

What happens if we remove wetlands? Regulatory

U.S. Army Corps of Engineers
Indiana Department of Environmental Management
Indiana Department of Natural Resources
Natural Resources Conservation Service





U.S. Army Corps of Engineers

Regulatory Program Overview

Aaron Damrill

Chief, Michiana Section

U.S. Army Corps of Engineers

Detroit District, Regulatory Branch

Regulatory Program Goals

Protect the Nation's aquatic resources,
while allowing **reasonable** development.

Ensure fair, flexible, balanced decisions.



USACE Regulatory Authority

Section 10 of the Rivers and Harbors Act of 1899

Regulation of the placement of any structure or work that takes place in, under, or over a navigable water* affecting course, location, or condition of navigable capacity.

Section 404 of the Clean Water Act

Regulation of the discharge of dredged or fill material into all waters of the U.S., including wetlands.



USACE Regulatory Authority

Section 10 of the Rivers and Harbors Act of 1899

Navigable Waters of the United States are waters that are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.

Examples: in the Detroit District include Lake Michigan, the Maumee River and the Kankakee River; Louisville District – The Ohio River.

Regulation of the placement of any structure or work that takes place in, under, or over a navigable water affecting course, location, or condition of navigable capacity.



Section 404 of the Clean Water Act

Navigable and non-navigable waters of the U.S.:

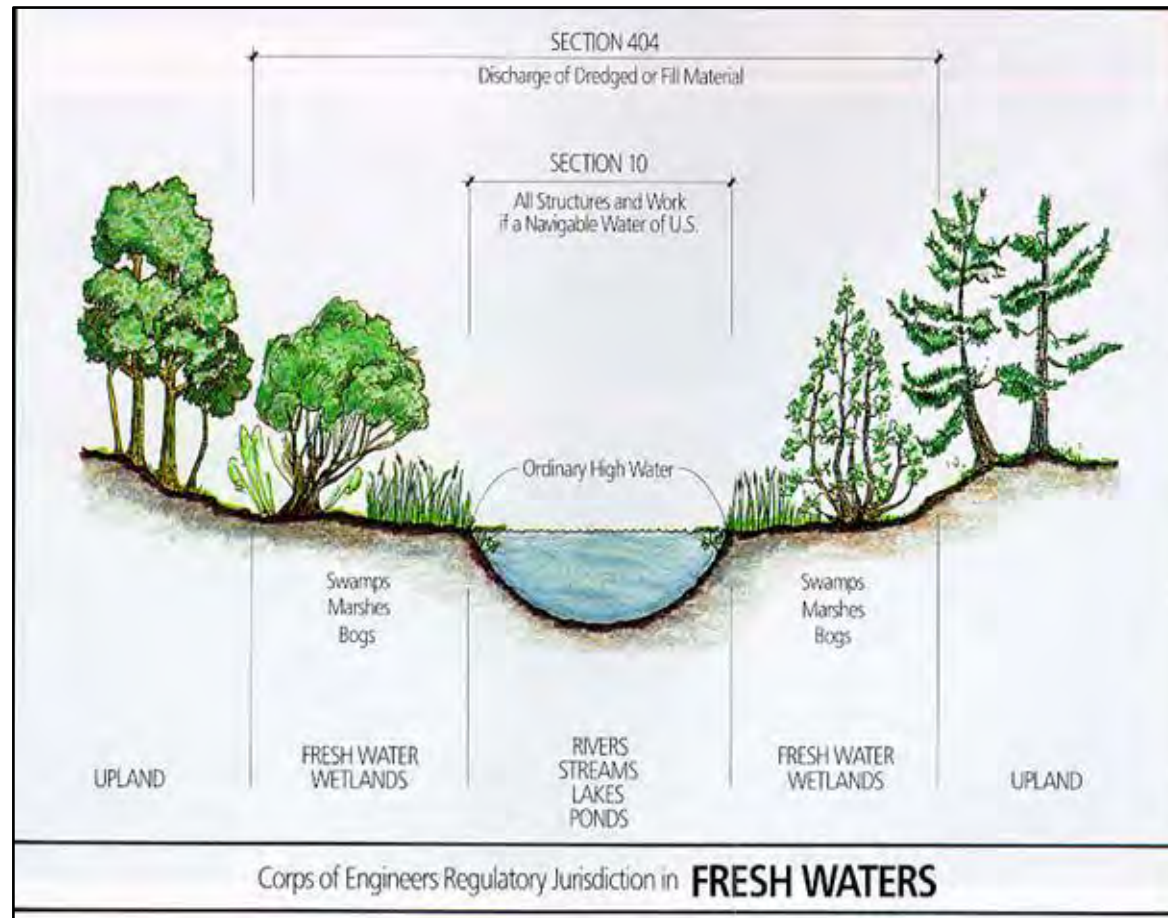
Rivers, streams, creeks, tributaries;
Many lakes, ponds, and adjacent wetlands
(33 CFR Part 328).

