South Fork of Hogan Creek is navigable from its junction with Hogan Creek for 5.0 river miles.
(3) Laughery Creek: Navigable from its junction with the Ohio River for 10.8 river miles (near Milton). (4) Ohio River: Navigable throughout the county.
(5) Tanners Creek: Navigable from its junction with the Ohio River in Lawrenceburg for 10.6 river miles. (6) Whitewater River: Navigable throughout the county.
(7) Wilson Creek: Navigable from its junction with the Ohio River for 1.9 river miles.

Decatur County
(1) Flatrock River: Navigable throughout the county.

DeKalb County
No waterway has been declared navigable or nonnavigable.

Delaware County
(1) Mississinewa River: Navigable throughout the county. (2) West Fork of the White River: Navigable to Smithfield.

Dubois County
(1) Flat Creek: Navigable from its junction with the Patoka River throughout the county. (2) East Fork of the White River: Navigable throughout the county.
(3) Patoka River: Navigable throughout the county.

E

Elkhart County
(1) Baugo Creek (formerly Bangango Creek).
(2) St. Joseph River: Navigable throughout the county.

F

Fayette County
(1) West Fork of the Whitewater River: Navigable to the three forks (near Connersville).

Floyd County
(1) Ohio River: Navigable throughout the county.
(2) Silver Creek: Navigable from its junction with the Ohio River for 3.0 river miles.

Fountain County
(1) Wabash River: Navigable throughout the county.

Franklin County
(1) East Pork of the Whitewater River: Navigable throughout the county from its junction with the Whitewater River.
(2) West Fork of the Whitewater River: Navigable throughout the county from its junction with the Whitewater River.
(3) Whitewater River: Navigable throughout the county.

Fulton County
No waterway has been declared navigable or nonnavigable. There is a discussion of navigability relative to a determination that Nyona Lake as a public freshwater lake in *Bath v. Courts*, Ind. App., 459 N.E. 2d 72 (1984).

G

Gibson County
(1) Patoka River (also known as Houchins Ditch): Navigable throughout the county from its junction with the Wabash River.
(2) Wabash River: Navigable throughout the county.
(3) White River: Navigable throughout the county from its junction on the Wabash River.

Grant County
(1) Mississinewa River: Navigable throughout the county.

Greene County
(1) Black Creek: Navigable to near Marco.
(2) Eel River: Navigable throughout the county from its junction with the West Fork of the White River. (3) West Fork of the White River: Navigable throughout the county.

H

Hamilton County
(1) West Fork of the White River: Navigable throughout the county.

Hancock County
(1) Big Blue River: Navigable throughout the county.

Harrison **County**
(1) Big Blue River: Navigable throughout the county from its junction with the Ohio River. (2) Buck Creek: Navigable 5.8 river miles from its junction with the Ohio River.

(3) Indian Creek: Navigable 4.8 river miles from its junction with the Ohio River.
(4) Mosquito Creek: Navigable 2.8 river miles from its junction with the Ohio River. (5)
Ohio River: Navigable throughout the county.
(6) Potato Run: Navigable 0.4 river miles from its junction with the Ohio River.

Hendricks County

(1) Mud Creek: Navigable to Tudor Road (near Hazelwood).

Henry County

(1) Flatrock River: Navigable throughout the county.

Howard County

No waterway has been declared navigable or nonnavigable.

Huntington County

(1) [Huntington Lake: Nonnavigable for interstate commerce.]
(2) Little River: Navigable throughout the county from its junction on the Wabash River. (3)
Wabash River: Navigable throughout the county.

J

Jackson County

(1) East Fork of White River: Navigable throughout the county. (2)
Muscatatuck River: Navigable throughout the county.

Jasper County

(1) Iroquois River: Navigable to near Parr.
(2) Kankakee River: Navigable throughout the county.

Jay County

No waterway has been declared navigable or nonnavigable.

Jefferson County

(1) Big Saluda Creek: Navigable 1.0 river miles from its junction with the Ohio River.
(2) Indian-Kentuck Creek: Navigable 3.8 river miles from its junction with the Ohio River. (3)
Ohio River: Navigable throughout the county.

Jennings County

(1) Muscatatuck River: Navigable to the main forks.

Johnson County

(1) Big Blue River: Navigable throughout the county.
(2) East Fork of White River: Navigable to its junction with the Flatrock and Driftwood rivers.
(3) Sugar Creek: Navigable from its junction with the Big Blue River (to form the Driftwood River) throughout the county.
(4) West Fork of White River: Navigable throughout the county.

K

Knox County

(1) Black Creek: Navigable from its junction with the West Fork of the White River (near Edwardsport) throughout the county.
(2) Busseron Creek: Navigable throughout the county. (3)
Wabash River: Navigable throughout the county.
(4) West Fork of White River: Navigable throughout the county from its junction with the White River. (5)
White River: Navigable throughout the county from its junction with the Wabash River.

Kosciusko County

(1) [Tippecanoe Lake: Nonnavigable.]

L

Lagrange County

(1) Fawn River: Two segments of the river are navigable in Lagrange County. These segments are separated by portions of the river in Michigan. The Fawn River has been found to be nonnavigable at Greenfield Mills (river mile 32).

Lake County

(1) Grand Calumet River: Navigable from the Illinois state line (near Hammond) to Marquette Park. (2)
Indiana Harbor and Ship Canal: Navigable throughout the county.
(3) Kankakee River: Navigable throughout the county. (4)
Lake Michigan: Navigable throughout the county.
(5) Little Calumet River: Navigable throughout the county. (6)
[Wolf Lake: Nonnavigable.]

LaPorte County

(1) Kankakee River: Navigable throughout the county. (2)
Lake Michigan: Navigable throughout the county.

(3) Trail Creek: Navigable 1.0 river miles from its junction with Lake Michigan.
(4) [Unnamed Lake: Located in the north one-half of section 8, township 36 north, range 1 west is a nonnavigable lake.]

Lawrence County
(1) East Fork of White River: Navigable throughout the county.
(2) Salt Creek: Navigable from its junction with the East Fork of White River throughout the county.

M

Madison County
(1) West Fork of White River: Navigable throughout the county.

Marion County
(1) West Fork of the White River: Navigable throughout the county.

Marshall County
(1) Yellow River: Navigable to Plymouth.

Martin County
(1) East Fork of White River: Navigable throughout the county.
(2) Indian Creek: Navigable throughout the county.
(3) Lost River: Navigable from its junction with East Fork of the White River. (1) Iroquois River: Navigable to near Parr.
(2) Kankakee River: Navigable throughout the county.

Jay County
No waterway has been declared navigable or nonnavigable.

Jefferson County
(1) Big Saluda Creek: Navigable 1.0 river miles from its junction with the Ohio River.
(2) Indian-Kentuck Creek: Navigable 3.8 river miles from its junction with the Ohio River. (3) Ohio River: Navigable throughout the county.

Jennings County
(1) Muscatatuck River: Navigable to the main forks.

Johnson County
(1) Big Blue River: Navigable throughout the county.
(2) East Fork of White River: Navigable to its junction with the Flatrock and Driftwood rivers.
(3) Sugar Creek: Navigable from its junction with the Big Blue River (to form the Driftwood River) throughout the county.
(4) West Fork of White River: Navigable throughout the county.

K

Knox County
(1) Black Creek: Navigable from its junction with the West Fork of the White River (near Edwardsport) throughout the county.
(2) Busseron Creek: Navigable throughout the county. (3) Wabash River: Navigable throughout the county.
(4) West Fork of White River: Navigable throughout the county from its junction with the White River. (5) White River: Navigable throughout the county from its junction with the Wabash River.

Kosciusko County
(1) [Tippecanoe Lake: Nonnavigable.]

L

Lagrange County
(1) Fawn River: Two segments of the river are navigable in Lagrange County. These segments are separated by portions of the river in Michigan. The Fawn River has been found to be nonnavigable at Greenfield Mills (river mile 32).

Lake County
(1) Grand Calumet River: Navigable from the Illinois state line (near Hammond) to Marquette Park. (2) Indiana Harbor and Ship Canal: Navigable throughout the county.
(3) Kankakee River: Navigable throughout the county. (4) Lake Michigan: Navigable throughout the county.
(5) Little Calumet River: Navigable throughout the county. (6) [Wolf Lake: Nonnavigable.]

LaPorte County
(1) Kankakee River: Navigable throughout the county. (2) Lake Michigan: Navigable throughout the county.
(3) Trail Creek: Navigable 1.0 river miles from its junction with Lake Michigan.

(4) [Unnamed Lake: Located in the north one-half of section 8, township 36 north, range 1 west is a nonnavigable lake.]

Lawrence County

(1) East Fork of White River: Navigable throughout the county.
(2) Salt Creek: Navigable from its junction with the East Fork of White River throughout the county.

M

Madison County

(1) West Fork of White River: Navigable throughout the county.

Marion County

(1) West Fork of the White River: Navigable throughout the county.

Marshall County

(1) Yellow River: Navigable to Plymouth.

Martin County

(1) East Fork of White River: Navigable throughout the county. (2)
Indian Creek: Navigable throughout the county.
(3) Lost River: Navigable from its junction with East Fork of the White River.

Miami County

(1) Mississinewa River: Navigable throughout the county. (2)
Wabash River: Navigable throughout the county.

Monroe County

(1) Beanblossom Creek: Navigable to Griffy Creek. (2)
Clear Creek: Navigable to near Harrodsburg.
(3) North Fork of Salt Creek: Navigable from its junction with Salt Creek (within Lake Monroe) throughout the county.
(4) Salt Creek: Navigable into Lake Monroe.
(5) West Fork of White River: Navigable throughout the county.

Montgomery County

(1) Sugar Creek: Navigable throughout the county.

Morgan County

(1) Indian Creek: Navigable from its junction with the West Fork of the White River for 3.3 river miles. (2)
[Lambs Creek: Nonnavigable.]
(3) Mill Creek: Navigable throughout the county.
(4) Mill Creek Ditch: Navigable throughout the county.
(5) Mud Creek: Navigable from its junction with Mill Creek throughout the county. (6)
West Fork of White River: Navigable throughout the county.

N

Newton County

(1) Iroquois River: Navigable throughout the county. (2)
Kankakee River: Navigable throughout the county.

Noble County

No waterway has been declared navigable or nonnavigable.

O

Ohio County

(1) Arnold Creek: Navigable from its junction with the Ohio River for 4.4 river miles. (2)
Buck Run: Navigable from its junction with the Ohio River for 1.1 river miles.
(3) Island Branch: Navigable from its junction with the Ohio River for 1.0 river miles. (4)
Laughery Creek: Navigable throughout the county.
(5) Ohio River: Navigable throughout the county.

Orange County

(1) Lick Creek: Navigable downstream from Old Spring Mill (near Paoli). (2)
Lost River: Navigable to near Orangeville.
(3) Patoka River: Navigable within Greenfield Township and downstream.

Owen County

(1) Cagles Mill Lake: Navigable throughout the county. (2)
Eel River: Navigable to Cagles Mill Lake.
(3) Mill Creek: See Cagles Mill Lake.
(4) West Fork of White River: Navigable throughout the county.

P

Parke County

(1) Big Raccoon Creek: Navigable throughout the county.
(2) Little Raccoon Creek: Navigable from its junction with Big Raccoon Creek for 5.3 river miles (Nevins Covered Bridge).
(3) Cecil M. Harden Lake: See Big Raccoon Creek. (4)
Sugar Creek: Navigable throughout the county. (5)
Wabash River: Navigable throughout the county.

Perry County

(1) Anderson River: Navigable from its junction with the Ohio River along the Spencer County line. (2)
Bald Knob Creek: Navigable from its junction with Big Oil Creek for 0.5 river miles.
(3) Bear Creek: Navigable from its junction with the Ohio River for 1.6 river miles.
(4) Big Deer Creek: Navigable from its junction with the Ohio River for 5.9 river miles. See Deer Creek. (5)
Big Oil Creek (including Webb Branch): Navigable from its junction with the Ohio River for 10.6 river miles. Webb Branch is navigable from its junction on Big Oil Creek for 0.9 river miles.
(6) Big Poison Creek: Navigable from its junction with the Ohio River for 6.3 river miles.
(7) Buck Creek: Navigable from its junction with the Ohio River for 0.7 river miles.
(8) Bull Hollow: Navigable from its junction with Big Oil Creek for 0.7 river miles.
(9) Caney Branch of Big Poison Creek: Navigable from its junction with Big Poison Creek for 0.2 river miles. (10)
Caney Branch of Little Deer Creek: Navigable from its junction with Little Deer Creek for 0.8 river miles. (11)
Clover Lick Creek: Navigable from its junction with Big Oil Creek for 0.7 river miles.
(12) Deer Creek: Navigable from its junction with the Ohio River for 5.9 river miles. (13)
East Deer Creek: Navigable from its junction with Deer Creek for 0.6 river miles. (14)
Fanny Creek: Navigable from its junction with the Ohio River for 0.8 river miles. (15) Indian Fork: Navigable from its junction with Big Oil Creek for 1.4 river miles.
(16) Kelly Hollow: Navigable from its junction with Millstone Creek for 1.0 river miles. (17)
Kingly Creek: Navigable from its junction with the Ohio River for 0.2 river miles. (18) Knob Creek: Navigable from its junction with the Ohio River for 0.2 river miles.
(19) Little Deer Creek (also known as West Fork of Deer Creek): Navigable from its junction with Deer Creek for 3.9 river miles.
(20) Little Oil Creek: Navigable from its junction with Big Oil Creek for 4.4 river miles.
(21) Little Poison Creek: Navigable from its junction with Big Poison Creek for 1.2 river miles. (22)
Millstone Creek: Navigable from its junction with the Ohio River for 1.4 river miles.
(23) Neglie Creek: Navigable from its junction with Little Deer Creek for 0.5 river miles. (24)
Ohio River: Navigable throughout the county.
(25) Oil Creek: See Big Oil Creek.
(26) Poison Creek: See Big Poison Creek.
(27) Sample Run: Navigable from its junction with the Ohio River for 0.2 river miles. (28)
Tates Hollow: Navigable from its junction with the Ohio River for 0.3 river miles. (29)
Webb Branch: See Big Oil Creek.

Pike County

(1) East Fork of White River: Navigable throughout the county.
(2) Flat Creek: Navigable downstream from a point in Franklin Township. (3)
Patoka River: Navigable throughout the county.
(4) White River: Navigable throughout the county.

Porter County

(1) Burns Ditch: See Portage Burns Waterway.
(2) Portage Burns Waterway: Navigable in its entirety (1.3 river miles) as a connection between the Little Calumet River and Lake Michigan.
(3) Kankakee River: Navigable throughout the county. (4)
Lake Michigan: Navigable throughout the county.
(5) Little Calumet River: Navigable throughout the county.

Posey County

(1) Big Creek: Navigable from its junction with the Wabash River for 25.4 river miles (near Cynthiana). (2)
Harris Ditch: Navigable from its junction with the Ohio River for 0.9 river miles.
(3) Hurricane Fork: See Little Fork of Big Creek.
(4) Little Fork of Big Creek: Navigable from its junction with Big Creek for 5.1 river miles. (5)
Little Pitcher Lake: Navigable as an extension of Harris Ditch.
(6) South Fork: See Little Fork of Big Creek.
(7) McFadden Creek: Navigable from its junction with the Ohio River for 2.3 river miles. (8)
Ohio River: Navigable throughout the county.
(9) Wabash River: Navigable from its junction with the Ohio River throughout the county.

Pulaski County

Tippecanoe River: Navigable throughout the county.

Putnam County

(1) Cagles Mill Lake: See Eel River, and see Mill Creek.
(2) Eel River: Navigable upstream to its junction with Mill Creek (now within Cagles Mill Lake). (3) Mill Creek: Navigable throughout the county.

R

Randolph County

(1) Mississinewa River: Navigable throughout the county.

Ripley County

No waterway has been declared navigable or nonnavigable.

Rush County

(1) Big Blue River: Navigable throughout the county. (2) Flatrock River: Navigable throughout the county.
(3) Little Blue River: Navigable downstream from its junction with Ball Run in Posey Township.

S

St. Joseph County

(1) Baugo Creek (formerly Banbango Creek): Navigable from its junction with the St. Joseph River throughout the county.
(2) Kankakee River: Navigable throughout the county. (3) St. Joseph River: Navigable throughout the county.

Scott County

(1) Cammie Thomas Ditch: Navigable as a channelization of the Muscatatuck River. (2) Muscatatuck River: Navigable throughout the county.
(3) South Fork of Muscatatuck River: Navigable from its junction with the Muscatatuck River upstream to its junction with Graham Creek at river mile 28.1.

Shelby County

(1) Big Blue River: Navigable throughout the county.
(2) Conns Creek: Navigable from its junction with the Flatrock River throughout the county (but with private ownership of the creek bed).
(3) Flatrock River: Navigable throughout the county.
(4) Little Blue River: Navigable from its junction with the Big Blue River (Shelbyville) throughout the county. (5) Sugar Creek: Navigable to Hough Cemetery (near Boggstown).

Spencer County

(1) Anderson River: Navigable from its junction with the Ohio River throughout the county. (2) Baker Creek: Navigable from its junction with Little Pigeon Creek for 1.8 river miles.
(3) Caney Creek: Navigable from its junction with the Ohio River for 2.8 river miles.
(4) Clear Creek: Navigable from its junction with Little Pigeon Creek for 2.4 river miles. (5) Crooked Creek: Navigable from its junction with the Ohio River for 7.7 river miles. (6) Garrett Creek: Navigable from its junction with the Ohio River for 2.2 river miles.
(7) Honey Creek: Navigable from its junction with the Ohio River for 1.8 river miles. (8) Jackson Creek: Navigable from its junction with the Ohio River for 1.8 river miles. (9) Lake Drain: Navigable from its junction with the Ohio River for 1.6 river miles.
(10) Little Pigeon Creek: Navigable from its junction with the Ohio River for 15.8 river miles. (11) Little Sandy Creek: Navigable from its junction with the Ohio River for 2.0 river miles. (12) Ohio River: Navigable throughout the county.
(13) Sandy Creek: Navigable from its junction with the Ohio River for 2.6 river miles.

Starke County

(1) Kankakee River: Navigable throughout the county. (2) Tippecanoe River: Navigable throughout the county.
(3) Yellow River: Navigable from its junction with the Kankakee River throughout the county.

Steuben County

No waterway has been declared navigable or nonnavigable.

Sullivan County

(1) Busseron Creek: Navigable to near Caledonia.
(2) Kelly Bayou: Navigable from its downstream junction with an oxbow of the Wabash River to its upstream junction of the Wabash River.
(3) Turman Creek: Navigable from its junction on the Wabash River for 7.9 river miles.
(4) Wabash River: Navigable throughout the county.

