



## **Waterway Regulation**

# Indiana Department of Environmental Management Office of Water Quality







#### Indiana Department of Environmental Management



Protecting Hoosiers and Our Environment Since 1986



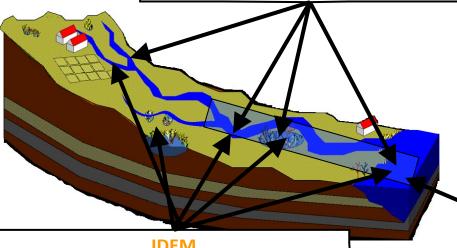






#### **USACE (WOTUS)**

**Relatively Permanent Streams and Open Water** and Wetlands adjacent to them



#### **IDEM**

All USACE waters and All wetlands (State Regulated & WOTUS)

#### **DNR**

Floodways over one square mile drainage including streams, wetlands, and trees found within





## **Regulated Activities**

- Filling (including stump removal)
- Dredging





### What is Fill?

- Soil, rock, sand, gravel
- Riprap, articulated mats
- Pipes and culverts
- Tile and tile outlets
- Dredged material
- Dams
- Mechanized land clearing
- Stump removal







### Section 404 of the Clean Water Act

- Implemented by U.S. Army Corps of Engineers (USACE). Overseen by U.S. EPA
- Permitting program to regulate discharges of dredged and fill material into Waters of the U.S. (jurisdictional waters)
  - A waterbody, being a stream/river, lake or wetland, that has a hydrological connection (drains into) a navigable water body (significant nexus)
  - Only the USACE (overseen by the U.S. EPA) can make this determination





### **Section 401 of the Clean Water Act**

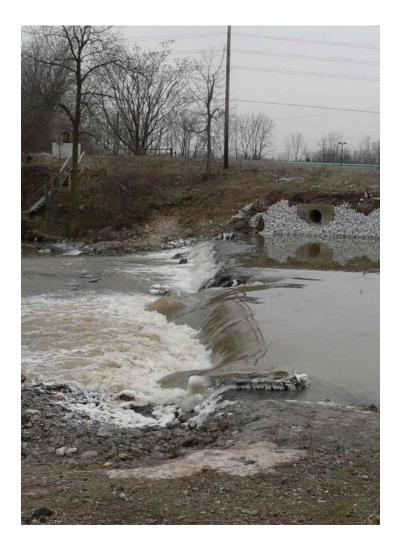
- Implemented by IDEM
- Water Quality Certifications issued
- Ensures activities authorized by federal permits or licenses maintain the:
  - chemical,
  - physical, and
  - biological integrity of Indiana's waters





## **Methods of Water Quality Certification**

- Individual
- General
  - Nationwide Permits (NWP)
  - Regional General Permit (RGP)







#### **General Certifications**

- Use RGP form
- 401 WQC for projects with "minimal impact"
- USACE is the lead agency and determines if a project falls under a general permit
- Common General Permits:
  - RGP
  - NWP 3 Maintenance
  - NWP 12 Utility Line Activities
  - NWP 33 Temporary Construction, Access, and Dewatering





#### **NWP & RGP Notification Form**

- Two pages
- 401 WQC for projects with "minimal impact"
- 30-day review time frame
- Automatic approval unless there is a problem
- Applicants must meet the terms and conditions of the IDEM General WQC





## **General WQC Major Thresholds**

- Impacts to streams/shorelines must be less than 300 linear feet
- Impacts to wetlands/open water must be less than 0.10 acre
- Stream encapsulation must be for the purposes of a constructing a crossing:
  - Must be less than 150 feet in length
  - Requirements for oversizing/embedding





### **Individual 401 WQC**

- For projects requiring a site-specific individual 401 WQC (projects exceeding general permits)
- Nine-page form
- 120-day review period
- Public Notice required
- Avoidance and minimization required
- Mitigation often required