Limits:

Wetlands – USACE 1987 Wetland Delineation Manual
Non-tidal Streams – Ordinary High-Water Mark



Limits of Jurisdiction



Ordinary High-Water Mark (OHWM)



Wetlands

defined as:

“Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”



Technical Resources

www.usace.army.mil

ERDC/EL TR-12-1



US Army Corps of Engineers
Engineer Research and Development Center

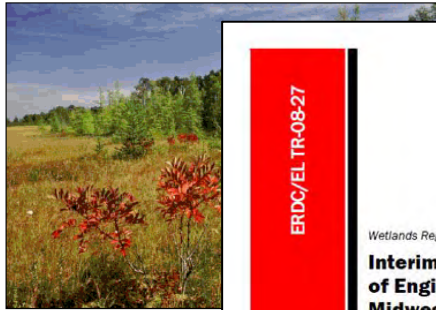
Wetlands Regulatory Assistance Program

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region

(Version 2.0)

U.S. Army Corps of Engineers

January 2012



Approved for public release; distribution is unlimited.

Environmental Laboratory

ERDC/EL TR-08-27



US Army Corps of Engineers
Engineer Research and Development Center

Wetlands Regulatory Assistance Program

Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region

U.S. Army Corps of Engineers

September 2008



Approved for public release; distribution is unlimited.

Environmental Laboratory



US Army Corps of Engineers
Waterways Experiment Station

Wetlands Research Program Technical Report Y-87-1 (on-line edition)

Corps of Engineers Wetlands Delineation Manual

by Environmental Laboratory



United States Department of Agriculture
Natural Resources Conservation Service

In cooperation with the National Technical Committee for Hydric Soils

Field Indicators of Hydric Soils in the United States

A Guide for Identifying and Delineating Hydric Soils, Version 8.0, 2016



The screenshot shows the NWPL Website v3.0.7 interface. The main content area displays a grid of various plant species. On the left, there is a sidebar with sections for 'What's New?' (listing documents and plant lists), 'Propose a New Species', and 'Contact us via Email'. On the right, there is a 'Partner Links' section with logos for the US Army Corps of Engineers, BONAP, and NRCIS. The top of the page includes a search bar and navigation links like 'NWPL Home Page', 'Create Plant List', and 'GIS Map Layers'.



®

Wetlands

Wetland Delineations are conducted per the 1987 USACE Wetland Delineation Manual and appropriate Regional Supplement and requires three criteria:

1. Hydrophytic Vegetation
2. Hydrology
3. Hydric Soils



Criteria 1: Hydrophytic Vegetation



Vegetation adapted to growing in wet / anaerobic conditions



Criteria 2: Hydrology

Saturated or inundated conditions



®

Criteria 3: Hydric Soils



Areas **NOT** Classified as Waters of the U.S.

- Prior converted cropland (unless abandoned)
- Non-tidal drainage / irrigation ditches excavated in dry land (connection exception)
- Artificially irrigated areas that would revert to upland if irrigation ceased
- Artificial lakes or ponds created by excavating from dry land and used exclusively for stock watering, irrigation, settling basins, or rice growing
- Artificial reflecting or swimming pools or ornamental water bodies created by excavation from dry land
- Water-filled depressions created on dry land incidental to construction activities and pits excavated on dry land for the purpose of obtaining fill, sand, or gravel
- Waste treatment ponds/lagoons designed to meet CWA requirements
- Isolated, intrastate, non-navigable waters – Only “Commerce Clause” nexus is migratory birds

