ESSH-1130 Environmental Laws & Regulations Mel Shilling Autumn 2019

> Chapter 3 Water Pollution

I. INTRODUCTION § 3.01. Scope

 Ohio EPA Water Pollution Control Authority [3.02] • Water Quality Stds [3.03] • Ohio's Point Source Permitting Programs [3.04] • Storm water Discharge Permitting [3.05] • Ohio's Antidegradation Requirements [3.06] • Regulation of Underground Injection Wells [3.07] • Enforcement of Water Pollution Control Law in Ohio [3.08]

II. WATER POLLUTION CONTROL

§ 3.02. Ohio EPA Authority

- Ohio has a comprehensive statutory and regulatory program to <u>control discharges of</u> <u>pollutants to waters of the state</u>.
- The basic framework was established by Feds under Federal Water Pollution Control Act in 1972. Known as <u>Clean Water Act</u>.
 - <u>Purpose</u> restore and maintain the chemical, physical and biological integrity of the waters of the United States.
 - <u>Prohibits</u> discharges of pollutants to the nation's waterways unless and until a prospective discharger obtains a permit to do so.
 - <u>Authority</u> to regulate discharges can be delegated to the states.
- Ohio's water quality legislation found in R.C. Chapter 6111 gives the Director broad powers:
 - (1) develop plans and programs to prevent, control, and abate new or existing water pollution;
 - (2) adopt, amend or rescind water regs;
 - (3) permitting program (issue, revoke, modify or deny permits to discharge pollutants to the waters of the state);
 - (4) administrative orders (issue, modify or revoke administrative orders to prevent, control, or abate water pollution);
 - (5) public information about water pollution (collecting and disseminating information relating to the prevention, control and abatement of water pollution);
 - (6) liaison with other entities (consult with state and local government as well as industrial representatives and other interested persons regarding water quality matters); and
 - (7) manage grants (administer federal, state and other grants relating to water quality control matters.)

§ 3.03. Water Quality Standards

[1] Establishment and Revision of Water Quality Standards

Ohio EPA promulgated regs establishing state water quality standards

- These standards classify each lake or stream segment in the state for particular uses and prescribe water quality criteria which must be met by dischargers so to maintain these uses.
- <u>Water quality standards</u> contain two primary elements:
 - (1) designated uses (aka beneficial uses); and
 - (2) the specific water quality criteria designed to protect and measure attainment of the uses.
 - <u>Water Quality Standards</u> (WQS) are ambient standards applicable to the conditions in the water not the characteristics of permittee discharges. (permits set the standard for the discharges)
 - ambient standards are developed through a complex, technical process of reverse calculation procedures of regulatory mechanisms like total maximum daily loads (TMDLs) and wasteload allocations aimed at identifying levels that will protect the water quality.
 - Once established, the WQS become the foundation for calculating appropriate water-quality based effluent limitations. These limits are set in permits to regulate the amount of discharge into waters.
- (1) <u>Designated Use/Beneficial Use</u> describes the existing or potential uses of specific waterbodies. It takes into consideration the use and value of each waterbody for public water supplies, aquatic life, and water recreation.
 - Examples of several specific beneficial use designations utilized in Ohio include: public water supply, primary contact recreation, industrial use and aquatic life uses (such as warmwater habitat, etc.).
 - Ohio EPA studies and assigns use designations for (1) <u>aquatic life</u>, (2) <u>water</u> <u>supply</u>, and (3) <u>recreation</u> uses for each waterbody in the state.
 - Each use designation has sub categories (recreational has bathing, primary, and secondary, etc...).
 - A waterbody may be assigned more than one use designation.
 - Standard must be evaluated every 3 years.
 - Types of testing:
 - Biological evaluation Index of Biotic Integrity, the Modified Index of Well-Being, and the Invertebrate Community Index.
 - These biological indices measure species richness, trophic composition, diversity, presence of pollution-tolerant individuals or species, abundance of biomass, and the presence of diseased organisms.
 - In establishing and revising use designations, Ohio EPA samples reference sites and uses the results to set minimum criteria index scores as thresholds for attaining certain designated use classifications.