### State Regulated Wetland Law

- Established 2004
- Regulates wetlands not under the Clean Water Act
- IC 13-18-22
- 327 IAC 17
- Distinguishes wetlands by Class





### **Class III Wetland Definition**

#### Highest quality wetland habitat:

- Rare or ecologically important type
- Some must be no more than minimally disturbed

#### Rare or Ecologically Important Wetlands:

| (1) Is the wetland a listed rare or ecolor<br>If Yes, please indicate type:                  | Yes No                                                         |                                                   |                           |                              |  |  |  |  |  |  |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------------------------------------------|---------------------------|------------------------------|--|--|--|--|--|--|
| Acid Bog Fen Acid Seep Panne                                                                 | <ul><li>☐ Circumneutral Seep</li><li>☐ Cypress Swamp</li></ul> | <ul><li>☐ Muck Flat</li><li>☐ Sand Flat</li></ul> | Dune and Swale Forest Fen | Sinkhole Pond Sinkhole Swamp |  |  |  |  |  |  |
| If Yes, the Wetland is Class III. This form is now complete. If No, proceed to Question (2). |                                                                |                                                   |                           |                              |  |  |  |  |  |  |
| (2) Is the wetland a listed rare or ecolo<br>If Yes, please indicate type:                   | Yes No                                                         |                                                   |                           |                              |  |  |  |  |  |  |
| Shrub Swamp Sedge Me                                                                         | adow Forested Swamp                                            | Wet Floodplain Fo                                 | rest Wet Prairie          | Wet Sand Prairie             |  |  |  |  |  |  |
| If Yes OR No, proceed to Questi                                                              | on (3).                                                        |                                                   |                           |                              |  |  |  |  |  |  |





### **Class II Wetland Definition**

#### New:

 New: Some rare and ecologically important wetland types that have been disturbed

#### **Unchanged:**

- Supports moderate habitat or hydrological functions
- Dominated by native species
- Without the presence of or habitat for rare, threated, or endangered species





### **Class I Wetland Definition**

#### **Unchanged:**

- At least 50% of the wetland has been disturbed or affected
- Supports only minimal/does not support significant wildlife or aquatic habitat or hydrologic function
- Does not provide critical habitat for rare, threated, or endangered species
- Typified by low species diversity
- Contains greater than 50% non-native invasive vegetation





## **State Regulated Exemptions**

Dredge and fill activities to the following do not require a permit:

- Class I wetlands
- Class II wetlands 3/8 acre or smaller or if within a municipality
   3/4 acre
  - If multiple wetlands exist on a tract, the exemption is limited to 60% of the total acreage of those wetlands delineated at 3/8 or in municipality 3/4 acre or less
- House construction on wetlands cultivated and harvested in preceding 10 years





## **State Regulated Permits**

- State Regulate Wetland General Permit (SRGP):
  - Impacts to Class II wetlands less than 0.25 acre
  - 30-day review time period
  - No public notice
- State Regulated Individual Permits (SRIP):
  - Impacts to Class II wetlands greater than 0.25 acre
  - Impacts to Class III wetlands regardless of size
  - 90-day review period
  - 30-day public notice