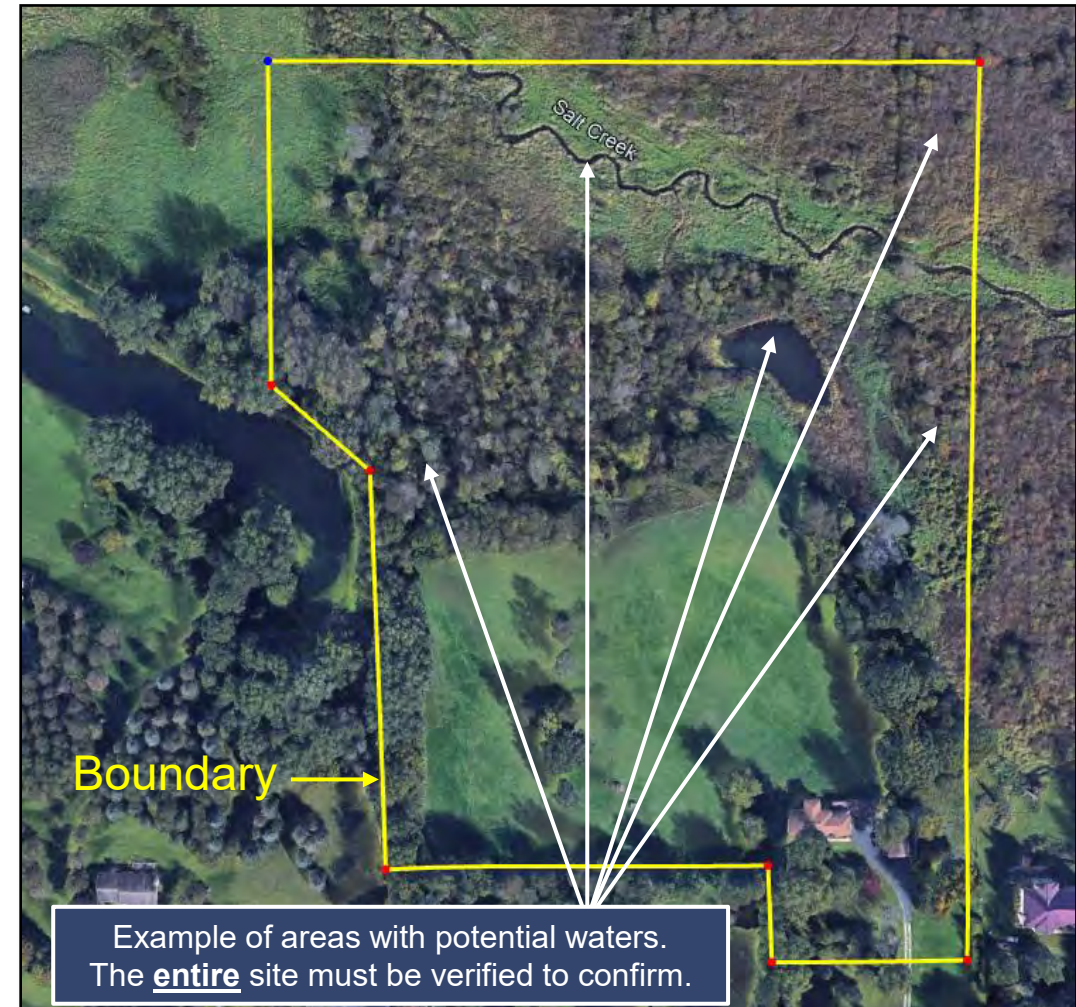


Areas **NOT** Classified as Waters of the U.S.
can still be regulated by the State.
Contact IDEM



Does your project need a USACE permit?

1. Identify jurisdictional waters on your site
2. Assess potential impacts:
 - A. Avoid – consider alternatives, including other properties
 - B. Minimize – modify plans
 - C. Mitigate – bank &/or ILF
3. Apply for Authorization



Three Types of Permits / Authorizations

1. Individual Permits (IPs)
2. Letters of Permission (LOPs)
3. General Permits:
 - A. Regional General Permits (RGPs)
 - B. Nationwide Permits (NWP)
 - C. Programmatic General Permits (PGPs)



Other Laws

Section 7: Endangered Species Act
U.S. Fish & Wildlife Service (USFWS)

Section 106: National Historic Preservation Act
State Historic Preservation Office

Section 401: Clean Water Act
Water Quality Certification
Indiana Department of Environmental Management

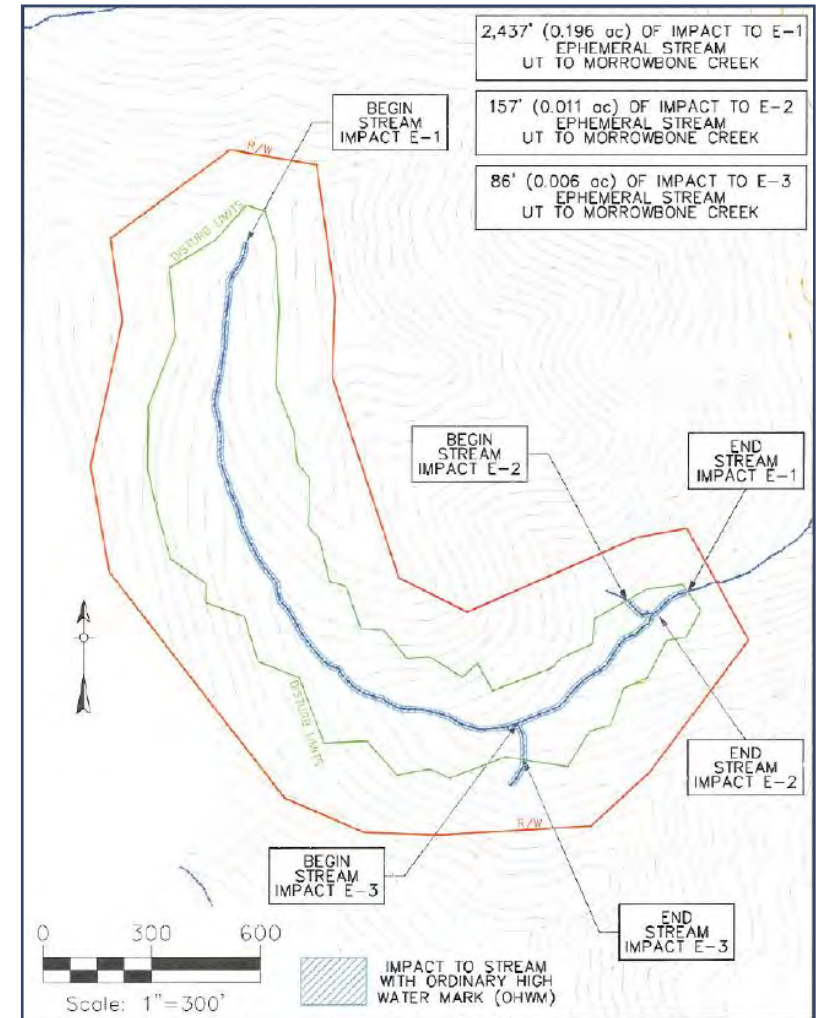
Section 408: Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408)
Civil Works Projects, USACE, Engineering Division