- (2) Water Quality Criteria the other key standard (to get to or keep designated uses in attainment) has 3 major components:
 - (1) narrative criteria;
 - (2) numeric criteria; and
 - (3) antidegradation provisions.
 - (1) <u>Narrative criteria</u> are general, subjective water quality criteria that apply to all surface waters. They are required where numeric criteria cannot be established or are not sufficient to protect designated uses.
 - Narrative criteria provides "Free Froms" general prohibitions that all waters shall be "free from" sludge, floating debris, oil and scum, color and odor producing materials, substances that are harmful to human, animal or aquatic life, and nutrients in concentrations that may cause nuisance growth of aquatic plants.
 - (2) Numeric criteria are painstakingly derived estimations of concentrations of chemicals and degrees of aquatic life toxicity that a waterbody can tolerate without adversely impacting its beneficial uses.
 - Types of numeric criteria utilized in Ohio include chemical criteria,
 - (1) "Whole Effluent Toxicity" ("WET") criteria, (2) biological criteria, and (3) nutrient criteria.
 - Chemical criteria include both aquatic life, human health and wildlife criteria for individual chemicals. These criteria are derived from studies of biological organisms' sensitivity to specific chemicals or combination of chemicals. Many chemical criteria apply statewide, but some are tailored to specific areas like Ohio River or Lake Erie drainage basin. If a chemical criteria is established for a pollutant, the a numeric criteria is also established to protect human health,aquatic life and wildlife from the risks presented by the particular pollutant. The population deemed most sensitive to the risks posed by that chemical pollutant will generally be assigned the most stringent numeric criterion.
 - (1) Whole Effluent Toxicity (WET) measures the harmful effects of effluent on living organisms. Basically looks at the health impact. WET protocols have been established for both acute and chronic toxicity tests and are found in the regulations..
 - (2) Biological and (3) Nutrient criteria are relatively recent additions to the regulatory landscape in Ohio.
 - Biological criteria are used to evaluate the attainment of aquatic life uses. The data collected in these assessments are used to characterize aquatic life impairment and to help diagnose the cause(s) of this impairment.
 - Nutrient criteria are established and utilized to ensure aquatic life is not excessively impaired by loadings of nutrients typically arising from non-point sources.
 - (3) <u>Antidegradation</u> describes the conditions under which <u>water quality may be</u> <u>lowered in surface waters</u>. The antidegradation process is addressed in more detail in § 3.06 of this Chapter.

[2] Total Maximum Daily Loads

- The CWA requires the development of a Total Maximum Daily Load ("TMDL") to address impared waters.
 - Each state must submit a prioritized list of impaired waters to U.S. EPA for approval (a "§303(d) list") once every three years.
- Ohio EPA's § 303(d) list indicates the waters of Ohio that are currently impaired and require TMDL development to meet water quality standards.
 - In recent years, Ohio EPA has completed many TMDLs and has begun development of various additional TMDLs for specific reaches of certain impaired waterbodies.
- What's a TMDL a written, quantitative assessment of water quality problems in a waterbody and contributing sources of pollution.
 - TMDLs specify the amount a pollutant needs to be reduced to meet water quality standards, allocates pollutant load reductions, and provides the basis for taking regulatory actions (including permitting decisions) needed to restore a waterbody.
- In Ohio, a TMDL must identify, quantify and aggregate existing and projected loads of the subject pollutant to the waterbody from all point, nonpoint and background sources, in a manner such that the sum of these loads do not exceed the water's carrying capacity minus the sum of a specified margin of safety and a measure of capacity that may be reserved for future growth.
 - FYI Many of the TMDLs key elements can become the subject of intense deliberation. Another key issue facing stakeholders is how TMDLs impact future projects. Because it's an input/output calculations, bad numbers going in skews opportunities later on.
- Ohio EPA uses a 12-step project-management-based approach in developing TMDLs. The process relies on existing state monitoring, modeling, permitting, and grant programs to advance the various TMDL objectives.
 - The process contains four broad, overlapping phases:
 - (1) assessing waterbody health (including biological, chemical, habitat issues);
 - (2) developing a restoration target,
 - (3) implementing the solution;
 - (4) validating (primarily through data collection) to monitor progress. Ohio EPA uses various mechanisms to foster stakeholder participation throughout the TMDL process.

[3] Watershed Issues

- Ohio EPA has promulgated a set of rules establishing a program designed to facilitate pollutant trading among discharges within watersheds under certain circumstances. Goal is to provide an efficient and cost effective mechanism to achieve water quality standards.
 - For example Where an upstream discharger might have at its disposal a more cost effective means to reduce a given pollutant below legal requirement, it could "sell" the pollution gap credit to a downstream discharger looking for a less costly solution to solve its excess.

§ 3.04. Point Source Discharge Permitting

[1] Permits To Install

- Ohio requires a PTI to install or modify any wastewater "disposal system." "Disposal systems" include treatment works for disposing of sewage, sludge, sludge material, industrial waste and other waste.
 - <u>"Installation"</u> includes any commencement of actual construction or erecting, locating or affixing any treatment works or disposal system. <u>"Modifications"</u> include any physical change in or any change in the method of operation for any treatment works to allow it to process water pollutants in materially increased quantities, materially different character or materially higher concentrations.
 - "Sewerage system" includes pipelines, conduits, pumping stations and other devices and facilities that convey regulated wastewater..
 - Exempt disposal systems one, two or three family dwellings, certain coal waste facilities regulated under other authorities, oil and grease interceptors meeting certain requirements, certain not-for-profit car washes, mobile carpet cleaners and power washers meeting specified requirements, certain water recycling systems within buildings and smaller oil and water separators meeting specified criteria.
- PTI Process -
 - PTI applications must include detailed plans and require that certain documents be certified by a professional engineer.
 - When approving the PTI, the Director must find that the installation and operation of the proposed new or modified facility will not violate applicable laws, including water quality standards or other applicable effluent standards established by Ohio EPA or federal authorities.
 - PTI must be obtained before starting construction on a new or modified disposal system or facility. And usually must be started within 18 months of issuance.
 - Agency review takes about 6 months, longer if complex project.
 - Antidegradation Review required if the proposed installation or modification might increase the quantity of pollutants discharged to the receiving water
 - > Fun Fact No PTIO. Must get a PTI, then NPDES (like Title V for water)