Switzerland County

(1) Bryant Creek: Navigable from its junction with the Ohio River for 2.6 river miles. (2) Goose Creek: Navigable from its junction with the Ohio River 1.5 river miles.
(3) Grants Creek: Navigable from its junction with the Ohio River for 2.5 river miles. (4) Indian Creek: Navigable from its junction with the Ohio River for 4.1 river miles. (5) Log

Lick Creek: Navigable from its junction with the Ohio River for 2.3 river miles. (6) Ohio River: Navigable throughout the county.
(7) Plum Creek: Navigable from its junction with the Ohio River for 2.9 river miles. (8) Sand Creek: Navigable from its junction with the Ohio River for 0.9 river miles. (9) Turtle Creek: Navigable from its junction with the Ohio River for 1.3 river miles.

T

Tippecanoe County

(1) Tippecanoe River: Navigable from its junction with the Wabash River. (2) Wabash River: Navigable throughout the county.

Tipton County

No waterway has been declared navigable or nonnavigable.

U

Union County

(1) East Fork of Whitewater River: Navigable throughout the county.

V

Vanderburgh County

(1) Bayou Creek: Navigable from its junction with the Ohio River for 1.5 river miles. (2) Locust Creek: Navigable from its junction with Pigeon Creek for 1.5 river miles. (3) Ohio River: Navigable throughout the county.
(4) Pigeon Creek: Navigable from its junction with the Ohio River for 5.9 river miles.

Vermillion County

(1) Big Vermillion River: Navigable for 10.8 miles from its junction with the Wabash River throughout the county (and for a total of 22.6 river miles to Carmargo, Illinois).
(2) Wabash River: Navigable throughout the county.

Vigo County

(1) Wabash River: Navigable throughout the county.

W

Wabash County

(1) Mississinewa River: Navigable throughout the county. (2) Wabash River: Navigable throughout the county.

Warren County

(1) Wabash River: Navigable throughout the county.

Warrick County

(1) Baker Creek: Navigable from its junction with Little Pigeon Creek for 1.8 river miles. (2) Big Pigeon Creek: See Pigeon Creek.
(3) Clear Creek: Navigable from its junction with Little Pigeon Creek for 2.4 river miles.
(4) Cypress Creek (including Cypress Creek Diversion Channel): Navigable from its junction with the Ohio River for 6.6 river miles. (The original bed of Cypress Creek is also navigable west of Cypress Creek Diversion Channel, except where the creek bed has emerged and is no longer inundated.)
(5) Little Pigeon Creek: Navigable from its junction on the Ohio River for 15.8 river miles. (6) Ohio River: Navigable throughout the county.

Washington County

(1) Big Blue River: Navigable to the town of Fredricksburgh at river mile 57.2.
(2) Cammie Thomas Ditch: Navigable as a channelization of the Muscatatuck River. (3) East Fork of White River: Navigable throughout the county.
(4) Elk Creek: Navigable from its junction with the Cammie Thomas Ditch to river mile 3.0.
(5) Muscatatuck River: Navigable from its junction with the East Fork of the White River throughout the county.
(6) Twin Creek: Navigable from the East Fork of White River to river mile 7.98.

Wayne County

No waterway has been declared navigable or nonnavigable.

Wells County

(1) Wabash River: Navigable throughout the county (with navigability terminating at the Adams County line).

White County

(1) Tippecanoe River: Navigable throughout the county.

Whitley County

No waterway has been declared navigable or nonnavigable.

IDNR - PUBLIC FRESHWATER LAKES

Adams County
- Rainbow Lake, located in township 25 N, 1/2 mi. NE of Geneva
- Saddle Lake, located in township 28 N, 1.75 mi. N of Decatur

Allen County
- Lake Everett, located in township 31 N, 3 mi. N of Arcola
- Fulk Lake, located in township 32 N, 41.260556 latitude, -85.286141 longitude
- Hosey Lake, located in township 30 N,.5 mi. NE of Wash. & Anthony Blvds
- Schoaff Lake, located in township 31 N,.75 mi. S of US 30 on Sherman Blvd
- Viberg Lake, 41.247658 latitude, -85.060932 longitude

Carroll County
- Lake Freeman, also in White County, located in township 26 N, 3 mi. N of Monticello*

Cass County
- Lake Cicott, located in township 27 N, 9 miles West of Logansport

Dekalb County
- Cedar Lake, located in township 35 N, 4 1/2 mi. NW of Waterloo
- Dunton Lake, located in township 33 N, 6 1/2 mi. S of Auburn
- Haynes Lake, located in township 34 N, 41.38889 latitude, -85.17056 longitude
- Indian Lake, 41.464027 latitude, -85.169690 longitude
- Lintz Lake, located in township 34 N, 3 1/2 North of Garrett
- Lower Story Lake, located in township 35 N, 4 1/2 mi. N of Ashley, 41.51806 latitude, -85.14444 longitude
- Terry Lake, located in township 36 N, 1/2 mi. E of Hamilton
- Upper Story Lake, located in township 35 N, 4 1/2 mi. N of Ashley, 41.51417 latitude, -85.13611 longitude

Elkhart County
- Boot Lake, located in township 38 N, 4 mi. NW of Elkhart
- Buttonbush Lake, located in township 38 N
- Butts Lake, located in township 36 N, 41.60488 latitude, -85.80549 longitude
- Dock Lake, located in township 38 N, 3 mi. SE of Bristol
- East Lake, located in township 38 N, 3 mi. NE of Middlebury, also in LaGrange County
- Fish Lake, N of Millersburg, 41.579174 latitude, -85.663691 longitude
- Goose Pond, located in township 37 N, 41.693857 latitude, -85.788009 longitude
- Grange (or Orange) Lake, 41.689261 latitude, -85.766704 longitude
- Heaton Lake, located in township 38 N, 3 mi. N of Elkhart & 4 mi. E of SR 19
- Hunter Lake, located in township 38 N, 5 mi. NE of Middlebury
- Indiana Lake, located in township 38 N, 3 mi. NW of Bristol
- Norton Lake, located in township 36 N, NE edge of Goshen
- Round Lake, located in township 38 N, 3 mi. N of Bristol
- Simonton Lake, located in township 38 N, 4 mi. N of Elkhart
- Wolf Lake, located in township 37 N, 2 mi. N of Goshen on SR 15
- Yellow Creek Lake, located in township 36 N, 1 mi. N of Foraker

Fulton County
- Anderson Lake, 41.125588 latitude, -86.305194 longitude
- Barr Lake, located in township 31 N, 3 1/2 mi. NE of Athens
- Bruce Lake, located in township 30 N, 6 mi. NW of Kewanna, also in Pulaski County
- Fletcher Lake, located in township 29 N, 6 mi. SE of Grass Creek
- King Lake, located in township 31 N, 1 mi. S of Delong
- L Lake, located in township 30 N, 41.0125 lat, -86.03611 longitude
- Lake Sixteen, located in township 30 N, 2 mi. SE of Athens
- Lake Manitou, located in township 30 N, 1 mi. E of Rochester
- Landis Lake, located in township 30 N, 3 1/2 mi. SE of Akron
- Lost Lake, located in township 30 N, 4 mi. SE of Akron
- Millark Millpond, located in township 30 N, 4 mi. S of Athens
- Mt. Zion Millpond, located in township 30 N, 3 mi. SW of Athens
- Mud Lake, located in township 30 N, near Silver Lake
- Nyona Lake, located in township 29 N, 4 mi. NE of Fulton
- O'Blennis Lake, located in township 31 N, 7 mi. NW of Rochester
- Rock Lake, located in township 30 N, 7 mi. SW of Silver Lake
- South Mud Lake, located in township 29 N, 4 mi. NE of Fulton
- Town Lake, located in township 30 N, 1/2 mi. SW of Akron
- Upper Summit Lake, located in township 30 N, 2 1/2 mi. SE of Akron
- Zink Lake, located in township 31 N, 7.5 mi. NW of Rochester

Kosciusko County

- Allen Lake, located in township 34 N, 41.360785 longitude, -85.674792 latitude
- Backwater Lake (connected to Lake Webster), 1 mi. E of North Webster, 41.31312 latitude, -85.66310 longitude
- Banning Lake, located in township 33 N, 2 1/2 mi. SW of North Webster
- Barrel-and-a-half Lake, located in township 34 N, on Tri-County Fish and Wildlife Area near Syracuse
- Beaver Dam Lake, located in township 30 N, 4 mi. NW of Silver Lake
- Beigh Lake, located in township 30 N, 41.086306 latitude, -85.845317 longitude
- Big Barbee Lake, located in township 33 N, 2 1/2 mi. S of North Webster
- Big Chapman Lake, located in township 33 N, 2 mi. S of Oswego
- Black Pond, 3 1/2 mi. NE of North Webster, 41.349463 latitude, -85.654778 longitude
- Boner Lake, located in township 34 N, 2 mi. E of Syracuse
- Bufflehead Pond, 2 1/2 mi. E of North Webster, 41.331419 latitude, -85.650787 longitude
- Caldwell Lake, located in township 31 N, 4 mi. N of Silver Lake
- Carr Lake, located in township 31 N, 5 mi. S of Warsaw
- Center Lake, off of North Buffalo Street in Warsaw, 41.246497 latitude, -85.857557 longitude
- Crystal Lake, located in township 32 N, 5 mi. N of Burket
- Dewart Lake, located in township 34 N, 3 mi. N of Oswego
- Diamond Lake, located in township 31 N, 3 mi. NW of Silver Lake
- Durham Lake, located in township 33 N, 5 mi. SE of North Webster
- Fish Lake, located in township 31 N, 3 1/2 mi. NE of Claypool
- Hammond Lake, located in township 34 N, on Tri-County Fish and Wildlife Area near Syracuse
- Goose Lake, 41.190117 latitude, -85.880841 longitude
- Heckman Lake, 41.093430 latitude, -85.703157 longitude
- Heron Lake, located in township 33 N, 2 mi. S of N. Webster
- Hill Lake, located in township 31 N, 2 1/2 mi. N of Silver Lake
- Hoffman Lake, located in township 33 N, 1 1/2 mi. NW of Atwood
- Irish Lake, located in township 33 N, 3 1/2 mi. SW of North Webster
- James Lake, located in township 33 N, 1 1/2 mi. W of North Webster
- Kuhn Lake, located in township 33 N, 3 mi. SW of North Webster
- Lake Wawasee, located in township 34 N, at Syracuse
- Little Barbee Lake, located in township 33 N, 4 mi. SW of North Webster
- Little Chapman Lake, located in township 32 N, 8 mi. NE of Lakeside Park
- Little Pike Lake, located in township 32 N, 1 mi. N of Warsaw
- Long Lake, located in township 33 N, 1 1/2 mi. N-NE of North Webster
- Loon Lake, locate in township 30 N, 2.5 mi. E of Beaver Dam
- McClures Lake, located in township 30 N, 3 1/2 mi. W of Silver Lake
- Morehead Lake, located in township 33 N, 41.346939 latitude, -85.714832 longitude
- Muskellunge Lake, located in township 31 N, 4 1/2 mi. S of Warsaw
- North Little Lake, located in township 30 N, 1 mi. N of Silver Lake
- Oswego Lake, located in township 33 N, at Oswego
- Pierceton Lake, located in township 32 N, 2 mi. N of Pierceton
- Pike Lake, located in township 32 N, at Warsaw
- Price Lake, located in township 33 N, 41.347380 latitude, -85.677666 longitude
- Reed Lake, located in township 31 N, 41.172259 latitude, -85.729471 longitude
- Ridinger Lake, located in township 32 N, 4 mi. S of Warsaw
- Robinson Lake, located in township 32 N, 4 mi. NW of Larwill, also in Whitley County
- Rothenberger Lake, located in township 34 N, part of Flatbelly Lake
- Sawmill Lake, located in township 33 N, 2 1/2 mi. SW of N. Webster
- Sechrist Lake, located in township 33 N, 2 1/2 mi. SW of N. Webster
- Sellers Lake, 41.152465 latitude, -85.745154 longitude
- Sheely Lake, 41.193680 latitude, -85.770207 longitude
- Sherburn Lake, 41.159643 latitude, -85.745221 longitude
- Shock Lake, on Tri-County Fish and Wildlife Area near Syracuse; 41.353446 latitude, -85.690925 longitude
- Shoe Lake, 41.307843 latitude, -85.749094 longitude
- Silver Lake, located in township 30 N, 1 mi. N of Silver Lake
- Spear Lake, located in township 34 N, 4 mi. N of Highbanks
- Stafford Lake, 41.170340 latitude, -85.778559 longitude
- Stanton Lake, 41.321955 latitude, -85.769864 longitude
- Stevens Lake, 41.176217 latitude, -85.746210 longitude
- Syracuse Lake, located in township 34 N, 2.5 mi. W of Wawasee
- Tennant Lake, 41.147152 latitude, -85.731769 longitude
- Tippecanoe Lake, 41.327180 latitude, -85.762759 longitude
- Waubee Lake (also known as Wabee Lake), located in township 34 N, S edge of Shady Banks

- Webster Lake, located in township 33 N, E edge of North Webster
- Winona Lake, located in township 31 N, 1.5 mi. E of Warsaw
- Wyland Lake, on Tri-County Fish and Wildlife Area near Syracuse
- Yellow Creek, 41.104644 latitude, -85.953391 longitude

LaGrange County

- Adams Lake, located in township 36 N, 1.5 mi. S of Woodruff
- Aldrich Lake, located in township 38 N, 1/2 mi. NE of Ontario
- Appleman Lake, 6.5 mi. E of Plato, 41.623330 latitude, -85.212805 longitude
- Atwood Lake, located in township 36 N, 1.5 mi. E of Eddy
- Basin Lake, located in township 36 N, 41.56861 latitude, -85.41222 longitude
- Big Long Lake, located in township 36 N, 3 mi. NE of South Milford
- Blackman Lake, located in township 36 N, 1 1/2 mi. NW of South Milford
- Brokesha Lake, located in township 38 N, 5 mi. W of Scott
- Buck Lake, located in township 37 N, 1 1/2 mi. SE of Seybert
- Cass Lake, located in township 37 N, 4 mi. West/NW of Shipshewana
- Cedar Lake, located 4 mi. NE of Howe, 41.738157 latitude, -85.367755 longitude
- Cline Lake, located in township 37 N at Plato, 41.649932 latitude, -85.312247 longitude
- Cotton Lake, located in township 37 N, 1 mi. SW of Shipshewana
- Dallas Lake, located in township 36 N, 4 1/2 mi. NW of Wolcottville
- Donaldson Lake, 41.718547 latitude, -85.356171 longitude
- East Lake, located in township 38 N, 3 mi. NE of Middlebury, also in Elkhart County
- Emma Lake, located in township 36 N, in Town of Emma
- Eve Lake, located in township 36 N, 1 mi. SE of Woodruff
- Fish Lake (in Plato), located 2 mi. S of Plato, 41.623132 latitude, -85.329517 longitude
- Fish Lake (in Scott), 41.760687 latitude, -85.641710 longitude
- Fennell Lake, located in township 38 N, 4 mi. NE of Brighton
- Green Lake, located in township 32 N, 4 mi. W of Flint, also in Steuben County
- Hackenburg Lake, located in township 36 N, 6 mi. NW of Wolcottville
- Hayward Lake, located in township 36 N at Stroh, 41.584621 latitude, -85.204313 longitude
- Lake of the Woods, located in township 36 N, 3 mi. S of Stroh
- Little Turkey Lake, located in township 36 N, 1/2 mi. W of Elmira
- Martin Lake, located in township 36 N, 3 mi. NW of Wolcottville
- Messick Lake, located in township 36 N, 6 mi. NW of Wolcottville
- Meteer Lake, located in township 38 N, 2 mi. E of Howe
- Mud Lake, 41.571919 latitude, -85.222943 longitude
- Mud Lake, 41.696758 latitude, -85.628828 longitude
- Nauvoo Lake, located in township 36 N, 1 1/2 mi. E of Wolcottville
- North Twin Lake, located in township 38 N, 1 1/2 mi. NW of Howe
- Olin Lake, located in township 36 N, 2 1/2 mi. NW of Wolcottville
- Oliver Lake, located in township 36 N, 2 1/2 mi. NW of Wolcottville
- Pigeon Lake, located in township 38 N, 3 mi. W of Howe
- Pretty Lake, located in township 36 N, 3 mi. W of Stroh
- Rainbow Lake, located in township 37 N, near Shipshewanna
- Royer Lake, located in township 36 N, 2 mi. S of Plato
- Shipshewana Lake, located in township 37 N, 1 mi. W of Shipshewana
- South Twin Lake, located in township 38 N, 2 mi. W of Howe
- Spectacle Lakes, located in township 36 N, 3 mi. S of Stroh
- Still Lake, located in township 38 N, 1 mi. NW of Howe
- Stone Lake, located in township 38 N, 5 mi. W of Scott
- Taylor Lake (at Shipshewana), located in township 38 N, 2 mi. N of Shipshewana
- Taylor Lake (at Stroh), located in township 36 N, 2 mi. South of Stroh
- The Spreads, located in township 36 N, 41.564625 latitude, -85.420549 longitude
- Wall Lake, located in township 38 N, 2 mi. W of Orland
- Weir Lake, located in township 37 N, 1/2 mi. N of Plato
- Westler Lake, located in township 36 N, 2 mi. NW of Wolcottville
- Witmer Lake, located in township 36 N, 1 mi. W of Wolcottville
- Yost Pond, located in township 38 N, 3 1/2 mi. SW of Scott

Lake County

- Cedar Lake, located in township 34 N, E edge of Cedar Lake
- Fancher Lake, in Crown Point at Lake County Fairgrounds
- Golf Lake, 41.461607 latitude, -87.458811 longitude
- Lake George (Hobart), W edge of Hobart, 41.670872 latitude, -87.502204 longitude

LaPorte County

- Clear Lake, 6.5 mi. N of Mill Creek
- Clear Lake, located in township 36 N, 2 mi. W of Westville, also in Porter County
- Crane Lake, 41.619695 latitude, -86.764634 longitude
- Fish Trap Lake, 2 mi. N of LaPorte, 41.633436 latitude, -86.729619 longitude
- Hog Lake, 2.5 mi. N of Rolling Prairie, 41.705855 latitude, -86.630034 longitude
- Horseshoe Lake, 5 mi. S of Springville, 41.643537 latitude, -86.730878 longitude
- Hudson Lake, 41.715524 latitude, -86.551806 longitude
- Lily Lake, 1 mi. N of LaPorte, 41.612893 latitude, -86.732005 longitude
- Pine Lake, 5 mi. S of Springville, 41.627776 latitude, -86.748939 longitude
- Saugany Lake, N edge of Lake Park, 41.715216 latitude, -86.584026 longitude
- Silver Lake, 2.5 mi. S of Birchim, 41.692493 latitude, -86.593875 longitude
- Stone Lake, 41.614234 latitude, -86.745058 longitude
- Tamarack Lake, located at Kingsbury Fish and Wildlife Area near LaPorte
- Upper & Lower Fish Lake, 41.564340 latitude, -86.545977 longitude