Decisions

Issue, Deny, or Issue with Conditions:

- Authorize as proposed
- Deny – not in the Public Interest, or without prejudice (other Agency denial)
- Issue with Special Conditions to ensure in Public Interest



Issue Department of the Army Permit or verification of GP with Special Conditions

Examples:

- Mitigation to offset adverse impacts to the aquatic environment
- Seasonal tree clearing – Indiana bat, Northern Long-Eared Bat, Gray Bat
- Comply with MOA – Historic Properties
- Specific construction details from ED regarding Civil Works Projects



Mitigation

2008 Mitigation Rule-Hierarchy

- Mitigation Bank
- In-Lieu Fee Program
- Off-Site Permittee Responsible Mitigation
- On-Site Permittee Responsible Mitigation

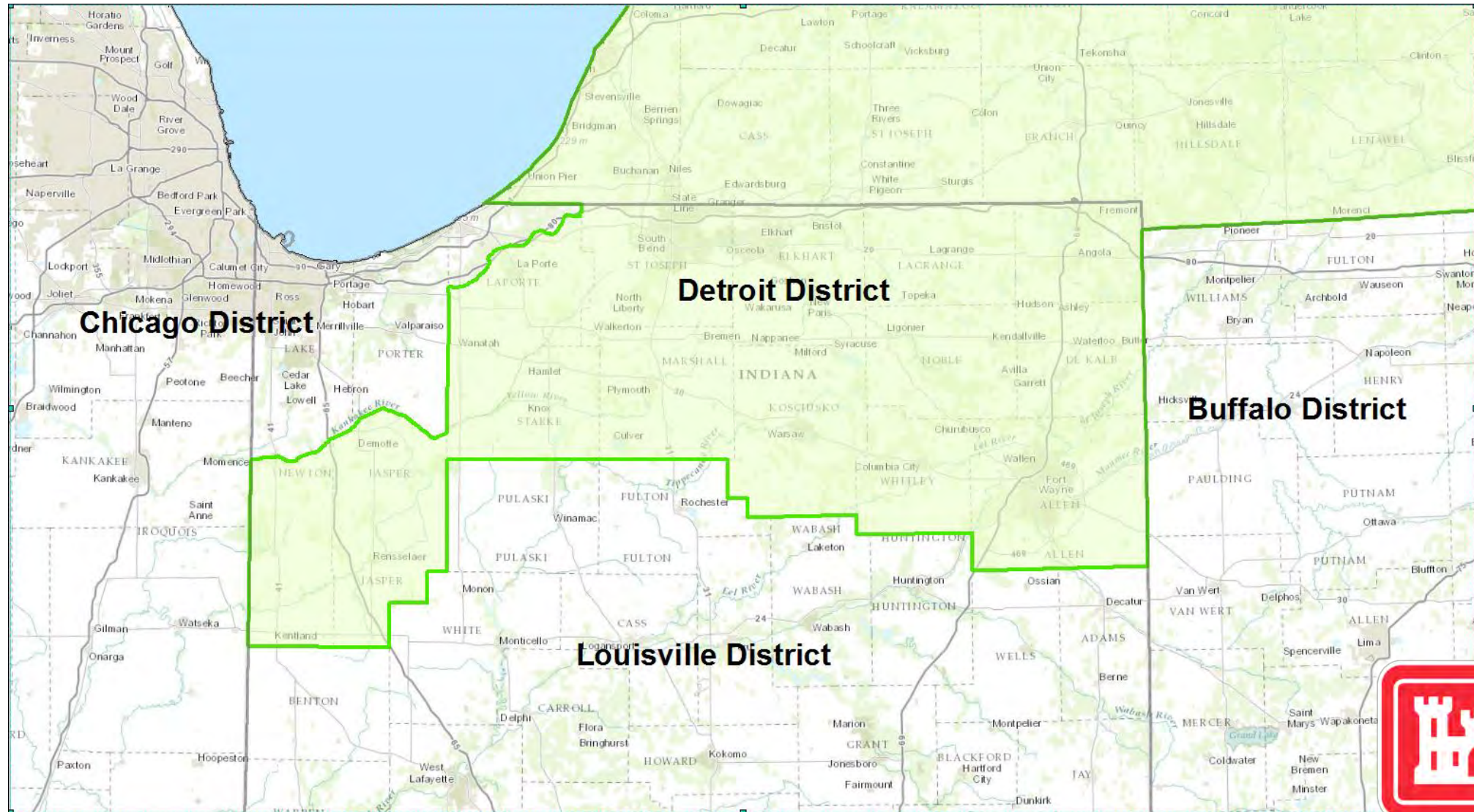


Common Work Types

- Dredging / debris / sediment removal (Section 10)
- Construction of roads & crossings
- Stream relocation, new crossings, encapsulation, or tiling
- Bank stabilization
- Maintenance of currently serviceable structures (culvert or bridge)
- Residential, Industrial, & Commercial Development

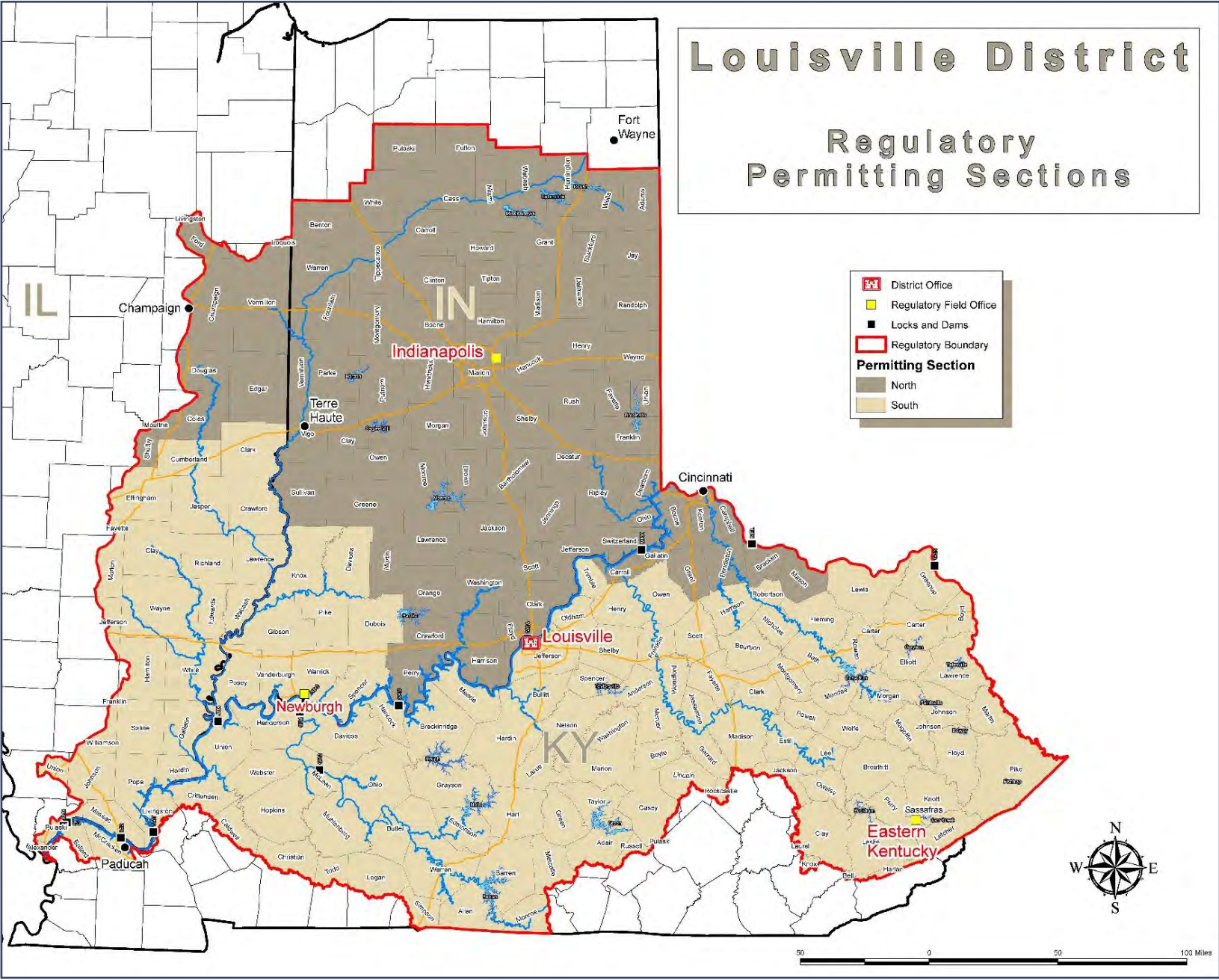


USACE Districts in Indiana



Louisville District

Regulatory Permitting Sections



Questions?