### **Class Determination Worksheet**

|                                                                                                                            |                                                                            |                                                |                                                    |                       | 7                                                     |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------|-----------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| State Regulated Wetland Class D<br>(R2 / 5-24)<br>INDIANA DEPARTMENT OF ENVIRONMENTAL MANY<br>Effective Date: July 1, 2024 |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
| Agent First Name:                                                                                                          | Agent Last Name:                                                           | Anent                                          | Affiliation (Company Name):                        |                       |                                                       |                                                                                                     |                                      | -                                                    |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
| Phone Number:                                                                                                              | Email A                                                                    |                                                | and to the same of                                 |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|                                                                                                                            |                                                                            | nd ID (Per the Wetland D                       |                                                    |                       | 11-2-25.8(3)(A)?                                      |                                                                                                     | Yes No                               |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
| Project Name:                                                                                                              | Wetan                                                                      | id ID (Per the Wetland D                       | elineatony:                                        | Wetland Size (Acres): |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
| Project Description (If Applicable):                                                                                       |                                                                            |                                                |                                                    |                       | Muck Flat<br>Sand Flat                                | Dune and Swale Forest Fen                                                                           | Sinkhole Pond Sinkhole Swamp         |                                                      |               |                                                                                                           |                                   | 7                                                                                                                                                                       |  |
| INSTRUCTIONS                                                                                                               |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      | sment:                                               |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
| 1. Read all questions and instructions thorough                                                                            |                                                                            |                                                |                                                    |                       | 11-2-25.8(3)(B)?                                      |                                                                                                     | Yes No                               | ate wildlife or aquatic habitat? (Se                 |               |                                                                                                           | Yes No                            |                                                                                                                                                                         |  |
| <ol><li>Complete this form when conducting wetlar<br/>are required for wetlands that have zones</li></ol>                  | of different classifications.                                              |                                                |                                                    |                       | Wet Floodplain F                                      | orest Wet Prairie                                                                                   | Wet Sand Prairie                     | inities (Score =) e, using parameters to the right.  |               | on Community Cover Scale (4.1a)                                                                           |                                   |                                                                                                                                                                         |  |
| <ol> <li>Submit all completed forms with your wetla<br/>correspondence when applying for Waters of</li> </ol>              | and delineation and Approved Juriso<br>the State Determinations or State F | dictional Determinat<br>Regulated Wetland I    | ion or official U.S. Armj<br>Permits.              | y Corps of Engineers  |                                                       |                                                                                                     |                                      |                                                      |               | ent or comprises <0.1ha (0.2471 acres) con                                                                |                                   |                                                                                                                                                                         |  |
| Please attach any additional comments, ju<br>attachment appended to this form.                                             |                                                                            |                                                |                                                    | on as a separate      |                                                       |                                                                                                     |                                      |                                                      |               | ent and comprises small part of wetland's v<br>erate quality.                                             | egetation and is of               |                                                                                                                                                                         |  |
| <ol> <li>Additional instructions and guidance for co<br/>https://www.in.gov/idem/wetlands/files/state</li> </ol>           | regulated guidance class determin                                          | nation.pdf                                     |                                                    |                       |                                                       |                                                                                                     | Yes No                               |                                                      | Pres<br>and   | ent and comprises a significant part of wetlis of low quality.                                            | and's vegetation                  |                                                                                                                                                                         |  |
| In addition, the Ohio EPA Rapid Assessment<br>as superseded by the instructions on this form                               | Method manual at the following we<br>n, the IDEM worksheet guidance, or    | ebsite may be refere<br>or additional informat | nced for help completing<br>tion provided by IDEM: | ng this form, except  | ecovering (2)                                         | Recent or no rec                                                                                    | overy (1)                            |                                                      | Pres<br>is of | ent and comprises significant part of wetlar<br>moderate quality.                                         | d's vegetation and                |                                                                                                                                                                         |  |
| https://epa.ohio.gov/static/Portals/35/401/OR                                                                              |                                                                            |                                                |                                                    |                       | ecovering (z)                                         |                                                                                                     |                                      | Present and comprises a small part of we             |               |                                                                                                           | vegetation and is                 | Functional Assessment: support moderate hydrological function? (See below)  Yes No                                                                                      |  |