Marshall County

- Cook Lake, S edge of Twin Lakes, 41.299782 latitude, -86.366798 longitude
- Dixon Lake, Southwest side of Plymouth, on Dixon Lake Trail, 41.326825 latitude, -86.344560 longitude
- Eddy Lake, 41.186249 latitude, -86.310274 longitude
- Flat Lake, 41.329254 latitude, -86.436989 longitude
- Gilbert Lake, 41.335538 latitude, -86.446380 longitude
- Holem Lake, 41.299782 latitude, -86.366798 longitude
- Houghton Lake, 41.234587 latitude, -86.455385 longitude
- Koontz Lake, see Koontz Lake in Starke county; located in township 34N
- Lake Maxinkuckee, located in township 32 N, S edge of Culver
- Lake of the Wood, 8 mi. SW of Bremen, 41.423786 latitude, -86.228653 longitude
- Lawrence Lake, 2.5 mi. S of Plymouth on Olive Trail, 41.296591 latitude, -86.334971 longitude
- Lost Lake, 41.198378 latitude, -86.422414 longitude
- Myers Lake, 41.301159 latitude, -86.348994 longitude
- Pretty Lake, 6 mi. SW of Plymouth, 41.326028 latitude, -86.373436 longitude
- Thomas Lake, 41.292580 latitude, -86.394986 longitude
- Zehner Millpond Lake, 2 mi. W of Twin Lakes, 41.298765 latitude, -86.386667 longitude

Noble County

- Axel Lake, located in township 35 N, 2 mi. NE of Rome City
- Barr Lake, located on township 35 N, 1/2 m mi. NE of Rome City
- Bartley Lake, located in township 33 N, 3 mi. SW of Albion
- Bass Lake, located in township 33 N, 2 mi. N of Burr Oak
- Baugher Lake, located in township 33 N, 4 1/2 mi. NW of Etna
- Bear Lake, located in township 33 N, 1 1/2 mi. SW of Wolfe Lake
- Beck Lake, located in township 35 N, 3 mi. NW of Kendallville
- Big Lake, located in township 33 N, 8 mi. N of Columbia City
- Bixler Lake, located in township 34 N, edge of Kendallville
- Bowen Lake, located in township 33 N, Chain-O-Lakes State Park
- Bristol Lake, located in township 33 N, 1 1/2 mi. North of Merriam
- Bushong Lake, located in township 34 N, 2 1/2 mi. SE of Albion
- Crane Lake, 4.2 mi. S of Wolf Lake, 41.277236 latitude, -853482374 longitude
- Cree Lake, located in township 35 N, 8 mi. N of Kendallville
- Crooked Lake, 9 mi. N of Columbia City, 41.262075 latitude, -85.479572 longitude, also in Whitley County
- Cub Lake, 41.315410 latitude, -85.508220 longitude
- Deep Lake, 41.331390 latitude, -85.479531 longitude
- Deer Lake, 41.374131 latitude, -85.555696 longitude
- Diamond Lake, located 0.5 mi. S of Ligonier, 41.438679 latitude, -85.523519 longitude
- Dock Lake, 41.335486 latitude, -85.373623 longitude
- Dollar Lake, located in township 34 N, 41.363847 latitude, -85.484956 longitude
- Duely Lake, 41.357840 latitude, -85.631972 longitude
- Eagle Lake, located in township 34 N, 4 mi. N of Kimmell
- Engle Lake, located in township 34 N, 6 mi. N of Kimmell
- Finster, Big & Little, 41.338419 latitude, -85.368940 longitude
- Gilbert Lake, located in township 33 N, 1 1/2 mi. SE of Knapp Lake
- Gordy Lake, located in township 33 N, 2 mi. SE of Indian Village
- Grannis Lake, located in township 35 N, 41.506903 latitude, -85.325942 longitude
- Hall Lake, located in township 35 N, 3 1/2 mi. NW of Kendallville
- Harper Lake, located in township 33 N, 4 1/2 mi. NW of Ormas
- Hawk Lake, located in township 33 N, 1 mi. NE of Wolfe Lake

- Henderson Lake, located in township 35 N, 1/2 mi. W of Kendallville
- High Lake, located in township 33 N, 2 mi. SW of Wolfe Lake
- Hindman Lake, located in township 33 N, 3 mi. NE of Wilmot
- Horseshoe Lake, located in township 33 N, 1 1/2 mi. SW of Smalley Lake
- Indian Lake @ Ligonier, located in township 35 N, 41.45444 latitude, -85.58000 longitude
- Indian Lake @ Albion, located in township 34 N, SE of Albion, 41.37500 latitude, -85.4011 longitude
- Johnson Lake, located in township 33 N, 2 1/2 mi. E of Wilmot
- Jones Lake, located in township 35 N, 2 mi. W of Rome City
- Keister Lake, located in township 33 N, 1 mi. E of Merriam
- King Lake, 41.346632 latitude, -85.227287 longitude
- Knapp Lake, located in township 33 N, 3 mi. NE of Wilmot
- Latta Lake, located in township 35 N, 3 mi. E of Rome City
- Lindsey Lake, located in township 33 N, 1 mi. E of Merriam
- Little Bause Lake, located in township 33 N
- Little Long Lake, located in township 35 N, 1 mi. North of Kendallville
- Little Whitford Lake, 41.456908 latitude, -85.233903 longitude
- Loon Lake, 3 mi. W of SR 109 on County Line Road, 41.272182 latitude, -85.539387 longitude, also in Whitley County
- Long Lake, located in township 34 N, 3 1/2 mi. SW of Albion
- Lower Long Lake, 41.3762 latitude, -85.4903 longitude
- Marl Lake, located in township 33 N, 1 mi. E of Wolf Lake
- Metz Lake, located in township 33 N, 1 mi. E of Washington Center
- Miller Lake, located in township 33 N, W side of SR 9
- Moss Lake, located in township 33 N, 1 1/2 mi. N of Wilmott
- Mud Lake, located in township 33 N in Chain-O-Lakes State Park
- Muncie Lake, located in township 33 N, 2 1/2 mi. E of Wolf
- Norman Lake, located in township 33 N, 4 mi. NE of Merriam
- Petty Lake, located in township 33 N, 7 mi. E of Wolf Lake
- Pleasant Lake, located in township 33 N, 2 mi. NE of Wolf Lake
- Port Mitchell Lake, located in township 34 N, 3 mi. NE of Wolf Lake
- Rider Lake, located in township 33 N, 41.353173 latitude, -85.630540 longitude
- Rivir Lake, located in township 33 N, in Chain-O-Lakes State Park
- Round Lake, located in township 35 N, 3 mi. NE of Kendallville
- Sacarider Lake, located in township 34 N, 3 mi. SW of Kendallville
- Sand Lake, located in township 33 N, in Chain-O-Lakes State Park
- Schauweker Lake, located in township 34 N, 41.361037 latitude, -85.418953 longitude
- Schockopee Lake, located in township 35 N, 3 1/2 mi. NE of Kendallville
- Skinner Lake, located in township 34 N, 3 mi. E of Albion
- Silver Lake, located in township 34 N, 3 mi. E of Albion
- Smalley Lake, located in township 33 N, 3 1/2 mi. E of Wilmot
- Sparta Lake, located in township 34 N, W edge of Kimmel
- Steinbarger Lake, located in township 35 N, 2 1/2 mi. SW of Rome City
- Summit Lake, located in township 33 N, 4 1/2 mi. NW of Ege
- Stump Lake, located in township 33 N, 41.328349 latitude, -85.586907 longitude
- Sweet Lake, located in township 34 N, 3 mi. E of Albion
- Sylvan Lake, located in township 35 N, at Rome City
- Tamarack Lake, located in township 35 N, 3 mi. SE of Wolcottville
- Tamarack Lake, 2.5 mi. SW of Rome City, 41.495612 latitude, -85.421185 longitude
- Upper Long Lake, located in township 34 N, 2.5 mi. N of Wolf Lake
- Village Lake, located in township 39 N, at Indian Village
- Waldron Lake, located in township 35 N, 2 1/2 mi. W of Rome City
- Weber Lake, located in township 33 N, 41.338488 latitude, -85.393084 longitude
- Wible Lake, located in township 35 N, 2 mi. N and 1 mi. W of Kendallville
- Williams Lake, located in township 33 N, 2 mi. E of Wolf Lake
- Wolf Lake, located in township 33 N, at Wolf Lake on SR 109

Porter County

- Canada Lake, located in township 36 N, 4 mi. N of Valparaiso
- Carlson Pond, located in township 36 N, 41.534017 latitude, -86.990873 longitude
- Clear Lake, located in township 36 N, 2 mi. W of Westville, 41.5525 latitude, -86.9310 longitude, also in LaPorte County
- Dog Lake, located in township 33 N, 1/2 mi. W of Hebron
- Flint Lake, located in township 35 N, 3 mi. N of Valparaiso
- Lake Eliza, located in township 35 N, 8 mi. SW of Valparaiso

- Long Lake, located in township 36 N, 4 mi. N of Valparaiso
- Loomis Lake, located in township 35 N, 2 1/2 mi. N of Valparaiso
- Mink Lake, located in township 36 N, 4 1/2 mi. N of Valparaiso
- Morgan Lake, located in township 36 N, 1 mi. SW of Chesterton
- Moss Lake, located in township 36 N, 2 1/2 mi. N of Valparaiso
- Wauhob Lake, located in township 36 N, 5 mi. N of Valparaiso

Pulaski County

- Bruce Lake, located in township 30 N, 6 mi. NW of Kewanna, also in Fulton County
- Langenbaum Lake, located in township 31 N, 3 mi. E of Ora, also in Starke County

St. Joseph County

- Chamberlain Lake, located in township 37 N, SW of South Bend
- Deer Lake, located in township 38 N, 10 mi. NW of South Bend
- Goodman Lake, located in township 36 N, 41.603558 latitude, -86.314289 longitude
- Kale Lake, located in township 36 N, 4 mi. N of North Liberty
- Mud Lake, located in township 38 N, 5 mi. N of Lydick
- North Chain (Bass) Lake, located in township 38 N, at Lydick
- Pinhook Park Lake, located in township 38 N, at South Bend
- Pleasant Lake, located in township 35 N, 1/2 mi. S of Lakeville
- Riddles Lake, located in township 35 N, 3 mi. SE of Lakeville
- Rupel Lake, located in township 36 N, 1 mi. SE of North Liberty
- Sously Lake, located in township 36 N, 2 mi. N of North Liberty
- South Chain Szmanda Lake, located in township 37 N, 6 mi. W of South Bend
- South Clear Lake, 38 N, 9 mi. NW of South Bend
- St. Joseph Lake, located in township 38 N, at University of Notre Dame
- St. Mary's Lake, located in township 38 N, at University of Notre Dame

Starke County

- Bass Lake, located in township 32 N, 4 mi. S of Knox
- Eagle Lake, located in township 33 N, 3 mi. NE of Ober
- Hartz Lake, located in township 32 N, 3 mi. E of Ora
- Koontz Lake, located in township 34 N, 3 mi. E of Hamlet
- Langenbaum Lake, located in township 31 N, 3 mi. E of Ora, also in Pulaski County
- Round (Silver) Lake, located in township 32 N, 5 mi. NE of North Judson

Steuben County

- Ball Lake, located in township 36 N, 1 1/2 mi. NW of Hamilton
- Barton Lake (also called Hog Lake), located in township 38 N, 5 1/2 mi. NE of Orland
- Beaver Dam Lake, located in township 38 N, 3 mi. SW of Orland
- Bass Lake, located in township 37 N, 6 mi. W of Angola
- Bell Lake, located in township 38 N, 4 mi. SE of Orland
- Big Bower Lake, located in township 36 N, 3 mi. NW of Pleasant Lake
- Big Otter Lake, located in township 38 N, 5 mi. North of Angola
- Big Turkey Lake, located in township 36 N, 1/2 mi. E of Stroh
- Black Lake, located in township 36 N, 4 mi. NW of Pleasant Lake
- Booth Lake, located in township 37 N, 1 mi. W of Angola
- Buck Lake, located in township 37 N, 2 mi. W of Angola
- Cemetery Lake, located in township 38 N, 1 mi. S of Fremont
- Center Lake, located in township 37 N, 1 mi. NW of Angola
- Chair Factory Lake, located in township 38 N
- Clear Lake, located in township 38 N, 6 mi. E of Fremont
- Crooked Lake, located in township 37 N, 5 mi. NW of Angola
- Deep Lake, located in township 37 N, 3 1/2 mi. SW of Orland
- Eaton Lake, located in township 38 N, 1/2 mi. SW of Fremont
- Failing Lake, located in township 38 N, 41.706330 latitude, -84.999266 longitude
- Fish Lake, located in township 38 N, 2 mi. N of Fremont
- Fox Lake, located in township 37 N, 1 mi. SW of Angola
- Golden Lake, located in township 36 N, 4 mi. SW of Angola
- Gooseneck Lake, located in township 36 N, 1 mi. E of Pleasant Lake
- Green Lake, located in township 32 N, 4 mi. W of Flint, also in LaGrange County
- Green Lake, located in township 38 N, 4 mi. W of Fremont
- Hamilton Lake, located in township 36 N, at Hamilton, IN
- Handy Lake, located in township 38 N, 1 1/2 mi. SE of Clear Lake
- Henry Lake, located in township 36 N, 1 1/2 mi. SE of Wildwood
- Hog Lake, located in township 38 N, 2.5 mi. W of Jamestown, 41.7556 latitude, -85.0619 longitude
- Hogback Lake, located in township 37 N, 5 1/2 mi. W of Angola

- Howard Lake, located in township 37 N, 5 1/2 mi. W of Angola
- Jackson Lake, 41.554502 latitude, -84.955205 longitude
- Jimmerson Lake, located in township 38 N, 7 mi. NW of Angola
- Johnson Lake, located in township 36 N, 3 1/2 mi. N of Hamilton
- Lake Anne, located in township 38 N, 1/4 mi. E of Clear Lake
- Lake Arrowhead, located in township 37 N, 6 1/2 mi. W of Angola, 41.6209 latitude, -85.1583 longitude
- Lake Charles East, located in township 37 N, 41.699860 latitude, -85.004900 longitude
- Lake Charles West, 41.702892 latitude, -85.012461 longitude
- Lake Gage, located in township 38 N, 3 mi. SE of Orland
- Lake George, located in township 38 N, 1 mi. N of Jamestown
- Lake James, located in township 37 N, 3 mi. NW of Angola
- Lake Pleasant, located in township 38 N, 4 mi. NE of Orland
- Lake Syl-Van, located in township 38 N, 4 mi. SE of Orland
- Lime Lake, located in township 38 N, 1/4 mi. N of Lake Gage
- Lime-Kiln Lake, located in township 38 N, 1 1/2 mi. NE of Helmer
- Little Bower Lake, located in township 36 N, 2 mi. NW of Pleasant Lake
- Little Center Lake, located in township 36 N, 41.641877 latitude, -85.006473 longitude
- Little Otter Lake, located in township 38 N, 5 mi. N of Angola
- Little Turkey Lake, located 1.5 mi. W of Hudson on CR 700S to 750W
- Long Lake, located in township 36 N, 1/2 mi. N of Pleasant Lake
- Loon Lake, located in township 37 N, 5 mi. NW of Angola
- Marsh Lake, located in township 38 N, 6 mi. N of Angola
- McClish Lake, located in township 36 N, 1 mi. NW of Helmer
- Meserve Lake, located in township 36 N, 1/2 mi. E of Pleasant
- Middle Center Lake, located in township 36 N, 41.643501 latitude, -85.011718 longitude
- Milldam Lake, located in township 38 N, 1/2 mi. N of Orland
- Mirror Lake, located in township 38 N, 1/2 mi. E of Clear Lake – between Long & Handy Lakes
- Mud Lake at Snow Lake, 41.743204 latitude, -85.026589 longitude
- Mud Lake, near Jamestown, located in township 36 N, 2 1/2 mi. NW of Pleasant Lake
- Mud Lake, near Moonlight, located in township 38 N, 2 mi. E of Ray
- Otter Lake (also known as West Otter), located in township 37 N, 9 mi. W of Angola, 41.63583 latitude, -85.16833 longitude
- Pigeon Lake, located in township 37 N, 4 mi. E of Angola
- Pine Canyon Lake, located in township 37 N, 6 1/2 mi. NW of Angola
- Pleasant Lake, located in township 36 N in Pleasant Lake
- Rhodes Lake, located in township 38 N, 2 1/2 mi. SE of Orland
- Round Lake (Clear), located in township 38 N, 2 mi. E of Ray
- Round Lake (Otsego), located in township 37 N, 6 1/2 mi. NW of Angola
- Round Lake (Gage), located in township 36 N, 3 mi. N of Hamilton
- Seven Sisters Lakes, located in township 38 N, 5 mi. N of Angola
- Shallow Lake, located in township 37 N, 4 mi. SW of Orland
- Silver Lake, located in township 37 N, 4 mi. W of Angola
- Snow Lake, located in township 38 N, 6 mi. N of Angola
- Stayner Lake, located in township 37 N, near junction of US 20 and SR 327
- Tamarack Lake, located in township 38 N, 2 1/2 miles East of Orland
- Walters Lake, located in township 38 N, 1 1/2 mi. NW of Fremont
- Warner Lake, located in township 38 N, 1 1/2 mi. SE of Orland
- West Otter Lake, located in township 37 N, 9 mi. W of Angola on US 20

Wabash County

- Bull Lake, located in township 29 N, 40.994428 latitude, -85.891584 longitude
- Long Lake, located in township 29 N, 1mi. N of Laketon
- Lotz Lake, located in township 30 N, 1 1/2 mi. NE of Disco
- Luken's Lake, located in township 29 N, 4 mi. N of Roann
- McColley Lake, located in township 29 N, 5 mi. North of Roann
- Round Lake, located in township 29 N, E edge of Laketon
- Twin Lakes, located in township 30 N, 1/2 mi. E of Disko

White County

- Lake Freeman, also in Carroll County, located in township 26 N, 3 mi. N of Monticello*
- Lake Shafer, located in township 27 N, 2 mi. N of Monticello*

Whitley County

- Blue Lake, located in township 32 N, 2 mi. NW of Churubusco
- Brown Lake, located in township 38 N, 1 1/2 mi. N of Etna
- Cedar Lake, 5 mi. N of Columbia City, 41.253728 latitude, -85.452185 longitude

- Crooked Lake, located in township 32 N, 9 mi. N of Columbia City, also in Noble County
- Dollar Lake, located in township 33 N, 3 mi. NE of Etna
- Goose Lake, located in township 32 N, 3 1/2 mi. SE of Etna
- Larwill Lake, located in township31 N, 1/4 mi. S of Larwill
- Little Cedar Lake, located in township 33 N, 41.248419 latitude, -85.439773 longitude
- Little Wilson Lake, located in township 32 N, 3 mi. E of Larwill
- Loon Lake, located in township 33 N, 2 mi. E of Etna;1 mi. S of Ormas, also in Noble County
- Mud Lake, located in township 32 N, 2 mi. S of Etna
- New Lake, located in township 32 N, 1 1/2 mi. SE of Etna
- Old Lake, located in township 33 N, 1 mi. E of Etna
- Rine Lake, located in township 32 N, 3 1/2 mi. N of Larwill
- Robinson Lake, located in township 32 N, 4 mi. NW of Larwill, also in Kosciusko County
- Round Lake, located in township 32 N, 7 1/2 mi. NE of Columbia City
- Scott Lake, located in township 32 N, 1 1/4 mi. SW of Etna
- Shriner Lake, located in township 32 N, 8 mi. NE of Columbia City
- Troy Cedar Lake, located in township 32 N, 8 mi. NW of Columbia City
- Wilson Lake, located in township 32 N, 3 mi. E of Larwill

* The authority of the DNR and of the Commission to govern Lake Freeman and Lake Shafer is abridged by IC 14-26-2-15.