Aaron Damrill

U.S. Army Corps of Engineers
2422 Viridian Drive, Suite #200
South Bend, IN 46628

Phone: (574) 232-1952 x 21961

Email: aaron.w.damrill@usace.army.mil

Detroit District Webpage:

<https://www.lre.usace.army.mil/Missions/Regulatory-Program-and-Permits/>

Kimberly J. Simpson

U.S. Army Corps of Engineers
P.O. Box 59
Louisville, KY 40201

Phone: (502) 315-6692

Email: Kimberly.J.Simpson@usace.army.mil

Louisville District Webpage:

<http://www.lrl.usace.army.mil/Missions/Regulatory.aspx>

USACE Headquarters Webpage:

http://www.usace.army.mil/CECW/Pages/cecwo_reg.aspx



IDEM Wetland Permitting 101:

Overview of permitting
for work in Waters of the State

Jay Turner

Wetlands, Lakes, & Streams Project Manager

Office of Water Quality
Indiana Department of
Environmental Management



IDEM & the Law: Regulatory Authority

Section 401 of the Clean Water Act

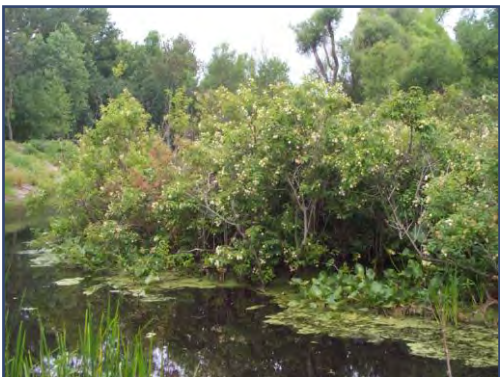
Implemented by IDEM

Water Quality Certification (WQC) required from the state before a federal permit or license can be issued

State Water Quality Standards (327 IAC 2)

State Regulated Wetlands Law (IC 13-18-22)

Establish General & Individual Permits for impacts in wetlands NOT under federal jurisdiction



IDEM-Regulated Activities

- Discharge of dredged or fill material into Waters of the U.S. & non-exempt Waters of the State
- All Waters of the U.S. are Waters of the State
- **Isolated Wetlands** – Waters of the State but NOT Waters of the U.S.
- **State Regulated Wetland** – Defined by state law as an isolated wetland located in Indiana that is not an exempt isolated wetland



Wetland image courtesy of IDEM



Indiana State

Isolated Wetlands Law: IC 13-18-22

- Wetlands not regulated under the Federal Clean Water Act.
- 2003: Law passed in response to lack of federal jurisdictional & permit requirements in wake of SWANCC
- Established wetland classification system for “class” of isolated wetlands
 - Class I, Class II, Class III
- Regulatory oversight & mitigation requirements through IDEM
 - Wetland class & acreage
- Exempts certain activities & wetlands based on size & class



Permits & Certifications

- General Permits
- Individual Section 401 WQC
- Isolated Wetland Individual Permit
- Tile Maintenance General Permit



