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What Landowners Should Know About Wetlands on Their Property

- What defines a wetland?
- Can I develop (dredge and fill activities), improve (rehabilitate), restore (re-establish), or protect (preserve) wetlands on my property?
- How do I identify if any areas of my property are wetlands?
- If I want to do any of the above activities when do I need a permit or other authorization to proceed?
- How do I get a permit/other authorization if needed?

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Wetland Definition

The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas that are delineated in accordance with the 1987 U.S. Army Corps of Engineers wetland delineation manual... (33CFR 328.3(b); 1984 and OAC 3745-1-02)



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Wetland Criteria



- **Hydrology** – wetlands are distinguished by the presence of water, either at the surface or within the root zone (top 12”).
- **Soils** – wetlands often have unique soil conditions that differ from adjacent uplands and are clearly observable—hydric soils.
- **Plants** – wetlands support vegetation adapted to the wet conditions (hydrophytes) and, conversely, are characterized by an absence of flooding-intolerant vegetation.

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Wetland Delineation – Identifying Wetlands

- Requires gathering of information on plants, soils, and hydrology
- Requires loads of knowledge on how to ID the 3 wetland criteria
- A job for a trained professional
- Wetland delineator develops a map identifying the boundaries of all wetlands on your property and also develops a report



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Federal Wetland Regulations

- 1899 -Rivers & Harbor Act of 1899 – required approval by War Secretary for all construction activities and deposition of refuse in navigable waters.
- 1967 – Fish and Wildlife Coordination Act – required Army Corps of Engineers to include ecological effects in their regulations.
- 1972 – Federal Water Pollution Control Act (Clean Water Act)
- 1977 – CWA – wetlands added as Waters of the U.S. (WOTUS)
 - Section 401 – State’s Water Quality Certification process
 - Section 404 – Federal regulation of placement of dredged and fill materials in a WOTUS. – Section 404 permits

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Federal Wetland Regulation Rulings

- 2001 -Tulloch Rule (last amended) – dredging and land clearing activities could be considered discharges of dredge and fill material if more than “incidental fallback” occurs.
- 2001 – Solid Waste Agency of Northern Cook County (SWANCC) – U.S. Supreme Court ruled those waters not adjacent to navigable waters are not Waters of the U.S.
- 2006 - Rapanos and Carabell – U.S. Supreme Court ruled that to be considered federally jurisdictional those waters need a “significant nexus” to a navigable water for CWA purposes. Afterwards, Corps required to fill out complicated field evaluation form to make jurisdictional determinations.

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Activities Exempt under the Clean Water Act, Section 404(f)

- Established (ongoing) farming, ranching, and forestry activities: plowing, seeding, cultivating, harvesting food, fiber, and forest products, minor drainage, and upland soil and water conservation practices.
- Maintenance (but not construction) of drainage ditches
- Construction and maintenance of irrigation ditches
- Construction and maintenance of farm or stock ponds
- Construction and maintenance of farm and forest roads, in accordance with best management practices
- Maintenance of structures, such as dams, dikes, and levees



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Prior Converted Farmland

Exempt from Section 404 of CWA if:

- Cropped prior to Dec. 23, 1985 with an agricultural commodity (annually tilled crop such as corn)
- The land was cleared, drained, or otherwise manipulated to make it possible to plant a crop
- The land has continued to be used for agricultural purposes (cropping, haying, or grazing)
- The land does not flood or pond for more than 14 days during the growing season
- Will no longer be considered “Prior Converted” if abandoned for 5 consecutive years

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CWA Section 404 Nationwide Permits

- These are “general” Section 404 Permits that cover a wide range of activities (52 NWP) considered low impact
- Have conditions on their use (31 currently)- Ohio 2017 WQC
 - Activity specific – utility lines, coal mining, maintenance, etc.
 - Avoid high quality and rare aquatic systems and species, etc.
 - Footprint (area, length, etc.) of impacts limited
 - Adherence to best management practices
 - Some require a Pre-Construction Notice (PCN)
- Renewed every five years – states must issue or waive a Section 401 WQC – may grant, condition, or deny

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Ohio Wetland Rules and Law

Ohio Administrative Code 3745-1-50 to 54



- Ohio's Wetland Water Quality Standards - Rules
 - 50-Definitions
 - 51-Wetland Use
 - 52-Narrative Criteria
 - 53-Criteria for Wastewater Discharges to Wetlands
 - 54 Wetland Antidegradation Rule
- Isolated Wetland Statute - Law

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Ohio Wetland Facts



- Ohio originally had 5 million acres of wetlands (20% of Ohio's landscape)
- Today there are approximately 500,000 acres left (2% of Ohio's landscape)
- The Great Black Swamp (NW Ohio) comprised 3 million acres, most of which is no longer wetland
- Ohio has lost 90% of its original wetlands!!!