IDNR – SALMONID STREAMS

Designated Salmonid Waters:
[327 IAC 2-1.5-5(a)(3)]

- Trail Creek and its tributaries downstream to Lake Michigan, LaPorte County
- East Branch of the Little Calumet River and its tributaries downstream to Lake Michigan via Burns Ditch, Porter and LaPorte Counties
- Salt Creek above (upstream of) its confluence with the Little Calumet River, Porter County
- Kintzele Ditch (Black Ditch) from Beverly Drive downstream to Lake Michigan, Porter County
- The Galena River and its tributaries, LaPorte County
- The St. Joseph River and its tributaries in St. Joseph County from the Twin Branch Dam in Mishawaka downstream to the Indiana/Michigan state line, St. Joseph County
- The Indiana portion of the open waters of Lake Michigan
- Those waters designated by the Indiana Department of Natural Resources (IDNR) for put-and-take trout fishing[5]

[5] Available on the internet at: http://www.in.gov/dnr/fishwild/files/fw-Trout_Stocking_Locations.pdf

IDNR - INDIANA SCENIC RIVERS

312 IAC 7-2-2

Blue River in Harrison, Crawford, and Washington Counties

Authority: IC 14-10-2-4; IC 14-29-6-9
Affected: IC 14-29-6

Sec. 2.

(a) The Blue River in Harrison, Crawford, and Washington Counties is included in the Indiana natural, scenic, and recreational river system from river mile 57 downstream to river mile 11.5.

(b) The portion of the Blue River described in subsection (a) is divided into the following segments:

(1) From river mile 57 downstream to river mile 42, the river is designated as a scenic river.

(2) From river mile 42 downstream to river mile 32, the river is designated as a recreational river.

(3) From river mile 32 downstream to river mile 22, the river is designated as a natural river.

(4) From river mile 22 downstream to river mile 11.5, the river is designated as a recreational river.

(Natural Resources Commission; 312 IAC 7-2-2; filed Aug 20, 1997, 7:15 a.m.: 21 IR 25; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286; readopted filed May 26, 2009, 11:20 a.m.: 20090624-IR-312090153RFA)

312 IAC 7-2-3

Cedar Creek in Allen and DeKalb Counties

Authority: IC 14-10-2-4; IC 14-29-6-9
Affected: IC 14-29-6

Sec. 3.

Cedar Creek in Allen and DeKalb Counties from river mile 13.7 to the confluence with the St. Joseph River is included in the Indiana natural, scenic, and recreational river system and is designated as a recreational river. (Natural Resources Commission; 312 IAC 7-2-3; filed Aug 20, 1997, 7:15 a.m.: 21 IR 26; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286; readopted filed May 26, 2009, 11:20 a.m.: 20090624-IR-312090153RFA)

312 IAC 7-2-4 **Wildcat Creek in Tippecanoe and Carroll Counties**

Authority: IC 14-10-2-4; IC 14-29-6-9
Affected: IC 14-29-6

Sec. 4.

The North Fork of Wildcat Creek in Tippecanoe and Carroll Counties from river mile 43.11 to river mile 4.82 and the South Fork of Wildcat Creek in Tippecanoe County from river mile 10.21 to river mile 0.00 are included in the Indiana natural, scenic, and recreational river system and are collectively designated as a scenic river. (Natural Resources Commissions 312 IAC 7-2-4; filed Aug 20, 1997, 7:15 a.m.: 21 IR 26; readopted filed Jul 28, 2003, 12:00 p.m.: 27 IR 286; readopted filed May 26, 2009, 11:20 a.m.: 20090624-IR-312090153RFA)

(*emphasis added)*

IDNR – LIST OF OUTSTANDING RIVERS AND STREAMS

River	Significance	County	Segment
Bear Creek River	11, 18, EUW	Fountain	C.R. 250W to confluence with the Wabash
Big Blue*	5, 11	Johnson, Rush, Shelby	Flatrock River to Carthage
Big Creek	17	Jefferson	East side of Jefferson Military Reservation boundary to Graham Creek
Big Pine Creek	7, 11, 13, 18, 20, EUW	Warren	S.R. 18 to confluence with Wabash River
Big Walnut Creek	5, 7, 11, 13, 19, 20	Putnam	Hendricks/Putnam Co. Line to Greencastle
Black River	11	Posey	Confluence with Higginbotham Ditch to confluence with Wabash River
Blue*	4, 5, 7, 11, 13	Crawford, Harrison, Washington	Confluence of Middle Fork Blue to confluence with Ohio River
Blue, South Fork	11, EUW	Washington	S.R. 135 to confluence with Blue River
Buck Creek*	11	Harrison	Headwaters to confluence with Ohio River
Cedar Creek	4, 7, 11, 18, HQW	Allen, Dekalb	Dekalb C.R. 68 to St. Joseph River
Clifty Creek	11, 18, EUW	Montgomery	Headwaters to confluence with Indian Creek
Cypress Slough Creek	11	Posey	Confluence with Castleberry Creek to Southwind Maritime Center
Deep	13, 17	Lake, Porter	1 mile south of U.S. 30 to Little Calumet River
Driftwood	11, 13	Bartholomew	Atterbury Fish and Wildlife Area to Columbus
Eel, North	13	Miami, Wabash	South Whitley to Logansport
Elkhart	13	Elkhart, Noble	S.R. 13 to Island Park in Elkhart
Elkhart, South Branch	7, 11, 13, 20	Noble	C.R. 100N to U.S. 6
Fall Creek	11, 18, EUW	Warren	U.S. 41 to confluence with Big Pine Creek
Fawn*	11, 13	LaGrange, Steuben	Nevada Mills to Indiana/Michigan Line and Indiana/Michigan to Indiana/Michigan line
Fish Creek	11	Dekalb, Steuben	Ohio/Indiana line to Indiana/Ohio Line
Flatrock*	13	Bartholomew, Shelby	S.R. 9 to East Fork White River
Fourteen-Mile Creek*	11	Clark	Confluence of East and West Forks to confluence with Ohio River
Graham Creek	17	Jefferson, Jennings, Ripley	New Marion to confluence with Big Creek
Indian Creek*	11	Harrison	Floyd/Harrison Co. Line to confluence with Ohio River
Indian Creek	11, 18, EUW	Montgomery	C.R. 475W to confluence with Sugar Creek
Indian-Kentuck Creek*	17	Jefferson, Ripley	Confluence with Vestal Branch to confluence with Ohio River
Iroquois*	13	Newton	S.R. 16 to Indiana/Illinois line
Kankakee*	11, 13	LaPorte, Newton, Porter	Upstream boundary of Kingsbury Fish and Wildlife Area through LaSalle State Fish and Wildlife Area to Indiana/Illinois line
Kilmore Creek	17	Clinton	U.S. 421 to confluence with South Fork Wildcat Creek
Laughery Creek*	5, 9, 11	Dearborn, Ohio, Ripley	Source just east of Morris in Ripley Co. to confluence with Ohio River
Little Blue*	5, 11	Crawford	Town of English to confluence with Ohio
Little Calumet East Fork	10, 13, SS	Porter	C.R. 600E to S.R. 249
Little Creek	17	Jefferson	Kent to Big Creek
Little Indian Creek	11	Harrison	Pfrimmer Church to confluence with Indian Creek
Little Mosquito	11	Harrison	Headwaters to confluence with Mosquito Creek

Little Pine Creek	11	Warren	Bridge SW of Green Hill to confluence with Wabash River
Little River*	22	Allen, Huntington	Source to confluence with the Wabash River
Lost River*	9, 11, 19, EUW	Martin, Orange	Potato Road to confluence with East Fork White River
Mosquito Creek*	11	Harrison	Buena Vista to confluence with East Fork White River
Mississinewa*	17	Miami	Mississinewa Reservoir to confluence with Wabash River
Mud Pine Creek	11, 18, EUW	Warren	S.R. 352 to confluence with Big Pine Creek
Muscatatuck*	5	Jackson, Jennings, Scott	Confluence of Graham Creek and Big Washington Creek to confluence with East Fork White River
Muscatatuck, Vernon	11, 13	Jackson, Jennings	Zenas to confluence with Muscatatuck Fork*
Oil Creek*	11	Perry	St. Croix to confluence with Ohio River
Otter Creek	17	Jennings, Ripley	Covered Bridge North of Holton to confluence with Vernon Fork Muscatatuck
Patoka River	17	Dubois, Gibson, Pike	Patoka Reservoir to confluence with Wabash River
Pigeon	11, 13	LaGrange	S.R. 327 to Indiana/Michigan Line
Rattlesnake Creek	18, EUW	Fountain	C.R. 350W to confluence with Bear Creek
Rattlesnake Creek	11	Parke	C.R. 400/450S to confluence with Sugar Creek
Roaring Creek	11	Parke	1 mile upstream of S.R. 41 to confluence with Sugar Creek
Sand Creek	17, 20	Bartholomew, Decatur, Jackson, Jennings	Confluence with Cobbs Fork to confluence East Fork of White River
Stinking Fork	11	Crawford	Headwaters to confluence with Little Blue River
Sugar Creek	5, 7, 11, 13, 16, 20	Montgomery, Parke	Darlington Covered Bridge to confluence with Wabash River
Sugar Creek*	11	Johnson, Shelby	Inclusive within Johnson and Shelby counties
Sugar Mill Creek	17	Fountain, Parke	Wallace to confluence with Sugar Creek
Tippecanoe	5, 13, 16	Carroll, Fulton, Kosciusko, Marshall, Pulaski, Tippecanoe, White	Source (Lake Tippecanoe) to Norway and from Oakdale Dam to the confluence with Wabash River
Turkey Fork	11	Crawford	I-64 to confluence with Little Blue River
Wabash*	22	Adams, Allen, Carroll, Cass, Fountain, Gibson, Huntington, Jay, Knox, Miami, Parke, Posey, Sullivan, Tippecanoe, Vermillion, Vigo, Wabash, Warren, Wells	Indiana/Ohio Line to confluence with the Ohio River including the Little River and the portage between the Little River and the Maumee River
West Branch Mosquito	11	Harrison	Headwaters to confluence with Mosquito Creek
White, East Fork	5, 11, 13	Bartholomew, Daviess, Dubois, Jackson, Lawrence, Martin, Pike	Columbus to confluence with West Fork White River
White, West Fork*	5, 11, 13	Daviess, Delaware, Gibson, Knox, Greene, Hamilton, Madison, Marion, Morgan, Owen, Randolph	Farmland to confluence with Wabash River
Whitewater*	7, 11, 13, 20	Dearborn, Fayette, Franklin	Cambridge City to Indiana/Ohio line Wayne (West Harrison, OH)
Wildcat Creek	4, 7, 13, 17, 18, HQW	Carroll, Tippecanoe	S.R. 29 to confluence with Wabash River
Wildcat Creek, Middle	17	Clinton, Tippecanoe	S.R. 26 (Edna Mills) to confluence with Fork Wildcat, South Fork
Wildcat Creek,	4, 7, 11, 13, 17,	Clinton, Tippecanoe	U.S. 421 to confluence with Wildcat Creek Fork
South	18, HQW		

IDNR – INDOT MAINTENANCE MOU

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is made and between the Indiana Department of Transportation (INDOT) and the Indiana Department of Natural Resources (IDNR) on the dates indicated below for the purpose of providing certain INDOT maintenance activity exemptions under the Flood Control Act and Navigable Waterways Act.

Whereas, INDOT and IDNR wish to cooperate in the elimination of unnecessary paperwork and the expeditious processing of certain INDOT maintenance actives which have minimal impact to the environment, the attached *INDOT Maintenance Activity Exemption from the Flood Control and Navigable Waterways Act* is hereby established.

Mr. Curt Wiley, Commissioner
Indiana Department of Transportation

March 9, 1997
Date

Mr. Larry D. Macklin, Director
Indiana Department of Natural Resources

March 13, 1997
Date

INDOT Maintenance Activity Exemption from the Flood Control and Navigable Waterways Act

March 3, 1997

Certain maintenance activities are exempted from the permit requirements of IC 14-28-1 and IC 14-29-1 if INDOT does or establishes the following:

(1) Maintenance activities will not occur within the channel of a river or stream, except where the activities are limited to work that does not disturb the channel:

(A) From March 15 through June 30 and from July 15 through November 30, for a salmonid water designated under 327 IAC 2-1-6 (c)(1); or

(B) From April 1 through June 30, for any other river or stream.

However, INDOT may request a waiver from the requirements of this subdivision. A written request to waive a portion of the restrictive dates must be submitted to the Environmental Supervisor with the Division of Fish and Wildlife no sooner than two (2) weeks prior to initiating the proposed maintenance project. A decision regarding the request will be provided in approximately five (5) days after the receipt by the Environmental Supervisor.

(2) Best management practices will be used during and after construction to minimize erosion and sedimentation.

(3) Following the completion of maintenance activities, disturbed areas will be reclaimed and revegetated. Disturbed areas will be mulched with straw, wood fiber, or other suitable material. To prevent erosion until revegetated species are established:

(A) Mulch shall be anchored by crimping, tackifiers, or netting; or

(B) Erosion control blankets shall be applied.

(C) Revegetation shall be accomplished in compliance with the Memorandum of Understanding dated February 22, 1993 between INDOT and IDNR that establishes revegetation guidelines.

(4) Pesticide will not be used on the banks.

(5) The INDOT maintenance activity must not fill or drain a wetland or alter the water table of any wetland.

(6) Logjam and debris removal shall be;

(A) Performed with equipment capable of being operated from a bridge or from a bank rather than using equipment in stream.

(B) In conformance with IDNR's Emergency Rule for *"General Permit for the Removal of Obstructions from Rivers and Streams"* (effective until July 14, 1997) or any subsequent similar enactments.

7) The maintenance activity must occur within existing INDOT right-of-way.

(A) An access corridor of fifty (50) feet beyond the existing right-of-way shall be allowed for placement of equipment only.

(B) Removal of waterway obstructions caused by sandbars, logjams, and debris that occur both in existing INDOT right-of-way and extend outside of the right-of-way is allowed. Removal of these obstructions that are solely outside of the right-of-way is not allowed.

Maintenance Activities Defined

The following maintenance operations activities are exempted from the permitting requirements of the Flood Control Act and the Navigable Waterway Act where "maintenance operations" means

(1) **Bridge maintenance activities**

(A) A **bridge** is a structure, including supports, erected over a depression or an obstruction such as water, highway, or a railway having a track or passageway for carrying traffic or other moving loads, and having a length measured along the center of the roadway of more than 6.1 meters (20 feet) between undercopings of abutments or extreme ends of opening for multiple boxes.

(B) **Bridge maintenance activities** include the following:

Hand cleaning bridges - This means the cleaning of bridge deck surfaces, expansion joints, drain holes, bridge seats and sidewalks by hand shoveling, sweeping and air blasting to remove accumulations of sand, chemicals and debris. It is accomplished by breaking loose the material as required, sweeping the material, loading the material into dump trucks and disposing of the material at proper disposal areas.

Bridge repair - This means minor repairs to bridge structures including repair, replacement or painting of handrails, curbs or sidewalk repair, minor joint and deck repair, timber deck repair, support repair, deck sealing and other minor repairs. It also includes emergency deck or support repair and minor maintenance of lift bridges.

Flushing bridges - This means the cleaning of bridge seats and shoe assemblies, drain holes, expansion joints, bottom chords of steel trusses, connection of vertical or diagonal truss members, truss members and gutter lines. This is accomplished by flushing to remove accumulation of sand, chemicals and debris.

Patching bridge decks - This includes the patching of bridge decks using a Portland Cement, concrete, or approved epoxy adhesive. It also includes marking, sawing and breaking out old

concrete with jack hammers. It is accomplished by breaking out and cleaning with air the areas to be patched, mixing the concrete, placing and finishing the concrete, and covering the patches with wet burlap or curing compound. None of the old concrete will fall or be placed within the channel.

Other bridge maintenance - This includes other routine bridge maintenance activities within right-of-way such as **replacing rip rap or repairing slope paving to the original configuration, clearing of water way openings (includes removal of undesirable materials including sand bars, log jams and debris removal), channel maintenance (reestablishing natural channel, flow lines and slopes)** and the removal of writing or painting on the structure.

(2) **Roadside maintenance activities** which includes the following:

Machine mowing - This means the cutting of grasses within the right-of-way. Roadside vegetation is machine mowed within designated mowing limits using tractor mowers and hand trimming, as required, to maintain an attractive roadside and control erosion and drainage. Additional special spot mowing is done to control Johnson grass and Canadian thistle.

Brush cutting - This is the cutting, trimming and removal of brush, small trees, tree branches and limbs within the right-of-way using power or hand tools to restore sight distances, eliminate traffic hazards and remove encroaching vegetation. This is accomplished by cutting the brush, tree branches and limbs within the right-of-way, cutting the brush flush to the ground, applying herbicides to sprouts in accordance with INDOT policy as directed by the District Landscape Supervisor, loading the brush on trucks using a chipper when available, hauling to a proper disposal area and clearing the roadway of debris.

Herbicide treatment - This is the **application of chemicals to roadside vegetation and soil along shoulders**, guardrail sections, around sign posts, delineators, mail boxes, bridge ends and other areas to eliminate or control undesirable vegetation. This is accomplished by the proper handling, mixing and application of the herbicide to the designated areas.

Seeding and/or fertilizing - This is the **seeding, reseeding, and fertilizing of shoulders, front and back slopes**, medians and other designated areas to restore vegetation for erosion control and beautification. It is done following clipping unpaved shoulders, reconditioning unpaved shoulders, motor patrol ditching, and the cleaning and reshaping of ditches in addition to areas damaged due to erosion or other causes. It is accomplished by using hydro seeder or fertilizer spreaders.

Spraying only occurs on calm days when the temperature is not too high. Only those areas are sprayed which can be sprayed without damage to surrounding crops, trees, etc.

Topping, trimming or removal of large trees - This is the topping, trimming or removal of large trees. It is accomplished using equipment such as bucket trucks and boom trucks. The sawn limbs are loaded into a dump truck. A chipper is to be used when available. The residue to be hauled to a proper disposal area. The work area is then to be cleaned.