SECTION 401 WQC REGIONAL GENERAL PERMIT NOTIFICATION									
<small>State Form 5107-95 (7-13) INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) and U.S. ARMY CORPS OF ENGINEERS (USACE)</small>									
<small>Authorities: Section 401 Water Quality Certification, Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbor Act</small>									
<small>INSTRUCTIONS: 1. Familiarize yourself with the terms and conditions of this permit. 2. Read the instructions before filling out this form. 3. All applicable sections of this two (2) page form must be completed.</small>									
<table border="1"> <thead> <tr> <th colspan="2">AGENCY USE ONLY</th> </tr> </thead> <tbody> <tr> <td>Date Received (mm/dd/yyyy)</td> <td></td> </tr> <tr> <td>IDEM ID</td> <td></td> </tr> <tr> <td>Processing Date (mm/dd/yyyy)</td> <td></td> </tr> </tbody> </table>		AGENCY USE ONLY		Date Received (mm/dd/yyyy)		IDEM ID		Processing Date (mm/dd/yyyy)	
AGENCY USE ONLY									
Date Received (mm/dd/yyyy)									
IDEM ID									
Processing Date (mm/dd/yyyy)									
APPLICANT INFORMATION									
Name of Project:	Designation Number:								
Applicant:	Agent (Name of Company):								
Contact Person:	Contact Person:								
Address (number and street):	Address (number and street):								
City: State: ZIP Code:	City: State: ZIP Code:								
Telephone Number:	Telephone Number:								
E-mail Address:	E-mail Address:								
PROJECT LOCATION									
County:	Nearest Town:								
Quad Name:	Section:	Township:	Range:						
Latitude:	Longitude:								
Project Address and Driving Directions:									
EXISTING CONDITIONS ON THE PROJECT SITE									
Lake: <input type="checkbox"/> Yes <input type="checkbox"/> No	Name of Lake:								
Stream: <input type="checkbox"/> Yes <input type="checkbox"/> No	Name of Stream:	Stream Type: <input type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral							
Wetlands: <input type="checkbox"/> Yes <input type="checkbox"/> No	Acreage on the site by Wetland Type(s): _____ Emergent _____ Scrub-Shrub _____ Forested								
Date (mm/dd/yyyy) of Wetland Delineation:									
Date (mm/dd/yyyy) of the U.S. Army Corps of Engineers Jurisdiction Correspondence:									
PROJECT IMPACTS									
Activity Description:									
Purpose of Project:									
For Lake Impact (Acceptable fill is defined in the instructions):									
(1) Linear feet of shoreline impact (Example – Seawall): _____									
(2) Type of fill below the Ordinary High Water Mark: _____ Volume (Cubic Yards): _____ Acres: _____									
(3) Does the shoreline or open water area have vegetation present? <input type="checkbox"/> Yes <input type="checkbox"/> No									
If Yes, are you proposing natural shoreline stabilization? <input type="checkbox"/> Yes <input type="checkbox"/> No Description: _____									
(4) Open water fill beyond shoreline (Examples – Boat Wall, Underwater Beach): Type of Fill: _____ Acres: _____									

Section 401 WQC Regional General Permit

Permits & Certifications: General Permits

On jurisdictional waters, permits issued by USACE (RGP, NWP, & PGP) have a 401 WQC issued based on applications by USACE to IDEM on a cyclical basis.

Notifications provided to IDEM are verified for compliance with conditions in the certification.



Permits & Certifications: Individual Section 401 WQC

Required for projects that do not meet general permit conditions on jurisdictional waters:

1. Required Public Notice
2. Required mitigation



Permits & Certifications: Isolated Wetland Individual Permit

Any regulated impact to non-jurisdictional wetlands

- “Isolated Wetlands”
- Non-Exempt under any of the stated exemptions
- Require Avoidance and Minimization as well as Mitigation
- Mitigation based on Class and dominant vegetation type



Permits & Certifications: Tile Maintenance General Permit

Maintenance of drainage tile in Class II or Class III Wetlands

Wetlands which have re-established over failed drainage tiles qualify for a general permit for maintenance that:

- Is necessary to restore drainage of land adjacent to the wetland
- Does not have the effect of draining of the wetland itself (the use of solid tile through the wetland)

General Permit for tile maintenance within Class II wetlands:

- Must meet general conditions as outlined in the Tile Maintenance General Permit issued July 12, 2021

Tile maintenance in Class III wetlands requires individual review of information meeting all general conditions as well as:

- Provide the location and area needed to be disturbed
- A lack of reasonable alternatives to the disturbance of the area



Avoid Permitting “Surprises”

1. **Avoid impacts to wetlands & streams, if possible**
2. **Complete a wetland delineation for all sites**
3. **Contact IDEM for early coordination site visit:**

4. **Indiana Department of Environmental Management**

Office of Water Quality

100 North Senate Avenue, Room 1255

Indianapolis, Indiana 46204

317-233-8488

WetlandsProgram@idem.IN.gov

Project Managers: <https://www.in.gov/idem/wetlands/contact/>



Indiana Department of Natural Resources

Under the Flood Control Act, the Indiana Department of Natural Resources (DNR) has jurisdiction over construction projects in the floodway *

- This includes impacts to wetlands in the floodway *
- DNR, Division of Fish & Wildlife reviews projects for unreasonably detrimental effects upon fish, wildlife, and botanical resources
 - “Unreasonably detrimental” is defined in code and essentially means the resources are not likely to recover in a timely manner and the impacts cannot be mitigated
 - Permit conditions address remaining unreasonably detrimental effects

* all streams have a floodplain, even when not mapped; the DNR has jurisdiction over the *floodway* portion of the floodplain only



Not sure whether a permit is required?

Waterways Inquiry Request – an online tool from IDEM & Indiana DNR to help Indiana citizens determine if a permit is needed from either agency.

Additional information at: waterways.IN.gov



Mitigation

IDEM Mitigation

Mitigation for wetland losses is determined by:

- the dominant vegetation type of wetland impacted
- the functions the wetland is providing
- the complexity of recreating the same functions and wetland vegetation type in a new location.