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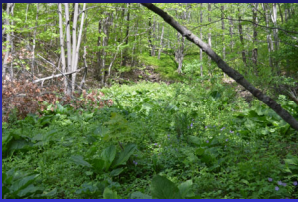
Wetland Functions and Values Ecosystem Services

- Water storage, flood control
- Groundwater exchange
- Biogeochemical cycling
- Nutrient regulation
- Sediment/Contaminant retention
- Maintenance of biodiversity
- Habitat for T & E species
- Recreation
- Cultural values
- Aesthetics
- Education and Research



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Wetlands in Ohio/USA – 2 Distinct Types



1. Federally Jurisdictional Wetlands - (WOTUS) Regulated by ORC 6111 & OAC 3745-1-50 through 54 – Wetland Water Quality Standards both federal and state jurisdiction
2. Isolated Wetlands – State-only jurisdiction, regulated by ORC 6111.02 through 6111.029 – 2001 SWANCC decision

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Statutory Requirement



- Ohio Revised Code 6111.04 – Requires a permit prior to the discharge of dredged or fill material into waters of the state.

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Federally Jurisdictional Wetlands Waters of the US (WOTUS)



Require a Section 401 Water Quality Certification (WQC) issued by Ohio EPA, coupled with a Section 404 Permit issued by the Army Corps of Engineers (ACOE) for discharges of dredged and fill materials – Both state and federal regulated

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Isolated Wetlands

- Rapanos/Carabell – 2006 Case Supreme Court split decision – unclear which wetlands are jurisdictional
- Federal jurisdiction requires a significant nexus to a navigable water
- Corps conducts an intensive review of wetland hydrology and other connectivity factors to determine if a wetland is federally jurisdictional
- If not federally jurisdictional – considered isolated and not WOTUS



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Waters of the US (WOTUS) Rule

US EPA and the Army Corps of Engineers, under the last administration, changed the WOTUS definition. This has significantly reduced the number of streams and wetlands that are now considered to be WOTUS. This new rule is being legally challenged by many organizations and appears likely to be overturned for its lack of scientific justification and how many current WOTUS resources would lose their federal jurisdiction protections.



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Federally Jurisdictional Wetlands – Ohio Rules

OAC 3745-1-50 through -54 establishes:

- 1) Narrative criteria, chemical criteria and use designation applicable to wetlands,
- 2) wetland categories,
- 3) a tiered review process for Section 401 applications.



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Ohio's Wetland Water Quality Standards

- Wetland Antidegradation Rule – varies protection based on wetland's:

- relative functions and values
- sensitivity to disturbance
- rarity
- ability to be compensated for by mitigation

- Category 1 wetlands – low quality
- Category 2 wetlands – moderate quality
- Category 3 wetlands – superior quality



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Wetland Narrative Criteria

OAC 3745-1-51



Narrative Criteria – The hydrology necessary to support the biological and physical characteristics naturally present in wetlands shall be protected; the water quality necessary to support existing habitats and the populations of wetland flora and fauna shall be protected.

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Wetland Chemical Criteria

OAC 3745-1-52

- Chemical Criteria – Establishment of waste water discharge permit limits, shall use the numeric chemical criteria associated with “warmwater aquatic life habitat” use designation at “end of pipe”. The applicant may submit a request, in writing to the director to use alternate criteria. The director may approve the request if the use of alternative criteria is deemed not to be injurious to the wetland’s designated use and assigned category,

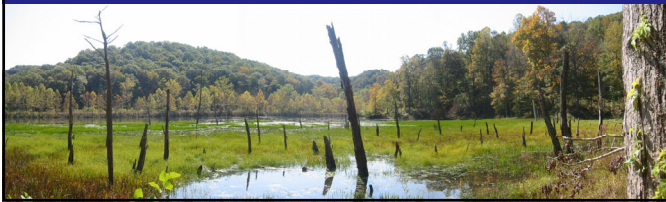


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Wetland Use Designation

OAC 3745-1-53

- All surface waters of the state of Ohio which meet the definition of a wetland in rule 3745-1-02 of the Ohio Administrative Code are assigned the “wetland” designated use.



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Wetland Antidegradation Rule

OAC 3745-1-54

- Sets up a tiered review system based on wetland categories
- Three wetland categories:
 - Category 1- wetlands of poor ecological conditions
 - Category 2 – wetlands of fair to good ecological conditions
 - Category 3 – wetlands of excellent ecological conditions



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Category 1 Wetland Permitting

- Avoidance - alternatives
- Minimization – smallest footprint possible
- Compensatory Mitigation Ratio
 - Non-forested 1.5 to 1.0
 - Forested 1.5 to 1.0
 - Replace with wetland of Category 2 or 3 quality



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Category 2 Wetland Permitting

- Avoidance - alternatives
- Minimization – smallest footprint possible
- Demonstration of important social or economic development
- Compensatory Mitigation Ratio
 - Non-forested 2.0 to 1.0
 - Forested 2.5 to 1.0
- Replace wetland - equal or higher quality - Category 2 or 3



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Category 3 Wetland Permitting

- Avoidance - alternatives
- Minimization – smallest footprint possible
- Demonstration of important social or economic development
- Meets a public need on a statewide basis
- Compensatory Mitigation Ratio
 - Non-forested 2.5 to 1
 - Forested 3.0
- Replace with Category 3



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Isolated Wetlands – Ohio Statute

Regulated by ORC 6111.02 through 6111.029

Tiered Review – based on total area of impacts and category of the wetland to be impacted.