Stump removal - This means the removal of stumps within the right-of-way to eliminate traffic hazards or improve efficiency of other maintenance activities. It is accomplished by using a stump cutter to cut the stump, loading and hauling chips to a proper disposal area, and then cleaning and smoothing the work area.

Spot mowing and hand trimming - This activity immediately follows machine mowing described above. It involves the spot or hand mowing to control Johnson grass, Canadian thistle and other noxious weeds, and hand trimming or mowing needed in addition to that performed during machine mowing. It is accomplished by using hand mowers or hand tools, trimming around signs, guardrail and other locations that cannot be mowed by tractor mowers. This activity also include the use of tractor mowing or hand mowers for noxious weeds.

Right-of-way fence repair - This activity means the repair of damaged, state-owned right-of-way fencing to maintain delineation of the right-of-way. It includes the rebuilding of existing fence using in place materials and/or replacing short sections of damaged fencing with new materials. It is accomplished by removing any damaged fence and salvage materials, if possible, rebuilding the fence using new and/or salvaged material, and loading unusable material and cleaning up the work area.

Other roadside maintenance - This includes such activities as rock cut maintenance, **slope spot slope repairs, slope mowing**, removal of unauthorized or illegal signs from within the right-of-way, sodding, preparing for seeding and fertilizing, mulching, **slide repair to the original slope**, mowing of state-owned property outside of right-of-way, repair of wheel ruts in grass medians.

(3) **Drainage maintenance activities.**

(A) The following data provides definitions of terminology used in drainage and special maintenance activities:

A **culvert** is a structure not classified as a bridge which provides an opening under the roadway. A **box culvert** is a culvert that is precast or cast in place with four sides, a concrete flow line, shaped like a rectangle or square. A **pipe culvert** is a culvert that is made of metal, plastic, or concrete, with either a tubular or deformed tubular shape. The structure should be placed to fit existing ground conditions with the upstream end of the structure under the roadway 0.2' to 0.5' below the lowest ground, ditch or tile ditch to be drained. The grade should then be approximately straight to the point where the water will leave the right-of-way.

A **ditch** should be interpreted to mean open ditches and channel changes parallel to and adjacent to the roadbed. They are constructed so they will drain and be free of water pockets. At the ends of cuts it is policy to flare the side ditches out to prevent ditch water from being spilled onto the fill embankment. Abrupt changes in alignment of side ditches should be avoided. The work consists of shaping and dressing of shoulders, ditches and slopes by machine or hand methods or both, to the required smoothness, elevation and cross section.

A **catch basin** is a receptacle at the entrance of a sewer designed to keep out large or obstructive matter or a reservoir for collecting surface drainage or run-off, having at its base a sediment sump designed to retain grit and detritus below the point of overflow. Their placement is accomplished by excavating to the established bottom of the proposed foundation. The finished surface should be firm and smooth. Holes may be formed or field cut in catch basins to receive pipe structures. Grade and location adjustments shall be made as necessary. The outlet of the pipe catch basins should be of smaller diameter than the catch basin.

A **berm** is a slightly canted shelf cut into or added onto a side or back slope. Berms should be clear of obstructions.

Tile drains. When farm drains cross the roadway, every effort should be made to preserve them in their original state of efficiency. If a farm tile is intercepted by ditches which provide adequate drainage for the tile, at least two sections of sewer pipe and a sod collar should be placed on the outlet end. The balance of the tile under the road shall be removed or sealed if they are 12" in diameter or larger.

A **ditch check** is a dam utilized to impede the movement of water so that sediment can settle out. It is constructed at specific intervals in the ditch based on the grade of the ditch. Ditch checks must be constructed wide enough to traverse the ditch section so that the water will flow over the check instead of around the ends.

An **inlet** is similar to a catch basin except it does not have a sediment sump designed to retain debris.
Paved side ditches are drainage ditches with a Portland cement concrete lining or gutter.

A **flume** is a channel lined with erosion-resistant materials used to convey water on steep grades without erosion. Except for these features, both of these drainage ways are constructed in the same manner as regular ditches.

(B) **Drainage maintenance activities** include the following:

Clean and reshape ditches - This involves the **machine cleaning of roadside ditches with excavating equipment to restore original grade and maintain adequate drainage.** It also includes the **loading, hauling and disposal of excess materials, reshaping front and back slopes, pipe culvert replacement** and **shoulder restoration as relating to ditching.** This work should occur **where existing ditches are ponding water, have minor obstructions, have lost their cross sections, have excessive silting and blocked drainage structures.** This work is accomplished by **reestablishing uniform flow lines, taking care to avoid low spots which will accumulate water, dressing foreslopes and back slopes where necessary**, cleaning the area, and **removing dirt and debris with an excavator** and loading it onto trucks and hauling the excess material to a proper disposal area.

Inspecting minor drainage structures - This involves **inspecting and minor cleaning** of all minor drainage structures including **box culverts, pipe culverts, catch basins, inlets and paved side ditches** with emphasis on **small cross culverts.** The drainage structures are to be inspected to determine both structural and drainage adequacy. Defects are to be reported for corrections at a future date. **Hand shovels are to be used to remove undesirable vegetation, obstructions and to repair minor eroded areas.**

Hazardous conditions and outlets of subsurface drains are to be marked with posts.

Pipe replacement - This means cross pipe culvert replacement required as a result of damage or deterioration in order to maintain adequate drainage. **It does not include pipe replacement projects for pipes carrying a waterway with a drainage area of greater than 50 square miles in a rural area or one square mile in a non rural area.** It is accomplished by cutting the pavement over the culvert to be replaced, excavating and removing the culvert that has failed, **cleaning out and replacing the pipe bed to the original grade,** placing the culvert in the trench beginning at the downstream end, backfilling over the culvert (small installation - using suitable material and compact in layers not exceeding 6" - large installations - backfilling and compacting using saturation method), and placing a bituminous patch over the excavation and compact.

Minor patrol ditching - This means machine **cleaning of roadside ditches with motor patrol** to restore original grade and maintain adequate drainage. It includes the **loading, hauling, and disposal of excess material, reshaping front and back slopes, pipe culvert replacement** and shoulder restoration as related to drainage. **It does not include pipe replacement projects for pipes carrying a waterway with a drainage area of greater than 50 square miles in a rural area or one square mile in a non rural area.** It is accomplished by **removing the dirt and debris with motor patrol** and windrowing the excess to be picked up with a loader. A uniform flow line is reestablished taking care to avoid low spots which will accumulate water. The **foreslopes and back slopes are dressed,** and pipe is replaced or retain as required. Excess material is to be loaded and hauled to a proper designated disposal area, and the work area is cleaned.

Cleaning minor drainage structures - This means **manual or machine cleaning and removal of debris** from **box culverts, pipe culverts, catch basins, inlets, out falls and paved ditches** to maintain adequate drainage. This is accomplished by **removing debris and undesirable vegetation from inlet and outlet channels and restoring inlet and outlet ditch flow lines,** cleaning out debris and silt from the structures, and **correcting any eroded areas around the inlet and outlet pipes and paved**

ditches. Excess material is to be loaded and hauled to a proper designated disposal area, and the work area is cleaned.

Inspect/clean under drains - This means the inspection and cleaning of pavement under drain structures. They are inspected to determine both structural and drainage adequacy. This is accomplished by using a **hand shovel to remove undesirable vegetation, obstructions, and repair minor eroded areas.** A clean-out device is to be used to remove sod or debris in the pipe. Hazardous conditions, and outlets of subsurface drains are to be marked with posts.

Other drainage maintenance - This includes the following activities, **minor relocation of ditches, hand ditching, scour and washout repairs, repair of minor drainage structures including paved side ditches, pipe extensions,** installations of **French drains, removal of unauthorized culvert pipes,** repair of **subsurface drains or drainage tiles,** cutting in preparation of pipe replacement, **marking of catch basins** or **pipes with delineators, rebuilding or repairing catch basins** and installing pipe liners.

(4) **Special maintenance activities** which include the following:

Minor surface and shoulder improvements - This activity includes minor roadway reconstruction, widening by adding turn lanes, climbing lanes, speed change lanes or crossovers, major leveling of the roadway, and adding shoulder material after resurfacing to eliminate shoulder drop off. This is non-routine work not requiring special funding that is to be performed by maintenance forces throughout the year as resources are available after routine maintenance work has been scheduled.

Minor roadside improvements - This means **flattening back slopes and fills,** planting trees and shrubbery, and the construction of roadside parks and picnic table sites.

Minor drainage improvements - This means the **installation of new structures at new locations -- culverts, ditches, catch basins, berms, tile drains, ditch checks, inlets, paved ditches and flumes, and drainage curbs and major repair of paved side ditches.** (See the Section 3, Drainage Maintenance Activities for definitions of these terms).

Minor bridge improvements - This includes widening of bridges and the installation of new guardrail or new bridge rail. This is non-routine work not requiring special funding that is to be performed by maintenance forces throughout the year as resources are available after routine maintenance work has been scheduled.

(5) **Roadway and shoulder maintenance** which includes the following:

Shallow patching - This means minor patching of small areas of bituminous roadway or paved shoulder surface with hot or cold bituminous mixtures and hand tools to correct potholes, **edge failures,** and **other potential surface hazards.** This activity also includes temporary patching of bituminous and concrete surfaces and the use of hot liquid bituminous material and aggregate for patching bituminous surfaces or crack and joint spalling of concrete surfaces. It is accomplished by repairing the surface failures exceeding 2" in depth and 1" in diameter as soon as possible after they are reported. The sides of the hole are prepared for the patch, removing all loose material and water. The bituminous mixture and aggregate are placed in the hole and compacted to make sure the patch is level and smooth. If appropriate the surface is sealed with bituminous material and sand and the area is then cleaned up.

Deep patching - This means major patching on roadway surface to correct extensive surface failure caused by **base failure, blowup, or settlement.** It includes the full depth removal of surface and base material and the replacement with compacted bituminous mixture. The work is accomplished by scheduling the repair as soon as possible after they are reported. Unsuitable material should be removed, under drains installed where necessary and the remaining materials recompacted. The bituminous mixture should be spread, compacting each layer, and making sure the final layer is flush with the adjacent surface. The work area is then cleaned.

Premix leveling - This means minor machine or hand leveling and wedging of small isolated areas of bituminous or concrete roadway and shoulder surfaces with bituminous mixtures to correct depressions at bridge ends, **surface failures and depressions caused by settlement** at pipe replacements and deep patches. It is accomplished by marking and cleaning the area to be leveled, applying light bituminous tack coat, spreading the bituminous mixture, hand raking the premix and feathering the edges before rolling, compacting the mixture making sure the final layer matches the exiting surface and pavement edge and cleaning up the work area.

Full width shoulder seal - This means the seal coating of continuous full width section of the paved shoulder surface with bituminous material and

sealing/covering aggregate to correct extensive cracking, sealing the surface and restoring the shoulder life. It is accomplished by cleaning the pavement, applying heated liquid bituminous material and squeegeeing if necessary, spreading the seal/cover aggregate immediately to cover the bituminous material and roll sealing the area.

Seal coating - chip - This means seal coating the continuous full width section of the roadway surface with hot bituminous material and coarse aggregate to correct extensive cracking, raveling, spalling, and shallow surface failures to prevent deterioration of the surface. It is accomplished by cleaning the pavement, applying heated liquid bituminous material, squeegeeing if necessary, spreading the aggregate with a mechanical spreader, hand brooming the aggregate where necessary, rolling the sealed area, and removing excess aggregate from the pavement.

Sealing longitudinal cracks and joints - This means the mechanical cleaning and sealing of longitudinal cracks and joints with a liquid bituminous sealant to prevent the entry of edge cracks between concrete surface and bituminous shoulder, the widening cracks and the centerline joint. This is accomplished by routing the joints as needed, cleaning the joint or cracking with a compressor, applying the material to the joints and cracks, and dusting the squeegeed areas lightly with sand.

Sealing cracks - This means the cleaning and sealing of open cracks and joints in bituminous and concrete roadways and paved shoulder surfaces to prevent the entry of moisture and debris which leads to surface and base failure. This activity also includes sealing short sections or isolated areas of alligatored, raveled, or spalled bituminous surfaces. It is accomplished by cleaning the crack, applying bituminous material to the crack, squeegeeing the material to force it into the cracks and surface voids, removing the surplus materials, and dusting the area lightly with cover aggregate.

Seal coating - sand - Same as seal coating - chip above except this method uses sand rather than chip seal.

Spot repair of unpaved shoulder - This means the repair of small areas of unpaved shoulders by adding aggregate, reshaping and compacting to correct edge ruts, potholes, corrugations and replace lost material at **washouts,** around mailboxes, and public road approaches. It is accomplished by blading off the high spots, adding material to low spots or at intervals along the shoulder, blading the material into the low spots and **shaping so the shoulder slope permits drainage to the ditch,** rolling the material with truck tires, and cleaning the work area.

IDNR – CONSTRUCTION IN A FLOODWAY – CHECKLIST

Construction in a Floodway (CIF) Permit Checklist | 2013

INDOT *Environmental* Services (ES), Ecology and Waterway Permitting Office (EWPO)

1. PROJECT SPECIFIC INFORMATION	
Project Route/Type	
INDOT Des. Number	
County	
Letting Date	

2. APPLICATION BACKGROUND			
Designer/Firm			
Submittal Date		Submittal Number	
ES Reviewer/Contact Info.			
Review Date			

Review columns are abbreviated as follows: Sufficient (S), Deficient (D), and Not Applicable (NA). All items marked deficient require resolution from the designer prior to INDOT acceptance of the application.

3. CIF VERIFICATION			
S	D	NA	Permit Exemptions*
			A) Is the upstream drainage area associated with the waterway in question less than or equal to one square mile? Streams with these drainage areas are outside of IDNR jurisdiction. *Reviewer Notes:*
			B) Is the project limited to removal of a logjam meeting the requirements of 312-IAC-10-5-6 and 10-5-7? Note that IDNR still requires notification to verify that this exemption is applicable. *Reviewer Notes:*
			C) Is the project limited to a utility line crossing or crossings meeting the requirements of 312-IAC 10-5-2, 10-5-3, 10-5-4, and 10-5-5? *Reviewer Notes:*
			D) Does the project meet the requirements for IDNR's wetland restoration exemption described under 312 IAC 10-5-1? Note that IDNR still requires notification to verify that this exemption is applicable. The project must not obstruct more than five percent of the floodway, must not remove more than one acre of forest, and must meet specific requirements regarding the installation of any berms. *Reviewer Notes:*
			E) Are the floodway impacts limited to an outfall structure (or structures) meeting the outfall exemption described in 312 IAC 10-5-8? *Reviewer Notes:*
			F) Does the project meet IDNR's bridge exemption requirements by meeting all of the following:
			☐ Construction/reconstruction project of a state highway bridge funded by INDOT;
			☐ The upstream drainage area of the waterway is less than or equal to 50 square miles;
			☐ Project is located in a rural area (defined as outside of the incorporated limits of a city/town as well as their urban planning zone);
			☐ Project is limited to a bridge or culvert (bank stabilization, roadway repair, and stream relocation do <u>not</u> apply);
			☐ The drainage area of the project does not exceed 50 square miles and;
			☐ Each building impacted by the project is higher than the regulatory flood elevation (lowest elevation in the structure including the basement). *Reviewer Notes:*

			G) Does the 1997 INDOT-IDNR Maintenance MOU apply to this project? In general, this will exempt projects limited to the following work types: pipe liner installation, roadside mowing, herbicide treatments, tree removal/trimming, slide repair to the original slope configuration, and cleaning roadside ditches to original grade. *Reviewer Notes:*

***If any of the above are noted as sufficient, the project is exempt from IDNR regulation under the Flood Control Act. Further review of the application is <u>not</u> required by INDOT-ES. Additional coordination, however, may be required with IDNR.**

Comments:_____

_____

_____

_____

_____

4. STATE FORM 42946

S	D	NA	1. General Application Requirements
			A) Was the most recent *State Form 42946* application used (version *R6/2-05*)? *Reviewer Notes:*
			B) Does the application reflect the waters report and/or wetland delineation prepared for this project? This includes:
			☐ Accounting of all streams and/or wetlands located within the floodway limits (including confirmation of any avoided waters);
			☐ Correct wetland boundary or boundaries used to calculate impacts;
			☐ Correct wetland types (emergent, scrub-shrub, forested) referenced in the application. *Reviewer Notes:*
			C) Is the waters report and/or wetland delineation less than five years old? If not, a follow-up investigation is warranted to verify findings are still accurate. *Reviewer Notes:*
			D) Was hydraulic modeling provided on a CD along with a modeling checklist? The consultant should provide documentation to INDOT-ES from IDNR if modeling is not required. *Reviewer Notes:*
			E) Does the application only include impacts to a single 100-year floodway? IDNR will require a separate application for <u>each</u> impacted floodway (i.e. two impacted streams having separate floodways will require two separate CIF applications). *Reviewer Notes:*

S	D	NA	1: Applicant Information
			A) Does the applicant contact information reflect the appropriate EWPO Team Lead or Manager? *Reviewer Notes:*

S	D	NA	2: Agent Information
			A) Do the agent contact information blocks appear to be accurate and complete? *Reviewer Notes:*

S	D	NA	3: Property Owner Information
			A) Does the property owner contact information reflect the appropriate EWPO Team Lead or Manager? *Reviewer Notes:*

[2]

S	D	NA	4. Public Notice
			A) Was a N4 form (*State Form 52086*) included in the application and does this appear to list all the adjacent property owners that require notification (i.e. only adjacent property owners to the 100-year floodway that is being impacted)? *Reviewer Notes:*
			B) Was a N2 form (*State Form 50354*) provided for each adjacent property owner (or was an editable version provided)? This form should meet the following requirements:
			☐ Correct water body name referenced on the form;
			☐ A project description that reflects the purpose of the project and its impacts to the 100-year floodway;
			☐ The project location in sufficient detail for the property owner to identify its location;
			☐ Application and agent contact information that reflects those listed in the permit application. *Reviewer Notes:*

S	D	NA	5: Project Description
			A) Does the "*Description Narrative*" meet the following requirements:
			☐ The INDOT Des number is included (this ensures that IDNR will include our tracking number in their issued permit);
			☐ Overall description clarifies floodway impacts and is not solely focused on the roadway or structure work;
			☐ Existing structure dimensions (length, width, and height);
			☐ Proposed structure dimensions (length, width, and height);
			☐ Total cumulative impacts to streams (linear feet);
			☐ Total cumulative impacts to streams and wetlands (acres);
			☐ Description of any riprap that will be placed (volume and depth);
			☐ Description of any changes to the approach roads and/or guardrail;
			☐ Details on any change to the structure's skew;
			☐ A short description of any temporary impacts associated with the project and a brief statement regarding the restoration of any areas impacted by temporary fill. *Reviewer Notes:*

S	D	NA	6: Project Location
			A) Does the "*Location Narrative*" include the following:
			☐ Stream/lake name that is being impacted by the project;
			☐ Project limits;
			☐ Nearest city/town;
			☐ Civil township and legal description;
			☐ County;
			☐ Bank/shoreline where impacts will occur. *Reviewer Notes:*
			B) Does the "*Driving Directions*" include road names, directions (i.e. north, south, etc.), and distances? *Reviewer Notes:*
			C) Is any necessary information provided in "*Special Information*" block? Note this is rarely used and usually describes a safety concern. *Reviewer Notes:*
			D) Did the "*Project Location Map*" meet the following requirements:

[3]

			☐ Displayed on a USGS 7.5 minute series topographic map;
			☐ Title block (applicant, agent, project title, and date);
			☐ Scale bar and north arrow;
			☐ Displays the general vicinity adjacent to the project within a half mile to mile radius. *Reviewer Notes:*
			E) Did the "*Project Site Map*" meet the following requirements:
			☐ Title block (applicant, agent, project title, and date);
			☐ Scale bar and north arrow;
			☐ Clearly defined project site limits;
			☐ Property lines;
			☐ General vicinity around the project site;
			☐ Distances from roadways and landmarks. Note that components of this map may be found in other locations of the application, such as the project plan set, which is acceptable so long as this information is provided within the application. *Reviewer Notes:*

S	D	NA	7: Disturbed Area Drawing
			A) Does the "*Disturbed Area Drawing*" meet the following requirements:
			☐ Title block (applicant, agent, project title, and date);
			☐ Delineation of the area that will be impacted (vegetation types, area [acres], distances from top of bank or shoreline, and right-of-ways);
			☐ Scale bar and north arrow. Note that components of this map may be found in other locations of the application, such as the project plan set, which is acceptable so long as this information is provided within the application. *Reviewer Notes:*

S	D	NA	8: Project Photographs
			A) Do the "*Images*" meet the following requirements:
			☐ Color photographs taken from spring through fall (if possible) so that vegetation is clearly depicted;
			☐ Sufficient photographs are provided to accurately describe the floodway impacts; *Reviewer Notes:*
			B) Does the "*Photo-Orientation Map*" meet the following requirements:
			☐ Title block (applicant, agent, project title, and date);
			☐ Scale bar and north arrow;
			☐ Number and orientation of each image;
			☐ Flow direction of any waterway (if applicable). *Reviewer Notes:*
			C) Does the "*Photo Documentation*" meet the following requirements:
			☐ Image number;
			☐ Direction and date taken;
			☐ Statement of the image's content. *Reviewer Notes:*

S	D	NA	9: Related Project Information
			A) Are any applicable IDNR tracking numbers listed within this block and if so are these documents attached to the application? In particular, early coordination numbers should be listed and attached to reduce IDNR's review time.