| <ol><li>Completed forms and materials or question following website: https://www.in.gov/idem/we</li></ol>                  | ns regarding this form may be subm<br>etland/contact                       | ntted to appropriate                           | program staff which ca                             | an be found at the    | air (3)                                               | Poor (1)                                                                                            |                                      |                                                      | -             | gh quality.                                                                                               |                                   | be Capacity (Soore = )                                                                                                                                                  |  |
| Please complete ALL questions and asset                                                                                    | ssments to complete the tables                                             | below.                                         |                                                    |                       | oor to fair (2)                                       | Foor (1)                                                                                            |                                      |                                                      | 3 Pres        | ent and comprises a significant part of wetli<br>is of high quality.                                      | and's vegetation                  | , , , , , , , , , , , , , , , , , , , ,                                                                                                                                 |  |
| Table 1:                                                                                                                   |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      | spersion (Score =) the diversity of habitat by plant | Narrative     | Description of Vegetation Quality (4.1b                                                                   | )                                 | s ≥50 acres (7)                                                                                                                                                         |  |
|                                                                                                                            | Moderate Habitat or Hydro                                                  | ology or Both                                  | Neither Moderate                                   | Habitat nor Hydrology | ecovering (3)                                         | Recent or no rec                                                                                    | overy (1)                            | the diversity of habitat by plant                    | Low           | Low species diversity and/or predomina<br>disturbance-tolerant native species.                            | nce of nonnative or               | Vater (Score =)                                                                                                                                                         |  |
| Question (2) is YES                                                                                                        | Question (4) and/or (5)                                                    | ) are YES                                      |                                                    | n (4) and (5) are NO  |                                                       |                                                                                                     |                                      | (5)                                                  | Moderat       | e Native species are dominant componen                                                                    | t of the vegetation.              | iy.                                                                                                                                                                     |  |
| Undisturbed or Minimally Disturbed<br>Question (3) is YES                                                                  |                                                                            |                                                | (                                                  | Class II              | hrub/sapling remo<br>erbaceous/aquati<br>edimentation | c bed removal                                                                                       | Dredging Farming Nutrient Enrichment |                                                      |               | although nonnative and/or disturbance t<br>species can also be present. Species di<br>to moderately high. | olerant native                    | roundwater (5) Perennial surface water (lake or stream) (5) Precipitation (1) undwater (3) Seasonal/intermittent surface water (3)                                      |  |
| More than Minimally Disturbed<br>Question (3) is NO                                                                        | Class II                                                                   |                                                |                                                    | Class II              | edimentation                                          |                                                                                                     | Nument Enforment                     |                                                      | High          | A predominance of native species, with<br>and/or disturbance-tolerant native speci                        | nonnative species<br>es absent or | ater Depth (Score =)  7. 6in) (3)                                                                                                                                       |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       | tional photos, na                                     | rative, etc., as necessa                                                                            | ry to justify score.                 |                                                      |               | virtually absent. High species diversity.                                                                 |                                   | nundation/Saturation (Score =)                                                                                                                                          |  |
| Table 2:                                                                                                                   |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|                                                                                                                            | Moderate Habitat or Hydro                                                  | ology or Both                                  | Neither Moderate                                   | Habitat nor Hydrology |                                                       |                                                                                                     |                                      | (Score =) coverage of any combination of             | Interspe      | rsion (4.2)                                                                                               |                                   | remanently inundated/saturated (4) Seasonally inundated (2) Inundated(saturated (3) Seasonally saturated in upper 30cm (12in) (1)                                       |  |
| Question (2) is NO                                                                                                         | Question (4) and/or (5)                                                    |                                                | Both Questio                                       | n (4) and (5) are NO  |                                                       |                                                                                                     |                                      | sive Species Council List:<br>siveplants.html<br>5)  |               |                                                                                                           |                                   | (Score =)                                                                                                                                                               |  |
| Undisturbed or Minimally Disturbed<br>Question (3) is YES                                                                  | Class II                                                                   |                                                |                                                    | Class I               |                                                       |                                                                                                     |                                      | (-3)                                                 |               | sone low                                                                                                  | lov                               | osition in the watershed is 1 <sup>st</sup> order (3) osition in the watershed is 2 <sup>nd</sup> order (2)                                                             |  |
| More than Minimally Disturbed<br>Question (3) is NO                                                                        |                                                                            |                                                |                                                    | Class I               |                                                       |                                                                                                     |                                      | r (0)                                                | 11 4          |                                                                                                           |                                   | osition in the watershed is 4th or 5th order and the substrate is sand or silt (1)<br>s located within a groundwater Wellnead Protection Area (2)                       |  |