IDEM Mitigation

Mitigation ratios may be higher when using ILF

- Mitigation constructed through ILF has a longer period of temporal loss expected

Mitigation using wetland mitigation banks will typically be at a 1:1 ratio

Mitigation for impacts to State Regulated Wetlands is at a lower ration than wetlands regulated under the Clean Water Act



IDEM Mitigation

	IDEM (401)	Isolated On-site and any ILF		Isolated Off-site	
Palustrine Forested (PFO)	4:1	Class I	Exempt	Class I	Exempt
		Class II	2:1	Class II	2.5:1
		Class III	2.5:1	Class III	3:1
Palustrine Scrub-Shrub (PSS)	3:1	Class I	Exempt	Class I	Exempt
		Class II	1.5:1	Class II	2:1
		Class III	2:1	Class III	2.5:1
Palustrine Emergent (PEM)	2:1	Class I	Exempt	Class I	Exempt
		Class II	1.5:1	Class II	2:1
		Class III	2:1	Class III	2.5:1

Mitigation is used only if avoidance and minimization cannot prevent all impacts

- The flood study which shows that wetlands help with flood reduction is just one example of a single function that needs to be mitigated when wetland losses are not prevented.



DNR Mitigation Requirements

See the “Habitat Mitigation Guidelines” at <https://www.in.gov/nrc/nonrule-policy-documents-npd/> for details about mitigation requirements from the DNR

Habitat Category	Standard Minimum Mitigation Ratio
Palustrine Emergent Wetland	2:1
Palustrine Scrub-Shrub Wetland	3:1
Palustrine Forested Wetland	4:1
Non-wetland forest (at least one acre of disturbance)	2:1
Non-wetland forest (less than one acre of disturbance in a rural area)	1:1
Non-wetland forest (less than one acre of disturbance in an urban area)	5:1 based on trees at least ten (10) inches in diameter-at-breast-height ("dbh") OR 1:1 based on area

- DNR and IDEM try to coordinate on mitigation requirements so that one mitigation plan is sufficient for both agencies' requirements



Additional Information



To view floodways in Indiana:
infip.dnr.IN.gov

DNR
Indiana Department
of Natural Resources

Additional Information



IDEM Wetlands Webpage:
<http://www.wetlands.IN.gov>

DNR Webpage:
<https://www.in.gov/dnr/water/>



Questions?

Jay Turner

Office of Water Quality
100 North Senate Avenue, Room 1255
Indianapolis, IN 46204

Phone: (317) 450-7054
Email: JTurner2@idem.IN.gov

IDEM Wetlands Webpage:
www.wetlands.IN.gov



Wetland Conservation Compliance

Scott Wagner, P.E.

Agricultural Engineer

Indianapolis, IN

Natural Resources Conservation Service



**United States
Department of
Agriculture**

Natural Resources Conservation Service

Helping People Help the Land.
USDA is an equal opportunity provider, employer and lender.



What is Wetland Conservation Compliance?

- Food Security Act of 1985 included wetland conservation compliance provisions to assist in protecting the value, acreage, and functions of the nation's wetlands
- To participate in most United States Department of Agriculture (USDA) programs, agricultural producers agree to comply with the wetland conservation provisions
- Producers will not farm converted wetlands or convert wetlands to enable or enhance **agricultural production**



Image courtesy of USDA - NRCS

Food Security Act of 1985

Defined a Wetland as land that =

- has a predominance of **hydric soils**;
- is **inundated or saturated by surface or groundwater** at a frequency and duration sufficient to support a prevalence of **hydrophytic vegetation** typically adapted for life in saturated soil conditions; and
- under normal circumstances does support a prevalence of such vegetation.



Image courtesy of USDA - NRCS



Wetland Conservation Compliance

- USDA participants self-certify wetland conservation compliance (form AD-1026) with the Farm Service Agency (FSA)
- Self-certifying (AD-1026) may trigger USDA to conduct a wetland determination
- **Contact FSA** to find if a wetland determination already exists or to initiate the process
- Find you local USDA Service Center (FSA/NRCS Office) at =



Image courtesy of USDA - NRCS

<https://www.farmers.gov/working-with-us/service-center-locator>



Wetland Determinations

- NRCS staff will conduct wetland determination
- Most determinations are completed offsite, utilizing remote sensing tools
- Onsite visits are made when requested by participant, before withholding USDA benefits, for an appeal, and other instances
- NRCS will complete a wetland determination map by delineating the wetland boundary, documenting the wetland type, and recording the wetland acreage
- If you disagree, a reconsideration can be requested



Image courtesy of USDA - NRCS

Questions?

Scott Wagner, P.E.

Indiana NRCS State Office
6013 Lakeside Boulevard
Indianapolis, IN 46278

Phone: (317) 295-5771

Email: scott.wagner@usda.gov

Indiana NRCS Webpage:

<https://www.nrcs.usda.gov/wps/portal/nrcs/in/home/>

USDA National Webpage:

<https://www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/>



Image courtesy of USDA - NRCS



United States
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