[4]

			Reviewer Notes:
			B) Are any applicable IDEM tracking numbers listed within this block and if so are these documents attached to the application? *Reviewer Notes:*
			C) Are any applicable Corps of Engineers tracking numbers listed within this block and if so are these documents attached to the application? *Reviewer Notes:*

S	D	NA	10: Statement of Affirmation

This block is left blank until the application is ready to be signed by the appropriate Team Lead or Manager.

S	D	NA	11: Regulatory Fees

INDOT is not currently required to pay fees associated with the processing of an IDNR CIF application.

S	D	NA	Project Plans
			A) The plan set should include the following items:
			☐ Water resources (streams, wetlands, lakes, etc.) and roads labeled correctly on the plans;
			☐ North arrow and scale bar;
			☐ Vertical benchmarks for structures (Q100 elevation with source data, flow-line elevation, bottom of structure elevation, and top of structure elevation) shown on cross sections;
			☐ Contours (or cross sections at regular intervals) within the floodway;
			☐ Property limits;
			☐ Existing and proposed structures;
			☐ The dimensions of any riprap that will be placed (including depth);
			☐ A hydraulic data table;
			☐ Existing and proposed waterway area;
			☐ Existing and proposed approach roads and guard rail;
			☐ Construction limits;
			☐ Limits of channel work. *Reviewer Notes:*
			B) Were temporary impacts included in the application? The following should be included:
			☐ Type of temporary fill material (should be non-erosive);
			☐ Volume (cubic yards) and area (acres) associated with temporary measures within the floodway;
			☐ Temporary acres of impact to any wetland(s);
			☐ Plan or drawing showing the approximate location and dimensions of the proposed temporary measure(s);
			☐ Expected amount of time the temporary measures will be in place;
			☐ Number and dimensions (diameter and length) of pipes required for a temporary stream crossing;
			☐ Restoration plan including an appropriate seed mix.
			Note that temporary measures should be designed to handle a two-year storm event. IDNR may request modeling for any temporary measures that will remain in place more than one year. *Reviewer Notes:*

S	D	NA	Mitigation
			A) Is mitigation provided for tree removal within the floodway and does it meet the following

[5]

			requirements: ☐ Proposed mitigation is located within the 100-year floodplain; ☐ The proper mitigation ratio has been applied based on rural/urban location and amount of clearing; ☐ Tree/shrub planting lists reflect the correct region of the state (north, central, and south); ☐ IDNR planting guidelines have been followed (spacing, species distribution, etc.); ☐ Planting specifications have been included in the application (Note that INDOT Standard Specification 622 may meet this requirement). *Reviewer Notes:*

5. DOCUMENTATION

S	D	NA	INDOT-ES Internal Databases
			A) Update the following databases:
			☐ EWPS;
			☐ Milestones;
			☐ Projectwise;
			☐ PSCS *Reviewer Notes:*

Comments:_____

Version: 20130524

[6]

IDNR – STATE FORM 42946

PERMIT APPLICATION FOR CONSTRUCTION

State Form 42946 (R6 / 2-05)
Approved by the State Board of Accounts, 2005

Mail To: **Department of Natural Resources Division of Water** 402 West Washington Street, Room W264
Indianapolis, Indiana 46204-2641
Telephone Number: (317) 232-4160
Toll Free: 1-877-928-3755
Fax Number: (317) 233-4579
www.IN.gov/dnr/water

Based on the "Permit Application Assistance Manual", I am submitting this application to perform work under:

Permit Type	Application Fee	Permit Type	Application Fee
☐ IC 14-26-2 Lake Preservation Act	$ 100.00	☐ IC 14-29-3 Sand and Gravel Permits Act	$ 50.00
☐ IC 14-26-5 Lowering of the Ten Acre Lake Act	$ 25.00	☐ IC 14-29-4 Construction of Channels Act	$ 100.00
☐ IC 14-29-1 Navigable Waterways Act	No Fee		
☐ IC 14-28-1 Flood Control Act, *(select one of the following:)*			
☐ Excavation, fill, or non-residential construction in a floodway			$ 200.00
☐ Residential reconstruction in a floodway, other than the Ohio River floodway			$ 50.00
☐ Residential construction, or reconstruction, in the Ohio River floodway			$ 10.00

PLEASE TYPE OR PRINT

1. APPLICANT INFORMATION

Name of Applicant INDOT Name of Contact Person Thomas J. Warrner

Applicant Mailing Address 110 N. Senate Ave., Room N642 Indianapolis IN 46204
Street, P.O. Box or Rural Route City State ZIP Code

Contact Information: Daytime Tele. # (317)232-5017 Fax # (317)233-4929 E-mail Address twarrner@indot.in.gov

2. AGENT INFORMATION

Name of Agent _____ Name of Contact Person _____

Agent Mailing Address _____
Street, P.O. Box or Rural Route City State ZIP Code

Contact Information: Daytime Tele. # ( ) _____ Fax # ( ) _____ E-mail Address _____

3. PROPERTY OWNER INFORMATION

Nam of Property Owner INDOT Name of Contact Person Thomas J. Warrner

Property Owner Mailing Address 100 N. Senate Ave., Room N642 Indianapolis IN 46204
Street, P.O. Box or Rural Route City State ZIP Code

Contact Information: Daytime Tele. # (317)232-5017 Fax # (317)233-4929 E-mail Address twarrner@indot.in.gov

Relationship of applicant to property: ☐ Owner ☐ Purchaser ☐ Lessee Other _____

4. PUBLIC NOTICE ***(See Permit Application Assistance Manual)***

Complete and submit SF # 52086 titled "Adjacent Property Owners Listing - Form N-4: Affirmation of personal service, 1st class mail service, or certified mail service

5. PROJECT DESCRIPTION **5.1 Description Narrative:** ***(See Permit Application Assistance Manual)***

6. PROJECT LOCATION

6-1 Location Narrative: ***(See Permit Application Assistance Manual)*** **Stream/Lake Name:**

6-2 Driving Directions: ***(See Permit Application Assistance Manual)***

6-3 Special Information: ***(See Permit Application Assistance Manual)***

6-4 Project Location Map: ***(See Permit Application Assistance Manual)***

6-5 Project Site Map: ***(See Permit Application Assistance Manual)***

7. DISTURBED AREA DRAWING

7-1 Drawing Requirements: ***(See Permit Application Assistance Manual)***

8. PROJECT PHOTOGRAPHS

8-1 Images: ***(See Permit Application Assistance Manual)***

8-2 Photo Orientation Map: ***(See Permit Application Assistance Manual)***

8-3 Photo Documentation: ***(See Permit Application Assistance Manual)***

9. RELATED PROJECT INFORMATION

Department of Natural Resources

Administrative Cause #	Related Application(s) #	Early Coordination #
Floodplain Analysis/Regulatory Assessment #	Violation #	Exemption #

Department of Environmental Management

Section 401 #

Corps of Engineers

Public Notice #	Section 404 Application #	Section 10 Application #

10. STATEMENT OF AFFIRMATION

I hereby swear or affirm, under the penalties for perjury, that the information submitted herewith is to the best of my knowledge and belief, true, accurate and complete. I further certify that I possess the authority to undertake the project. I hereby grant to the Department of Natural Resources, the right to enter the above-described location to inspect the work.

_____ _____

Signature of Applicant or Authorized Agent ***(REQUIRED)*** **Date** ***(month, day, year)***

11. REGULATORY FEES

11-1 Regulatory Fees Submitted: ***(See Permit Application Assistance Manual)***

11-3 Payment Method: ***(See Permit Application Assistance Manual)***

REQUIREMENT FOR ADDITIONAL INFORMATION AND PERMITS

Application made to and approval granted by the Department of Natural Resources does not in any way relieve the applicant of the necessity of securing easements or other property rights, permits and approvals from affected property owners and other local, state, and federal agencies.

IDNR – FORM N4 – STATE FORM 52086

ADJACENT PROPERTY OWNERS LISTING — Form N4

State Form 52086 (3-05)
Approved by the State Board of Accounts, 2005

Mail To: **Department of Natural Resources Division of Water**
402 West Washington Street, Room W264
Indianapolis, Indiana 46204-2641
Telephone Number: (317) 232-4160
Toll Free: 1-877-928-3755
Fax Number: (317) 233-4579
www.IN.gov/dnr/water

4. PUBLIC NOTICE IN CONFORMANCE WITH IC 14-11-4 AND 312 IAC 2-3-3

Property Owner *(if not applicant or adjacent landowner)* Address City State ZIP Code	☐ Personal service was provided on: _____ (date) ☐ 1st Class Mail service was provided on: _____ (date). I affirm that 21 days have passed without the mailing returned as undelivered or undeliverable. Attached is PS Form 3817 as proof of mailing. ☐ Certified Mail service was provided on: _____ (date). Attached is PS Form 3811 (green card) as proof of mailing.
Adjacent Property Owner Address City State ZIP Code	☐ Personal service was provided on: _____ (date) ☐ 1st Class Mail service was provided on: _____ (date). I affirm that 21 days have passed without the mailing returned as undelivered or undeliverable. Attached is PS Form 3817 as proof of mailing. ☐ Certified Mail service was provided on: _____ (date). Attached is PS Form 3811 (green card) as proof of mailing.
Adjacent Property Owner Address City State ZIP Code	☐ Personal service was provided on: _____ (date) ☐ 1st Class Mail service was provided on: _____ (date). I affirm that 21 days have passed without the mailing returned as undelivered or undeliverable. Attached is PS Form 3817 as proof of mailing. ☐ Certified Mail service was provided on: _____ (date). Attached is PS Form 3811 (green card) as proof of mailing.
Adjacent Property Owner Address City State ZIP Code	☐ Personal service was provided on: _____ (date) ☐ 1st Class Mail service was provided on: _____ (date). I affirm that 21 days have passed without the mailing returned as undelivered or undeliverable. Attached is PS Form 3817 as proof of mailing. ☐ Certified Mail service was provided on: _____ (date). Attached is PS Form 3811 (green card) as proof of mailing.
Adjacent Property Owner Address City State ZIP Code	☐ Personal service was provided on: _____ (date) ☐ 1st Class Mail service was provided on: _____ (date). I affirm that 21 days have passed without the mailing returned as undelivered or undeliverable. Attached is PS Form 3817 as proof of mailing. ☐ Certified Mail service was provided on: _____ (date). Attached is PS Form 3811 (green card) as proof of mailing.

I hereby swear or affirm, under the penalties of perjury, that the aforementioned statements submitted herewith are to the best of my knowledge and belief, true, accurate and complete, and that the property owner(s), and adjoining landowners have been notified of the activity in conformance with the provisions of 312 IAC 2-3-3.

Application Number Signature Date *(month, day, year)*

IDNR – FORM N2 – STATE FORM 50354

State Form 50354 (R3 / 7-09)

Public Notice

_____ *(Date)*
_____ *(Adjacent Property Owner's Name)*
_____ *(Mailing Address)*
_____*(City, State, Zip Code)*

Indiana Code 14-11-4 was enacted to ensure that adjacent property owners are notified of permit applications and provided with an opportunity to present their views to the Department of Natural Resources prior to action.

> According to IC 14-11-4-5, the applicant must notify at least one of the owners of each parcel of real property reasonably known to be adjacent to the affected real property. "Adjacent to the affected real property", defined in 312 IAC 2-3-2, means real property owned by a person, other than the applicant, that is both of the following: (1) located within one-fourth (¼) mile of the site where the licensed activity would take place, AND (2) has a border or point in common with the exterior boundary of the property where the licensed activity would take place. Included is property that would share a common border if not for the separation caused by a right-of-way, an easement, or a railroad.

Your property has been identified to be adjacent to the project site. This public notice is being provided to you in conformance with the provisions of IC 14-11-4 and 312 IAC 2-3.

Waterbody Name_____

Project Description:

_____
_____
_____

Project Location:

_____
_____
_____

Check relevant Statute or Rule:

- ☐ Flood Control Act, IC 14-28-1
- ☐ Lake Preservation Act, IC 14-26-2
- ☐ Lowering of Ten Acre Lake Act, IC 14-26-5
- ☐ Construction of Channels Act, IC 14-29-4
- ☐ Sand and Gravel Permits Act, IC 14-29-3
- ☐ Navigable Waterways Act, IC 14-29-1

Applicant's Name, Address, and Telephone

_____
_____
_____

Agent's Name, Address, and Telephone

_____
_____
_____

Questions relating to the project should be directed to: ☐ Applicant or ☐ Agent *(check one or both)*

Pursuant to 312 IAC 2-3-4, an informal public hearing, pre-AOPA (Administrative Orders and Procedures Act) hearing, on this application may be requested by filing a petition with the Division of Water. The petition must conform to administrative rule 312 IAC 2-3-4 as follows:

(a) This section establishes the requirements for a petition to request a public hearing under IC 14-11-4-8(a)(2).
(b) The petition shall include the signatures of at least twenty-five (25) individuals who are at least eighteen (18) years of age and who reside in the county where the licensed activity would take place or who own real property within one (1) mile of the site of the proposed or existing licensed activity.
(c) The complete mailing addresses of the petitioners shall be typed or printed legibly on the petition.
(d) Each individual who signs the petition shall affirm that the individual qualifies under subsection (b).
(e) The petition shall identify the application for which a public hearing is sought, either by division docket number (application number) or by the name of the applicant and the location of the project.

A pre-AOPA public hearing on the application will be limited to the Department's authority under the permitting statutes. Only the issues relevant to the Department's jurisdiction directly related to the application will be addressed. The Department has no regulatory authority on property zoning, local drainage, burning, nuisances, road traffic, etc.; therefore, topics beyond the Department's jurisdiction will not be discussed during the public hearing.

A petition for a pre-AOPA public hearing or a request to be notified of the Department's approval, denial, or termination of the permit application should be mailed to:

Indiana Department of Natural Resources
Division of Water, Technical Services
402 West Washington Street, Room W264
Indianapolis, Indiana 46204-2641
Telephone: (877) 928-3755 or (317) 232-4160

The Department's jurisdiction under the Flood Control Act, IC 14-28-1, is limited to a project in the floodway of a waterway that includes, but is not limited to, rivers, streams, ditches, and creeks. To be approvable a project must demonstrate that the project will not:

(a) adversely affect the efficiency of or unduly restrict the capacity of the floodway,
(b) constitute an unreasonable hazard to the safety of life or property; defined as, will not result in either of the following during the regulatory flood: (1) the loss of human life, (2) damage to public or private property to which the applicant has neither ownership nor a flood easement,
(c) result in unreasonably detrimental effects upon fish, wildlife, or botanical resources.

Additionally, the Department must consider the cumulative effects of the above items.

The Department's jurisdiction under the Lake Preservation Act, IC 14-26-2, is limited to certain projects that are below the legal or normal water level, and are located along the shoreline, lakeward of the shoreline, or landward of the shoreline within 10 feet. The project will be reviewed on the basis of its impacts on:

(a) the shoreline, water line, or bed of the public freshwater lake,
(b) the fish, wildlife, or botanical resources,
(c) the public rights for the natural resources, the natural scenic beauty, and the recreational purpose of the lake,
(d) the management of watercraft operations under IC 14-15,
(e) the interests of a landowner having property rights abutting the public freshwater lake or rights to access the public freshwater lake.

Additionally, the Department must consider the cumulative effects of the above items.

The Department's jurisdiction under the Lowering of Ten Acre Lake Act, also referred to as the "Ditch Act", IC 14-26-5, applies to ditch and / or drain work within one-half (1/2) mile of a freshwater lake, ten acres or greater in size, where the ditch and / or drain work has a bottom depth lower than the legal or normal water level of the lake. To be approvable, the Department must find that the project will not:

(a) endanger the legally established water level of the lake, or
(b) endanger the normal water level of the lake, if the water level has not been legally established,
(c) result in unreasonably detrimental effects upon fish, wildlife, or botanical resources.

Additionally, the Department must consider the cumulative effects of the above items.

All of the statutory regulations can be found on our webpage www.in.gov/dnr/water.

