

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

---

---

## TABLE OF CONTENTS

---

<b>Chapter 4 - United States Army Corps of Engineers (USACE) Permitting .....</b>	<b>i</b>
<b>Introduction to USACE Permitting .....</b>	<b>22</b>
Section 404 of the Clean Water Act.....	23
Section 10 of the Rivers and Harbors Act.....	23
Levee Permit .....	23
<b>4.1 404 Nationwide Permit (NWP) .....</b>	<b>24</b>
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
<b>4.2 404 Regional General Permit (RGP) .....</b>	<b>27</b>
Background.....	27
Application Process .....	28
<b>4.3 404 Individual Permit (IP).....</b>	<b>29</b>
Background.....	29
Application Process .....	29
<b>4.4 Section 10 (River and Harbors Act of 1899) .....</b>	<b>31</b>
Background.....	31
Application Process .....	31
<b>4.5 USACE Levee Permits .....</b>	<b>31</b>
Background.....	31
Application Process .....	32
<b>4.6 USACE Permitting Scenarios .....</b>	<b>32</b>

### 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 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).

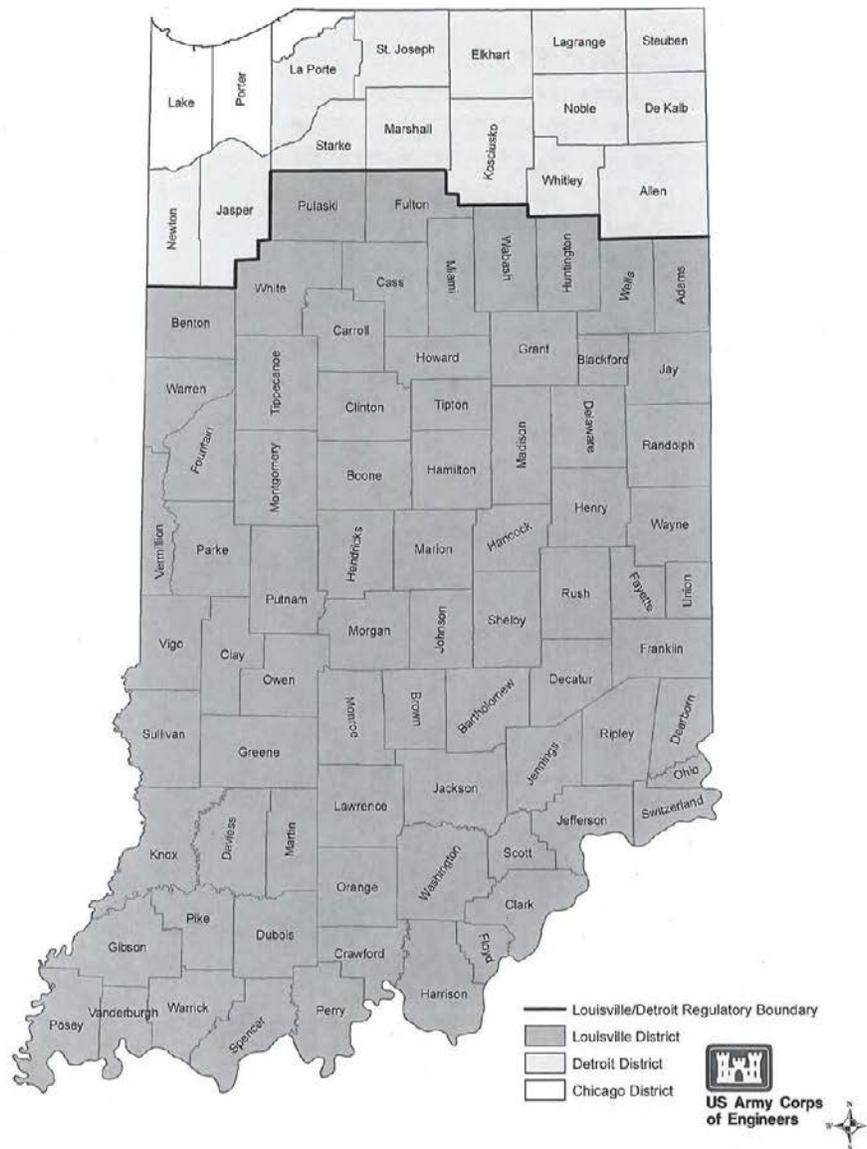


Figure 4.1 U.S. Army Corps of Engineers Districts (Revised 12/16/2013)

## 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

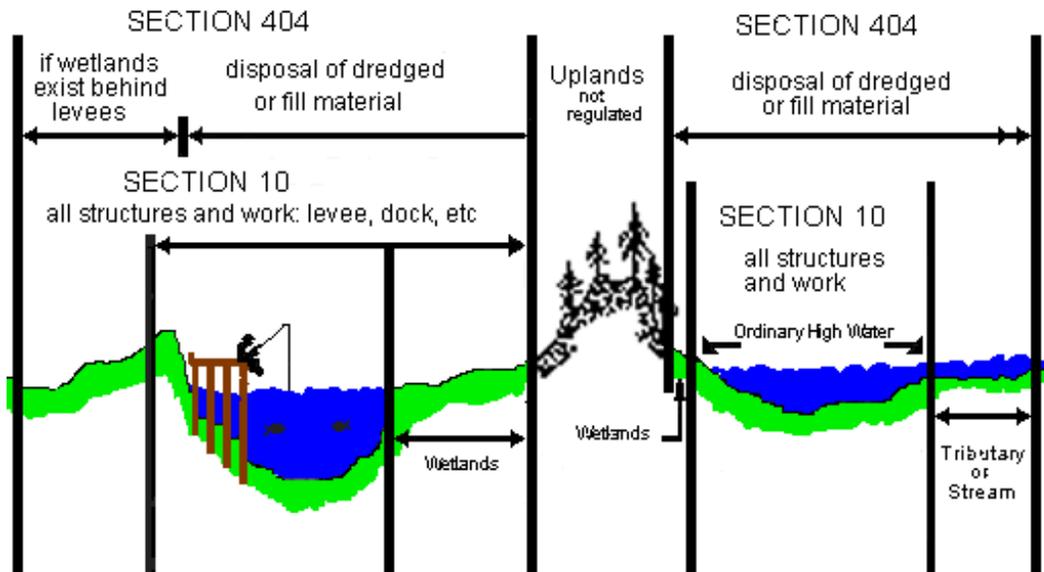
Section 10 of the Rivers and Harbors Act of 1899 requires approval by the USACE for any work in or over navigable waters of the U.S., or which affects the course, location, condition, or capacity of such waters. Federal jurisdiction under Section 10 on traditional navigable waterways is limited to the 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.

## Crosscut View of Regulatory Jurisdiction



**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-**Error! Bookmark not defined.** – 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 to 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 to 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.