| Question (3) is NO                                                                                                         |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   | w.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-                                                      |  |
| Select the State Regulated Wetland Clar                                                                                    | erification bared on the tables                                            | above: 🗆 C                                     | Class I 🔲 Clas                                     | is II Class III       |                                                       |                                                                                                     |                                      |                                                      |               | molerate moderate                                                                                         | high                              | ource-water-proximity-determination-tool/<br>s located within a drinking water Source Water Susceptibility Area (2)                                                     |  |
| ,                                                                                                                          |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      | ,                                                    | Microtor      | ography Cover Scale (4.4)                                                                                 |                                   | a located within a drinking water Source Water Assessment Area (2)                                                                                                      |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      | e, using parameters to the right.                    | 0 Abse        |                                                                                                           |                                   | floodplain (1) Part of wetland/upland, e.g. forest, complex (1) stream/lake and other human use (1) Part of riparian or upland corridor (1)                             |  |
|                                                                                                                            | Page 1 of                                                                  | 14                                             |                                                    |                       |                                                       |                                                                                                     |                                      | ssocks<br>5cm (6in)                                  | -             | ent in very small amounts or, if more comm                                                                | on, of marginal                   | of Moderate Hydrologic Function (Score =)                                                                                                                               |  |
|                                                                                                                            | I                                                                          |                                                |                                                    |                       | _                                                     |                                                                                                     |                                      | Oin) diameter at breast height                       | qual          | -4-                                                                                                       |                                   | fy. ossess strong hydric soil indicators – likely needs to be observed from datapoint near the center of a wetland                                                      |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      | ľ                                                    | 2 Pres        | ent in moderate amounts but not of the high<br>Il amounts of the highest quality.                         | nest quality, or in               | atrix or chroma s1) (1)                                                                                                                                                 |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      | 3 Pres        | ent in moderate or greater amounts and of                                                                 | the highest quality               | vegetation in wetland is highly adapted to prolonged inundation (OBL dominance) (1)<br>ubstrate is sand or silt, indicating higher hydraulic conductivity (1)           |  |
|                                                                                                                            |                                                                            |                                                |                                                    | Pi                    | ige 2 of 4                                            |                                                                                                     |                                      | 1) + (4.2) + (4.3) + (4.4) =                         |               |                                                                                                           |                                   | s located within a highly developed landscape (>75% impervious surfaces in ½ mile radius) (1)  In welland is bordered by development, roads, or impervious surfaces (1) |  |
|                                                                                                                            | L                                                                          |                                                |                                                    |                       |                                                       |                                                                                                     | II total score is 5 or greate        | theck Yes to Question (4)                            |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       | eck No to Question (4) - Provide additional photos, narrative, etc., as necessary to justify score. |                                      |                                                      | cure.         | from above: (5.1) + (5.2) + (5.3) + (5.4) + (5.5) + (5.6) =<br>or greater, check Yes to Question (5)      |                                   |                                                                                                                                                                         |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       | - 1                                                                                                 | If Yes OR No, proceed to Qu          | estion (3).                                          |               |                                                                                                           |                                   | less, check No to Question (5) - Provide additional photos, narrative, etc., as necessary to justify score.                                                             |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       | piceed to tables (Page 1 of 4).                       |                                                                                                     |                                      |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|                                                                                                                            |                                                                            |                                                |                                                    | - 1                   |                                                       | Pa                                                                                                  | ige 3 of 4                           |                                                      |               |                                                                                                           |                                   |                                                                                                                                                                         |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           | Γ                                 | <b></b>                                                                                                                                                                 |  |
|                                                                                                                            |                                                                            |                                                |                                                    |                       |                                                       |                                                                                                     |                                      |                                                      |               |                                                                                                           | l                                 |                                                                                                                                                                         |  |