After an approval, denial, or termination is issued by the Department, you may appeal the Department action by requesting an administrative review by the Natural Resources Commission under IC 4-21.5 and 312 IAC 3-1. The appeal request should be addressed to:

Division of Hearings
Natural Resources Commission
Indiana Government Center North, Room N501A
100 North Senate Avenue
Indianapolis, IN 46204
Telephone: (317) 232-4699

APPENDIX F – ADDITIONAL RESOURCES

ADDITIONAL RESOURCES

Environmental Law Institute, *The Clean Water Act Jurisdictional Handbook, Second Edition*, May 2012, Washington, DC. http://www.eli.org/New_Books/cwa_handbook.cfm

U.S. Army Corps of Engineers, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0),* April 2012, Washington, DC. ERDC/EL TR-12-9

U.S. Army Corps of Engineers, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0),* August 2010, Washington, DC. ERDC/EL TR-10-16

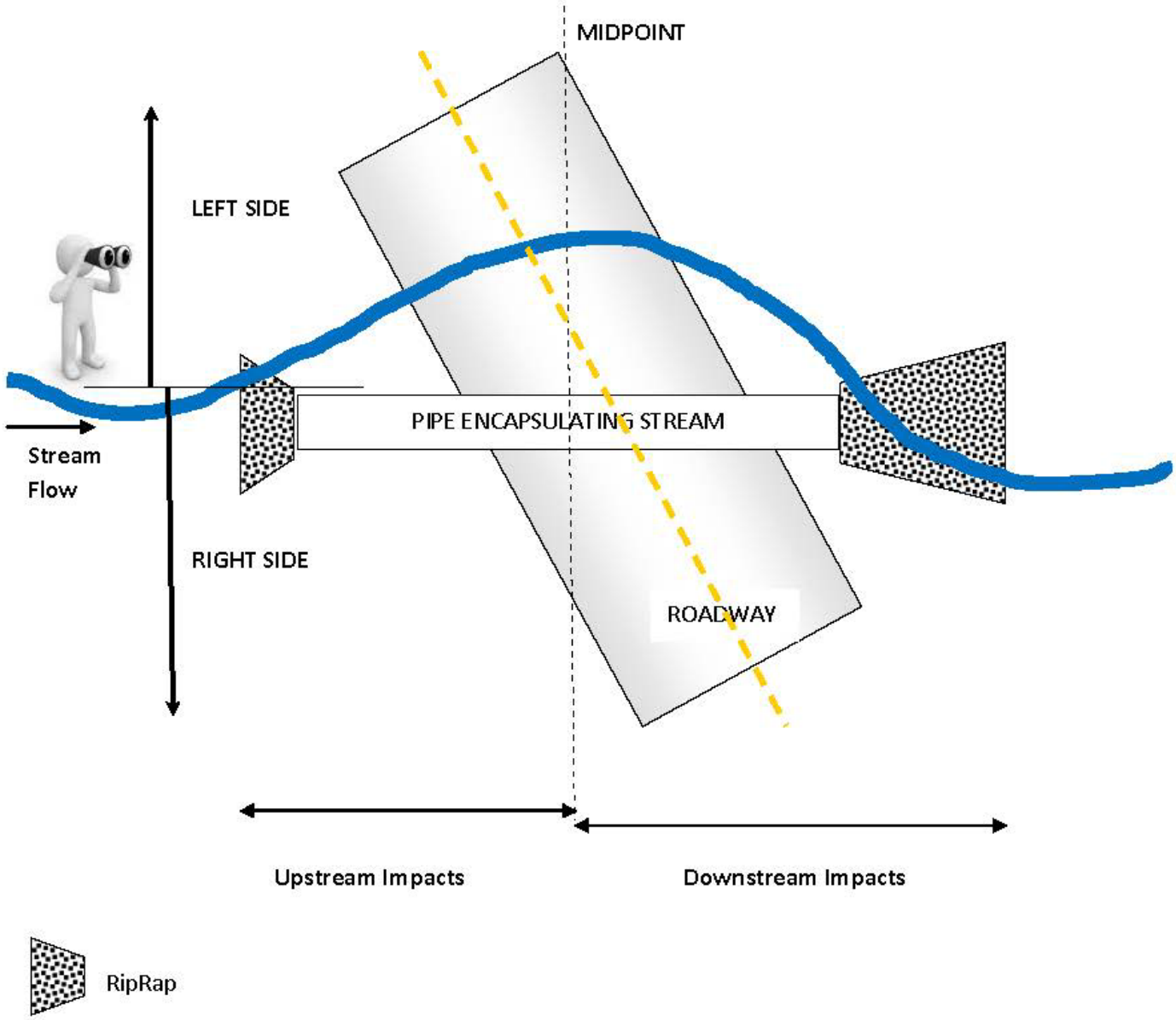
U.S. Army Corps of Engineers, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0),* January 2012, Washington, DC. ERDC/EL TR-12-1

http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx

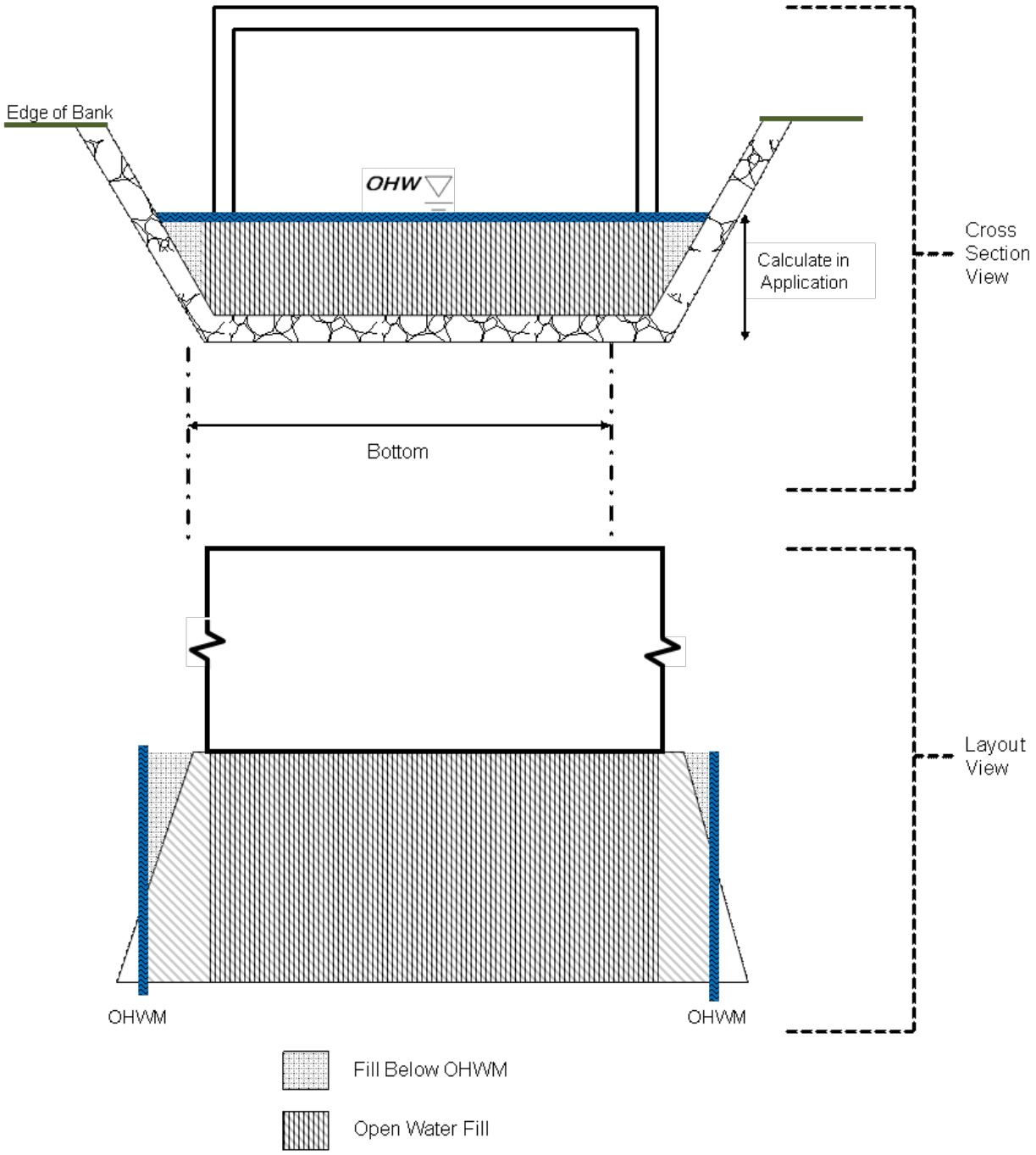
CALCULATING UPSTREAM AND DOWNSTREAM IMPACTS

for

SF 51821 Worksheet Section C



- *Mitigation is required for the lost stream length and the encapsulation.*
- *Left and right are determined looking downstream.*
- *Fill includes, but is not limited to, the structure, backfill, riprap, footings, liner, and grout.*


Edge of Bank
OHW
Calculate in Application
Cross Section View
Bottom
Layout View
OHWM
OHWM
Fill Below OHWM
Open Water Fill

ACRONYMS

BMP	Best Management Practice
C	Coefficient of Conservatism
CE	Categorical Exclusion
CIB	Contract Information Book
CWA	Clean Water Act
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERMS	Electronic Records Management System
ES	Environmental Services
ESA	Endangered Species Act
ESC	Erosion and Sediment Control
ETR	Endangered, Threatened and Rare
EUW	Exceptional Use Water
EWPO	Ecology and Waterway Permitting Office
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact (FONSI)
FTP	File Transfer Protocol
GWIA	Ground Water Impact Assessment
HQW	High Quality Water
IDEM	Indiana Department of Environmental Management
INDOT	Indiana Department of Transportation
IC	Indiana Code
IDNR	Indiana Department of Natural Resources
IP	Individual Permit
IWGP	Isolated Wetland General Permit
IWIP	Isolated Wetland Individual Permit
LCSS	Large-Capacity Septic Systems
LEDPA	Least Environmentally Damaging Practicable Alternative
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NA	No Agreement
NEPA	National Environmental Policy Act
NI	No Indicator
NO	No Occurrence
NOD	Notice of Deficiency
NOI	Notice of Intent
NOS	Notice of Sufficiency
NPDES	National Pollution Discharge Elimination System
NWP	Nationwide Permit
OBL	Obligate Wetland
SRW	State Regulated Wetland
OHWM	Ordinary High Water Mark
PCN	Preconstruction Notification
PD	Permit Determination
PE	Project Engineer
PRECON	Preconstruction
PS	Project Supervisor
RGP	Regional General Permit
SDWA	Safe Drinking Water Act
SS	Salmonid Stream
SSA	Sole Source Aquifer
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
UIC	Underground Injection Control
UNT	Unnamed Tributary
UPL	Obligate Upland
USACE	United States Army Corps of Engineers
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USDW	Underground Sources of Drinking Water
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WQC	Water Quality Certification

DEFINITIONS

Adjacent: Bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands. *Source: 33 CFR 328.3 (c)*

Adversely affect the efficiency of, or unduly restrict the capacity of, the floodway: An increase in the elevation of the regulatory flood of at least fifteen-hundredths (0.15) of a foot as determined by comparing the regulatory flood elevation under the project condition to that under the base condition. This definition does not apply to a dam regulated under IC 14-27-7 and IC 14-28-1, a flood control project authorized under IC 14-28-1-29 or an area for which a flood easement is secured and recorded with the county recorder. *Source: IDNR*

Aquifer: An aquifer is a geological formation or group of formations or part of a formation that is capable of yielding a significant amount of water to a drinking water well or spring. *Source: USEPA*

Bank: The ground that borders or slopes upward from the bed of a waterway and that confines water to the channel during the normal course of flow. *Source: 312 IAC 10-2-4*

Base Flood: A flood having a one percent chance of being exceeded in any given year (commonly known as a 100-year flood). *Source: USCG*

Base Floodplain: The area adjacent to the waterway, which would be inundated by a base flood. *Source: USCG*

Bed: The surface rock or soil underlying a waterway. *Source: 312 IAC 10-2-6*

Best Management Practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural. *Source: USACE NWP*

Bridge:

A structure placed over a waterway or other topographically depressed area that is designed to carry pedestrian, vehicular, or other traffic. The term includes a culvert or a ford. *Source: 312 IAC 10-2-8*

Any structure over, on, or in navigable waters of the United States used for transporting persons, vehicles, commodities or other physical matter and providing for the passage or flow of water through or under the structure.

a. The term "bridge" includes all integral bridge elements: approaches and appurtenances, regardless of the materials used, whether natural or manufactured, or the construction methodology.

b. Types of "bridges" include: highway bridges, railroad bridges, pedestrian bridges, aqueducts, aerial tramways and conveyors, overhead pipelines, and similar structures of the same function with their approaches, bridge protective systems, foundations, and appurtenances (integral features).

c. The definition of "bridges" does not include: aerial power transmission lines, submerged pipelines, and other similar structures and works unless they are integral features of a bridge used in its construction, maintenance, operation or removal; or they are affixed to the bridge and affect the bridge clearances. *Source: USCG*

Bridge Permit: An authorization issued by the Coast Guard, approving the location and plans of a bridge across a navigable waterway of the United States. A "bridge permit" includes the approved bridge project plans.

a. A "bridge permit" expresses the assent of the Federal Government as far as the project affects the public right of navigation, giving due consideration to the impacts on the quality of the human environment.

b. A "bridge permit" does not give any property rights, in either real estate or materials, or authorize any injury to private property or invasion of private rights. It does not remove the necessity of obtaining the assent of other agencies with cognizance of any aspect of the location, construction, or maintenance of a bridge.

c. Permits for completed bridges remain valid indefinitely, unless otherwise conditioned or amended, as long as the bridge remains in place, continues to be used for transportation purposes, and conforms to the original approved plans. *Source: USCG*

Channel:

The natural and artificial channel of a waterway. *Source: 312 10-2-10*

An artificial channel; or the improved channel of a natural watercourse; connecting to any river or stream in Indiana for the purpose of providing access by boat or otherwise to public or private industrial, commercial, housing, recreational, or other facilities. *Source: IDNR*

The deeper, navigable portion of a waterway, usually marked and designated on the appropriate navigation chart with known widths and depths. *Source: USCG*

Class I Wetland: An isolated wetland described by one (1) or both of the following:

(A) At least fifty percent (50%) of the wetland has been disturbed or affected by human activity or development by one (1) or more of the following:

(i) Removal or replacement of the natural vegetation.

(ii) Modification of the natural hydrology.

(B) The wetland supports only minimal wildlife or aquatic habitat or hydrologic function because the wetland does not provide critical habitat for threatened or endangered species listed in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and the wetland is characterized by at least one (1) of the following:

(i) The wetland is typified by low species diversity.

(ii) The wetland contains greater than fifty percent (50%) areal coverage of nonnative invasive species of vegetation.

(iii) The wetland does not support significant wildlife or aquatic habitat.

(iv) The wetland does not possess significant hydrologic function. *Source: 327 IAC 17-1-3 (1)*

Class II Wetland: Means either of the following:

(A) An isolated wetland that is not a Class I or Class III wetland.

(B) A type of wetland listed in subdivision (3)(B) that would meet the definition of Class I wetland if the wetland were not a rare or ecologically important type. *Source: 327 IAC 17-1-3 (2)*

Class III Wetland: An isolated wetland:

(A) that:

(i) is located in a setting undisturbed or minimally disturbed by human activity or development; and

(ii) supports more than minimal wildlife or aquatic habitat or hydrologic function; or

(B) unless classified as a Class II wetland under subdivision (2)(B), that is of one (1) of the following rare and ecologically important types:

(i) Acid bog.
(ii) Acid seep.
(iii) Circumneutral bog.
(iv) Circumneutral seep.
(v) Cypress swamp.
(vi) Dune and swale.
(vii) Fen.
(viii) Forested fen.
(ix) Forested swamp.
(x) Marl beach.
(xi) Muck flat.
(xii) Panne.
(xiii) Sand flat.
(xiv) Sedge meadow.
(xv) Shrub swamp.
(xvi) Sinkhole pond.
(xvii) Sinkhole swamp.
(xviii) Wet floodplain forest.
(xix) Wet prairie.
(xx) Wet sand prairie. *Source: 327 IAC 17-1-3 (3)*

Class V Wells: This is a term for all injection wells which are not explicitly identified as Class I, Class II, Class III or Class IV in the Code of Federal Regulations Sections 144.6 and 146.5. Classes I, II and III are different types of deep injection wells which inject fluids below underground sources of drinking water. Class IV wells inject hazardous waste into or above an underground source of drinking water and are generally banned. Class V wells include all other injection wells. They generally are shallow subsurface fluid disposal systems which are disposing of non-hazardous fluids into or above underground sources of drinking water. *Source: USEPA*

Cofferdam: An open box-like structure surrounding the area where an abutment, pier, retaining wall, or other structure will be placed. Water is removed from the enclosure so the excavation for preparing a foundation and the abutment, pier, or other construction may be done in the open air. *Source: USCG*

Compensatory Mitigation:
The (A) restoration; or (B) creation; of wetlands to offset or compensate for a loss of wetlands resulting from an authorized wetland activity. Wetlands enlargement, enhancement, and preservation may be considered compensatory mitigation on a case-by-case basis, particularly for Class III wetlands. *Source: 327 IAC 17-1-3 (5)*

The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved. *Source: USACE NWP*

Culvert: A closed conduit for the passage of run-off through an embankment. *Source: 312 IAC 10-2-17*

Cumulative Effects:
The impact that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what person undertakes the other actions. Cumulative effects can result from individually minor but collectively significant actions

taking place over a period of time. Each of the following elements is considered when assessing the impact of cumulative effects within a floodway: (1) adverse effects on the efficiency of, or undue restrictions on the capacity of, the floodway; (2) unreasonable hazards to the safety of life or property; (3) unreasonable detrimental effects upon fish, wildlife, or botanical resources. *Source: 312 IAC 10-2-18*

The impact which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what person undertakes the other actions. Cumulative effects can result from individually minor but cumulatively significant actions taking place over a period of time. Each of the following elements is considered when assessing the impact of cumulative effects within the floodway: (1) Adverse impacts on the efficiency of or undue restrictions upon the capacity of the floodway. (2) Unreasonable hazards to the safety of life or property. (3) Unreasonable detrimental effects upon fish, wildlife or botanical resources. *Source: IDNR*

Currently Serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction. *Source: USACE NWP*

Direct Effects: Effects that are caused by the activity and occur at the same time and place. *Source: USACE NWP*

Discharge: Any discharge of dredged or fill material. *Source: USACE NWP*

Drainage Area: The total land area measured in a horizontal plane and enclosed by a topographic divide from which surface run-off from precipitation normally drains by gravity into a waterway above a specified location. The term includes an area that is ineffective due to karst topography, subsurface drains, or diversions. *Source: 312 IAC 10-2-20*

Dredged Material: Material that is dredged or excavated from an isolated wetland. *Source: 327 IAC 17-1-3 (6)*

Encroachment: Bridge construction or modification where any part of a bridge structure or approach roadway is located in the floodplain. An "encroachment" does not exist in replacement projects when only the piers, pilings, or pile bents are in the floodplain. *Source: USCG*

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area. *Source: USACE NWP*

Ephemeral Stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow. *Source: USACE NWP*

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site.