- Level 1 – General Permit
- Level 2 and 3 – Individual Permits



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Isolated Wetland Permit Applications

Requirements for all levels of review:

- Project description
- Acceptable wetland delineation
- Corps isolated waters determination
- Wetland categorization



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Level 1 Review – General Permit



- Impacts to category 1 or 2 isolated wetlands of ½ acre or less,
- Ohio EPA must determine whether application is complete within 15 business days,
- Automatic approval after 30 calendar days unless Ohio EPA denies the permit,
- Permit good for two years.

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Level 2 Review – Individual Permit

- Impacts to category 1 isolated wetlands > ½ acre, or impacts to category 2 isolated wetlands > ½ acre but ≤ 3 acres,
- Submittal of an Individual Isolated Wetland Permit application,
- Ohio EPA must determine whether application is complete within 15 business days,
- 20-day public comment period,
- 90-day review period, but not automatic approval after that time.



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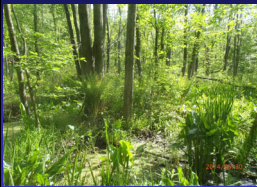
Level 3 Review – Individual Permit

- Impacts to category 2 isolated wetlands > 3 acres, or impacts to any category 3 isolated wetland,
- Submittal of an Individual Isolated Wetland Permit application,
- Ohio EPA must determine whether application is complete within 15 business days,
- 20-day public comment period,
- 180-day review period, but not automatic approval after that time,
- Full antidegradation review same as a Section 401 review.



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Wetland Monitoring and Assessment



- Determine quality/ecological condition of natural wetlands
- Place wetlands in appropriate Antidegradation categories
- Determine if compensatory mitigation goals are met

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Wetland Assessment

- Wetland bioassessment tools outline 3 levels of assessment:
- Level 1:** landscape level assessments using remote data and without site visit (i.e. LDI)
- Level 2:** "rapid" assessments with habitat, function, and stressor checklists with relatively short site visit (i.e. ORAM)
- Level 3:** detailed biological and/or biogeochemical surveys with quantitative data collection of floral, faunal, physical, and/or chemical characteristics of wetland with significant time at site (i.e. IBIs)



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Rule Requirements for Monitoring

- OAC 3745-1-54(B)(2)(a)(ii): "In assigning a wetland category, the director will consider the results of an appropriate wetland evaluation method(s) acceptable to the director, and other information necessary in order to fully assess the wetland's functions and values" ORAM or Level 3
- OAC 3745-32-05(C): "The director may impose such terms and conditions as part of a section 401 certification as are appropriate and necessary to ensure compliance with the applicable laws and to ensure adequate protection of water quality."

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Monitoring Ohio's Wetlands

- Started monitoring Ohio's natural and mitigation wetlands in 1995
- Monitored the plant, amphibian and macroinvertebrate communities, chemical and physical attributes, and hydroperiods
- Monitored over 675 natural wetlands and more than 200 mitigation wetlands including wetland mitigation banks
- Sites have been from all of Ohio's major ecoregions, have covered the entire state, and span the entire range of human disturbance
- The large amount of monitoring performed as resulted in development of ORAM, VIBI, VIBI-FQ, and AmphIBI.



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Rule Requirements for Mitigation Monitoring

• Mitigation Monitoring and Performance

– OAC 3745-1-54(E)(8):

– “Compensatory mitigation monitoring. The director shall require the permittee to conduct ecological monitoring of the compensatory mitigation project and submit annual reports detailing the results of the ecological monitoring. The ecological monitoring may include, but is not limited to, collection of data on hydrologic characteristics, vegetation communities and soils at the compensatory mitigation site and conducting an assessment of the compensatory mitigation wetlands using an appropriate wetland evaluation method in accordance with paragraph (B)(2)(a)(iii) of this rule. Ecological monitoring shall be conducted for a period of at least five years for non-forested wetlands and at least ten years for forested wetlands following construction of the compensatory mitigation.



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Wetlands Impacted Without Prior Authorization

- OAC 3745-1-54(B)(6):

- (a) “Where a wetland has been degraded or destroyed without prior authorization, ~~the wetland will be considered a category 3 wetland~~, unless the applicant demonstrates that a lower category is appropriate based on other information including, but not limited to, adjacent vegetation, aerial photographs, U.S. fish and wildlife service national wetland inventory maps, Ohio wetland inventory maps, public information, on-site inspections, previous site descriptions, and soil maps.”

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Wetlands Impacted Without Prior Authorization (continued)

- OAC 3745-1-54(B)(6):

- (b) “The director may consider other information in determining whether a lower category is appropriate.”

- (c) “When reviewing applications for discharges to wetlands which have occurred without prior authorization, the fact that the discharge has already occurred shall have no bearing on the decision of whether to allow lower water quality. Ohio EPA shall review the impacts based on pre-discharge conditions.”

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