### **Class Determination Worksheet**

#### Table 1:

| Question (2) is YES                                       | Moderate Habitat or Hydrology or Both<br>Question (4) and/or (5) are YES | Neither Moderate Habitat nor Hydrology<br>Both Question (4) and (5) are NO |
|-----------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Undisturbed or Minimally Disturbed<br>Question (3) is YES | Class III                                                                | Class II                                                                   |
| More than Minimally Disturbed<br>Question (3) is NO       | Class II                                                                 | Class II                                                                   |

#### Table 2:

| Question (2) is NO                                        | Moderate Habitat or Hydrology or Both<br>Question (4) and/or (5) are YES | Neither Moderate Habitat nor Hydrology<br>Both Question (4) and (5) are NO |
|-----------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Undisturbed or Minimally Disturbed<br>Question (3) is YES | Class II                                                                 | Class I                                                                    |
| More than Minimally Disturbed<br>Question (3) is NO       | Class II                                                                 | Class I                                                                    |

| Select the State Regulated Wetland Classification based on the tables above: |  | Class I | Clas | s II 🗍 | C | lass II |
|------------------------------------------------------------------------------|--|---------|------|--------|---|---------|
|------------------------------------------------------------------------------|--|---------|------|--------|---|---------|





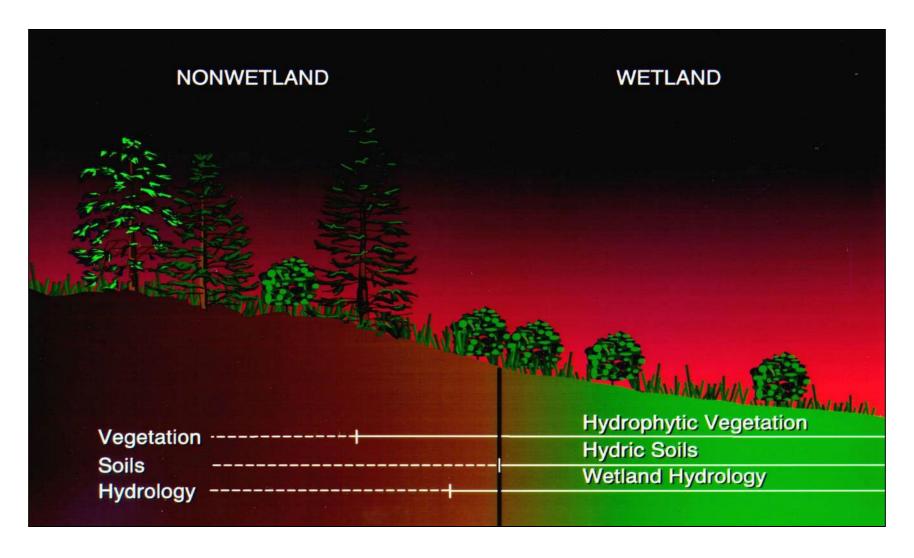
## **Implementation**

- Wetland?
  - Soils
  - Vegetation
  - Water
- Fill?
- Waters of the United States?
- Class of State Regulated Wetland?





### **Wetlands Are Transitional Areas**







### Wetland?

#### Determined using:

- The 1987 U.S. Army Corps of Engineers
   Wetland Delineation Manual
- The Regional Supplements:
  - Midwest Region
  - Eastern Mountains and Piedmont Region
  - Northcentral and Northeast Region

ERDC/EL TR-12-9



Wetlands Regulatory Assistance Program

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)

U.S. Army Corps of Engineers

April 2012



Approved for public release; distribution is unlimited.