Establishment results in a gain in aquatic resource area. *Source: USACE NWP*

Exempt Isolated Wetland: (A) An isolated wetland that is a voluntarily created wetland unless:
(i) the wetland is: (AA) approved by the department for compensatory mitigation purposes in accordance with a permit issued under Section 404 of the Clean Water Act or IC 13-18-22; or
(BB) reclassified as an SRW under IC 13-18-22-6(c); or
(ii) the owner of the wetland declares, by a written instrument: (AA) recorded in the office of the recorder of the county or counties in which the wetland is located; and
(BB) filed with the department; that the wetland is to be considered in all respects to be an SRW.
(B) An isolated wetland that exists as an incidental feature in or on any of the following:
(i) A residential lawn.
(ii) A lawn or landscaped area of a commercial or governmental complex.
(iii) Agricultural land.
(iv) A roadside ditch.
(v) An irrigation ditch.
(vi) A manmade drainage control structure.
(C) An isolated wetland that is a fringe wetland associated with a private pond.
(D) An isolated wetland that is, or is associated with, a manmade body of surface water of any size created by:
(i) excavating;
(ii) diking; or
(iii) excavating and diking;
dry land to collect and retain water for or incidental to agricultural, commercial, industrial, or aesthetic purposes.
(E) An isolated wetland that is a Class I wetland with an area, as delineated, of one-half (½) acre or less.
(F) An isolated wetland that is a Class II wetland with an area, as delineated, of one-fourth (¼) acre or less.
(G) An isolated wetland that is located on land: (i) subject to regulation under the United States Department of Agriculture wetland conservation rules, also known as Swampbuster (16 U.S.C. 3801-3862), because of voluntary enrollment in a federal farm program; and
(ii) used for agricultural or associated purposes allowed under the rules referred to in this clause.
(H) For purposes of clause (B), an isolated wetland exists as an incidental feature:
(i) if: (AA) the owner or operator of the property or facility described in clause (B) does not intend the isolated wetland to be a wetland;
(BB) the isolated wetland is not essential to the function or use of the property or facility; and
(CC) the isolated wetland arises spontaneously as a result of damp soil conditions incidental to the function or use of the property or facility; and
(ii) if the isolated wetland satisfies any other factors or criteria established in rules that are:
(AA) adopted by the water pollution control board; and
(BB) not inconsistent with the factors and criteria described in this clause.
(I) The total acreage of Class I wetlands on a tract to which the exemption described in clause (E) may apply is limited to the larger of the following: (i) The acreage of the largest individual isolated wetland on the tract that qualifies for the exemption described in clause (E).
(ii) Fifty percent (50%) of the cumulative acreage of all individual isolated wetlands on the tract that would qualify for the exemption described in clause (E) but for the limitation of this subdivision.
(J) The total acreage of Class II wetlands on a tract to which the exemption described in clause (F) may apply is limited to the larger of the following: (i) The acreage of the largest individual isolated wetland on the tract that qualifies for the exemption described in clause (F).

(ii) Thirty-three and one-third percent (33a%) of the cumulative acreage of all individual isolated wetlands on the tract that would qualify for the exemption described in clause (F) but for the limitation of this subdivision.
(K) An isolated wetland described in clause (E) or (F) does not include an isolated wetland on a tract that contains more than one (1) of the same class of wetland until the owner of the tract notifies the department that the owner has selected the isolated wetland to be an exempt isolated wetland under clause (E) or (F) consistent with the applicable limitations described in clauses (I) and (J). *Source: 327 IAC 17-1-3 (7)*

Floodplain:
The area adjoining a river or stream that has been or may be covered by flood water.
Source: 312 IAC 1-1-15

The lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year.
Source: 44 CFR Ch.1 § 9.4

Floodway:
The channel of a river or stream and the parts of the flood plain adjoining the channel that are reasonably required to efficiently carry and discharge the flood water or flood flow of a river or stream. *Source: 312 IAC 1-1-16*

That portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e. where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot.
Source: 44 CFR Ch.1 § 9.4

The channel of a river or stream and those portions of the flood plains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flow of the regulatory flood of any river or stream. *Source: IDNR*

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60). *Source: USACE NWP*

Independent Utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility. *Source: USACE NWP*

Indirect Effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable. *Source: USACE NWP*

Injection: The subsurface discharge of fluids through a well. *Source: USEPA*

Injection Well: Injection wells are defined (in Title 40, Code of Federal Regulations, Section 144.3) as a bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system into which fluids (any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas or any other form or state) are emplaced. *Source: USEPA*

Intermittent Stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow. *Source USEPA*

Isolated Wetland: A wetland that is not subject to regulation under Section 404(a) of the Clean Water Act. *Source: 327 IAC 17-1-3 (8)*

Lake: A reasonably permanent body of water that: (1) existed on March 12, 1947; (2) is substantially at rest in a depression in the surface of the earth that is naturally created; (3) is of natural origin or is part of a watercourse, including a watercourse that has been dammed; and (4) covers an area of at least five (5) acres within the shoreline and water line, including bays and coves. *Source: IC 14-26-2-1.5*

Large-Capacity Septic Systems: Class V wells that dispose of sanitary waste through a septic tank and are used by multiple dwellings, business establishments, communities, and regional business establishments for the injection of wastes. Systems serving single families and non-residential systems serving less than 20 persons are not included. *Source: USEPA*

Logjam: An accumulation of lodged trees, root wads, or other debris that impedes the ordinary flow of water through a waterway. The term does not include the development of sandbars, sedimentation, or accumulation of stone or gravel. Logjams are evidenced by a blockage that does any of the following: (1) traverse the waterway; (2) causes upstream ponding; (3) results in significant bank erosion. *Source: 312 IAC 10-2-26*

Loss of Waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States. *Source: USACE NWP*

Mitigation: All steps necessary to minimize potentially adverse effects of the proposed action, and to restore and preserve the natural and beneficial floodplain values and to preserve and enhance natural values of wetlands. *Source: 44 CFR Ch.1 § 9.4*

Modification: A bridge is modified when the configuration of the existing bridge is changed by adding new parts or replacing some parts of the existing bridge, and some parts of the existing bridge remain intact. *Source: USCG*

Navigable: A waterway that has been declared to be navigable or a public highway by one (1) or more of the following: (1) a court; (2) the Indiana general assembly; (3) the United States Army Corps of Engineers; (4) the Federal Energy Regulatory Commission; (5) a board of county commissioners under IC 14-29-1-2; (6) the commission following a completed proceeding under IC 4-21.4. See "Roster of Indiana Waterways Declared Navigable or Nonnavigable."

Source: 312 IAC 1-1-24

Navigable Waters of the United States: For Bridge Program purposes: waters subject to tidal influence, waterways with a history of substantial commercial navigation, waterways that presently have commercial navigation, or waterways susceptible to commercial development. *Source: USCG*

Navigable Waterway: Defined in two parts: navigable - a waterway which has been declared to be "navigable" or a "public highway" by one or more of the following: (1) A court. (2) The Indiana General Assembly. (3) The United States Army Corps of Engineers. (4) The Federal Energy Regulatory Commission. (5) A board of county commissioners under IC 14-29-1-1. (6) The commission following a completed proceeding under IC 4-21.5. Waterway - a river, stream, creek, run, canal, channel, ditch, lake, reservoir, or embayment. *Source: IDNR*

Open Drain: A natural or artificial open channel that: (1) carries surplus water; and (2) was established under or made subject to any drainage statute. *Source: IDNR*

Open Water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds. *Source: USACE NWP*

Ordinary High Water Mark:

The line on the shore of a waterway established by the fluctuations of water and indicated by physical characteristics. Examples of these physical characteristics include the following: (1) a clear and natural line impressed on the bank; (2) shelving; (3) changes in the character of the soil; (4) the destruction of terrestrial vegetation, and; (5) the presence of litter or debris.

Source: 312 IAC 1-1-26 (1)

That line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. 33 CFR 328.3 (e) The line on the shore of a waterway established by the fluctuations of water and indicated by physical characteristics. Examples of these physical characteristics include the following: (1) A clear and natural line impressed on the bank. (2) Shelving. (3) Changes in the character of the

soil. (4) The destruction of terrestrial vegetation. (5) The presence of litter or debris. *Source: IDNR*

A line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)). *Source: USACE NWP*

Outfall Structure: A closed conduit facility used for the transport and discharge of surface run-off or treated effluent to a waterway or swale. The facility includes all appurtenant channels, supply lines, energy dissipation, and erosion control systems. The term does not include a system where the delivery conduit is placed beneath the bed. *Source: 312 IAC 10-2-3*1

Outfall Swale: An excavated depression in the surficial topography used for the transport and discharge of surface run-off or treated effluent to a waterway. The depression includes all appurtenant channels, swales, and energy dissipation or erosion control systems. *Source: 312 IAC 10-2-32*

Perennial Stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. *Source: USACE NWP*

Pile: A rod or shaft-like linear member of timber, steel, concrete, or composite materials driven into the earth to carry structure loads through weak soil strata to soil strata capable of supporting such loads. *Source: USCG*

Practicable:

Capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of all pertinent factors, such as environment, cost and technology. *Source: 44 CFR Ch.1 § 9.4*

Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. *Source: USACE NWP*

Pre-Construction Notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit. *Source: USACE NWP*

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions. *Source: USACE NWP*

Public Freshwater Lake: A lake that has been used by the public with acquiescence of a riparian owner. *Source: IC 14-26-2-3*

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions. *Source: USACE NWP*

Regulated Drain*:* An open drain, a tiled drain, or a combination of the two. *Source: IC 36-9-27-2*

Regulatory Flood:

A flood having a one percent (1%) probability of being equaled or exceeded in a year as calculated by a method and an approved procedure. It is equivalent to the base food or the 100-year frequency flood. *Source: 312 IAC 10-2-35*

The flood having a peak discharge which can be expected to be equaled or exceeded on the average of once in a one hundred (100) year period, as calculated by a method and procedure which is acceptable to and approved by the commission. This flood is equivalent to a flood having a probability of occurrence of one percent (1%) in any given year. The term is also sometimes referred to as the one hundred (100) year frequency flood. "Commission" as used in the definition means the Natural Resources Commission, however, in practice the determination of acceptability is made by IDNR. *Source: IDNR*

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area. *Source: USACE NWP*

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation *Source: USACE NWP*

Riparian Areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.) *Source: USACE NWP*

Riprap:

Angular, limestone rock that satisfies each of the following conditions: (1) No individual piece weighs more than 120 pounds. (2) At least ninety percent (90%) of the material passes through a twelve (12) inch sieve. (3) Not more than ten percent (10%) of the material passes through a six (6) inch sieve. *Source: 312 IAC 11-2-20*

Brick bats, stones, concrete blocks, or other protective covering material deposited on river and stream beds and banks, or lake, tidal or other shores to prevent erosion and scour. *Source: USCG*

Rural Area:

An area where the flood protection grade of each residential, commercial, or industrial building impacted by the project is higher than the regulatory flood elevation under the project condition, and where the area lies outside … the corporate boundaries of a consolidated city or an incorporated town; and … the territorial authority for comprehensive planning established under IC 36-7-4-205(b). *Source: 312 IAC 10-2-36*

An area where the flood protection grade of each residential, commercial, or industrial building impacted by the project is higher than the regulatory flood elevation under the project condition, and where the area lies outside the corporate boundaries of a consolidated city or an incorporated town and outside the territorial authority for comprehensive planning established under IC 36-7-4-205 (b). *Source: IDNR*

Safe Drinking Water Act: The main federal law that ensures the quality of Americans' drinking water. The SDWA sets the framework for the UIC Program to control the injection of fluids. EPA and states implement the UIC Program, which sets standards for safe injection practices and bans certain types of injection. *Source: USEPA*

Shoreline or Water Line: The line formed on the bank or shore by the water surface at the legally established average normal level or the line formed by the water surface at the average level determined by existing water level records or the action of the water that has marked upon the soil of the bed of the lake a character distinct from that of the bank with respect to vegetation as well as the nature of the soil. *Source: IC 14-26-2-4*

Significant Environmental Harm: Damage to natural or cultural resources, the individual or cumulative effect of which is found by the Director of IDNR to be obvious and measurable (based upon the opinion of a professional qualified to assess the damage) and which: (1) creates a condition where recovery of affected resources is not likely to occur within an acceptable period; and (2) cannot be adequately mitigated through the implementation of a mitigation plan approved by the Director of IDNR. *Source: IDNR*

Single and Complete Linear Project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately. *Source: USACE NWP*

Single and Complete Non-Linear Project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization. *Source: USACE NWP*

Sole Source Aquifer: A sole or principal source aquifer as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. These areas may have no alternative drinking water source(s) that could physically, legally and economically supply all those who depend on the aquifer for drinking water. For convenience, all designated sole or principal source aquifers are referred to as "sole source aquifers" (SSAs). *Source: USEPA*

State Regulated Wetland: An isolated wetland located in Indiana that is not an exempt isolated wetland. *Source: 327 IAC 17-1-3 (8)*

Storm Water Drainage Wells*:* Shallow Class V wells that are designed for the disposal of rain water and melted snow. These wells typically drain paved areas such as streets and parking lots as well as roofs. Improved sinkholes and abandoned drinking water wells that receive storm water runoff are considered storm water drainage wells. *Source: USEPA*

Storm Water Management: Storm water management is the mechanism for controlling storm water runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment. *Source: USACE NWP*

Storm Water Management Facilities: Storm water management facilities are those facilities, including but not limited to, storm water retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of storm water runoff. *Source: USACE NWP*

Stream Bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed. *Source: USACE NWP*

Stream Channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States. *Source: USACE NWP*

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction. *Source: USACE NWP*

Surface Water: All water occurring on the surface of the ground. The term includes the following: (1) water in a stream; (2) natural and artificial lakes; (3) ponds; (4) swales; (5) marshes, and; (6) diffused surface water. *Source: 312 IAC 1-1-28*

Tiled Drain: A tiled channel that: (1) carries surplus water; and (2) was established under or made subject to any drainage statute. *Source: IC 36-9-27-2*

Total Length: The length of a stream, expressed in miles, from the confluence of the stream with the receiving stream to the upstream extremity of the stream, as indicated by the solid or dashed, blue or purple line depicting the stream on the most current edition of the seven and one-half (7½) minute topographic quadrangle map published by the United States Geological Survey, measured along the meanders of the stream as depicted on the map. *Source: IDNR*

Underground Source of Drinking Water: An aquifer or portion of an aquifer that supplies any public water system or that contains a sufficient quantity of ground water to supply a public water system, and currently supplies drinking water for human consumption, or that contains fewer than 10,000 mg/l total dissolved solids and is not an exempted aquifer. *Source: USEPA*

Unreasonable Detrimental Effects Upon Fish, Wildlife, or Botanical Resources:
Damage to fish, wildlife, or botanical resources that is found likely to occur based upon the opinion of a professional qualified to assess the damage and: (1) creates a condition where recovery of the affected resources is not likely to occur within an acceptable period; and(2) cannot be mitigated through the implementation of an approved mitigation plan.
Source: 312 IAC 10-2-39a

Damage to fish, wildlife, or botanical resources which is found likely to occur by the Director of IDNR based upon the opinion of a professional qualified to assess the damage and which creates a condition where recovery of the affected resources is not likely to occur within an acceptable period; and cannot be mitigated through the implementation of a mitigation plan approved by the Director of IDNR. *Source: IDNR*

Unreasonable Hazard to the Safety of Life or Property: A condition which is likely to be caused by the design or construction of a project and which is likely to result during the regulatory flood in either of the following: the loss of human life or damage to public or private property to which the permit applicant has neither ownership nor flood easement. *Source: IDNR*

Vegetated Shallows: Special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems. *Source: USACE NWP*

Voluntarily Created Wetland: An isolated wetland that:
(A) was restored or created in the absence of a governmental order, directive, or regulatory requirement concerning the restoration or creation of the wetland; and
(B) has not been applied for or used as compensatory mitigation or another regulatory purpose that would have the effect of subjecting the wetland to regulation as waters by:
(i) the department; or
(ii) another governmental entity. *Source: 327 IAC 17-1-3 (12)*

Waterbody: A jurisdictional water of the United States. If a jurisdictional wetland is adjacent – meaning bordering, contiguous, or neighboring – to a waterbody determined to be a water of the United States under 33 CFR 328.3(a)(1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands. *Source: USACE NWP*

Watercourse: A surface or subterranean water body at least a part of which is characterized by a current or flow. A water body does not include diffused surface water.

Source: NRC Information Bulletin #61

Waters: The accumulations of water, surface and underground, natural and artificial, public and private, or a part of the accumulations of water that are wholly or partially within, flow through, or border upon Indiana. The term does not include any of the following:
(A) An exempt isolated wetland.
(B) A private pond.
(C) An off-stream pond, reservoir, wetland, or other facility built for reduction or control of pollution or cooling of water before discharge.
The term includes all waters of the United States, as defined in Section 502(7) of the federal Clean Water Act (33 U.S.C. 1362(7)), that are located in Indiana. *Source: 327 IAC 17-1-3 (13)*

Waterway: A river, stream, creek, run, channel, ditch, lake, reservoir or an embayment.
Source: 312 IAC 1-1-29.5

Waters of the United States:
(a) (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.
(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.
Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. *Source: 33 CFR 328.3 (a)*

Watershed: An area of land from which all runoff water drains to a given point or that is affected by a small lake. *Source: IC 36-9-27-2*

Well: A bored, drilled, or driven shaft or a dug hole whose depth is greater than the largest surface dimension; an improved sinkhole; or a subsurface fluid distribution system. *Source: USEPA*

Wetland:

A transitional area between a terrestrial and deep water habitat (but not necessarily adjacent to a deep water habitat) where at most times the area is either covered by shallow water or the water table is at or near the surface and under normal circumstances any of the following conditions are met: (1) the area predominantly supports hydrophytes, at least periodically, or the substrate is predominantly undrained hydric soil, for example peat or muck. (2) The substrate is not a soil but is instead saturated with water or covered by shallow water some time during the growing season, for example, marl beaches or sand bars. *Source: 312 IAC 10-2-24*

Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. *Source: 33 CFR 328.3 (b)*

Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that, under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions. The term generally includes the following:
(A) Swamps.
(B) Marshes.
(C) Bogs.
(D) Similar areas. *Source: 327 IAC 17-1-3 (16)*

Wetland Activity: The discharge of: (A) dredged; or (B) fill; material into an isolated wetland. *Source: 327 IAC 17-1-3 (15)*

Wetlands Delineation: A technical assessment of:
(A) whether a wetland exists on an area of land; and
(B) if so, the type and quality of the wetland based on the presence or absence of wetlands characteristics, as determined consistently with the Wetlands Delineation Manual, Technical Report Y-87-1 of the United States Army Corps of Engineers. *Source: 327 IAC 17-1-3 (17)*

Wetland Restoration Measure: A practice or combination of practices to restore a degraded or filled wetland. The conversion of an unaltered wetland to another aquatic use is not included within the definition. *Source: 312 IAC 10-2-45*

Notes