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 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 comply 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 Permits - 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.;
  o Cross sections of all areas where fill will be placed with labels for the wetland boundaries, waterway flow line elevations, and waterway OHWM elevations;
  o 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 pursuing 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:
  o Repair, replacement, or rehabilitation of any previously authorized structure or fill;
  o 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 disturbance. 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 (SWPP). 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
• 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.