Environmental Laboratory





## **Hydrology**

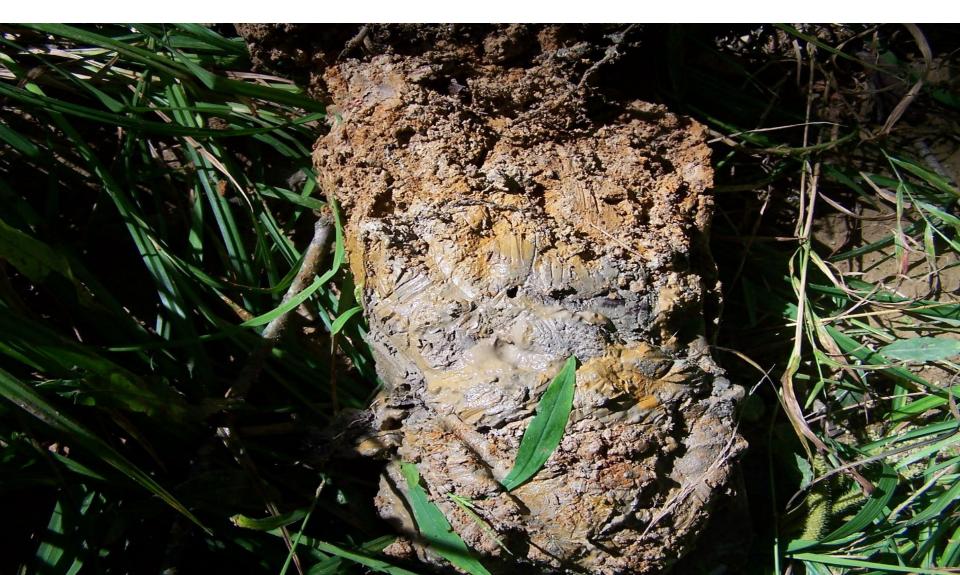




A State that Works

Protecting Hoosiers and Our Environment Since 1986

## **Hydric Soils**







## **Hydrophytic Vegetation**







### **Determine Permits Needed**

# IDEM and Indiana DNR Waterways Inquiry Request

waterways.in.gov

Two Agencies, One Response



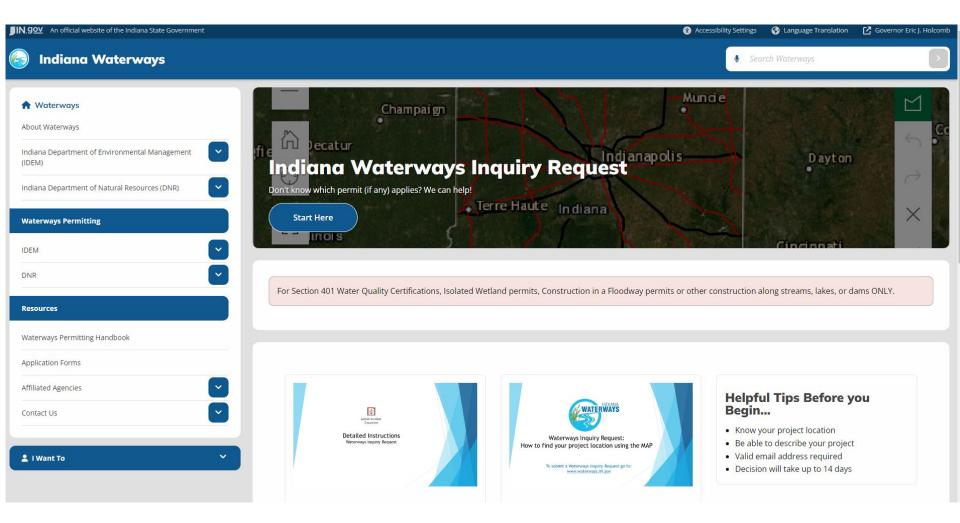


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## **Questions?**



wetlands.IN.gov