[2] NPDES Program

- Ohio EPA is under the federal CWA to issue point source wastewater discharge permits under the National Pollution Discharge Elimination System ("NPDES") in Ohio.
 - Governs the discharge of pollutants that include any liquid, gaseous or solid waste substance resulting from any process of industry, manufacture, trade or business, garbage, refuse, oil, domestic sewage and dredged or fill material.
 - These discharges are generally prohibited except to the extent authorized by a valid NPDES permit issued by Ohio EPA.
- Permit Process -
 - If a prospective point source discharger wants to pollute to waters of the state, it must prepare and submit a detailed permit application.
 - If the Agency's preliminary decision is to issue the permit, Ohio EPA will issue a draft permit containingproposed effluent limitations, a proposed schedule of compliance for meeting those limitations, and a description of any other proposed restrictions or conditions that are necessary. Then the Agency will issue a public notice of the draft and a 30-day public comment period on the draft.
 - Permits typically include conditions that require the permit-holder to monitor and sample discharges and to submit monthly reports. Various pollutant-specific effluent limitations, operating conditions and compliance schedules may also be included. (See 3.04 for more detail.)
 - Permitting takes about 6 months. Longer if anti-dedeg review required.
 - 0
- Ohio NPDES permits are valid for no more than 5 years. A permit-holder who wishes to renew an existing permit must submit a written request for issuance at least 180 days before the current one expires. During the renewal period, Agency will consider the permittee's compliance history and may deny the renewal application if compliance failures are determined to have occurred.
 - Denials are final actions & appealable to ERAC. Permit remains in effect while on appeal.

[3] Pretreatment Program

- Ohio's Pretreatment program regulates <u>discharges of wastewater from industrial or</u> <u>commercial facilities to sanitary sewers that are treated at a publicly owned wastewater</u> <u>treatment plant ("POTW")</u>. Effectively, extending federal and state water pollution control requirements to the industrial users of the POTW, which sets the discharger's requirements.
 - Called <u>Indirect Chargers</u> because they go through POTW before reaching waters of the state.
- Purpose of Pretreatment Program prevent the introduction of pollutants into a POTW which would disrupt the operation of the wastewater treatment plant and/or the collection system and also to prevent pollutants from passing through the POTW in concentrations that would violate the POTW's NPDES Permit.
 - Who can make a Pretreatment Plan POTWs with design flows above certain threshold levels which receive specified types of industrial discharges are required to establish a local pretreatment program.
 - For example: Municipal entities operating POTWs have the authority to establish regulatory mandates governing dischargers and waste streams

entering their collection system. These must be approved by Ohio EPA, and details of the POTW's authority are often included in the POTW's NPDES permit.

- But, if POTW does not have Agency-approved pretreatment plan, the Agency regulates & permits industrial users.
- How is all this tracked Ohio EPA keeps a database of local governments with approved pretreatment programs.
 - Certain indirect industrial dischargers with the potential to create more of an impact on their POTW's discharge, either through the volume or characteristics of their discharge, are designated by regulation as "Significant Industrial Users" and are subject to additional pretreatment regulation. More than fifty industryspecific national categorical pretreatment standards have been promulgated by U.S. EPA, establishing effluent standards that are tailored to industrial group characteristics.
 - In Ohio, Significant Industrial Users are subject to any federal pretreatment standards applicable to their industry or discharge category as well as individual indirect discharge permitting from Ohio EPA or the local POTW
- Theory of the program A significant aspect of any local pretreatment program is the set of local limits established by the POTW. Local limits are established in order to help the POTW meet its NPDES requirement by requiring industrial indirect dischargers to pretreat their discharges before they enter the sewers. Local limits, often tailored to the needs and treatment or volume limitations of the specific collection and treatment systems, may impose more stringent effluent limitations than would the otherwise applicable federal categorical pretreatment standards and also may regulate pollutants not addressed by such federal standards.

[4] Effluent Limitations and Other Permit Requirements

- When developing NPDES permit effluent limitations, Ohio EPA permit writers must follow a two-step approach.
 - First, a permit writer must ensure the permit imposes any applicable, industryspecific technology-based limitations that have been established through federal rulemakings.
 - These technology-based limits are generally derived from federal standards set by rule after detailed assessments of treatment technology results achievable in a particular industry. These technology-based standards, where applicable to a discharger, are utilized in permit development regardless of the quality of the discharger's receiving water.
 - Note: more stringent, water-quality based effluent limits may be imposed in addition where necessary to achieve water quality standards for the pollutant in question in the discharger's receiving water.
 - The pollutant effluent limitations included in NPDES can be mass-based or concentration-based. And permittees are often required to demonstrate compliance with separate limits for the same pollutant to address distinct chronic and acute toxicity risks to human, aquatic and/or wildlife receptors.

- For example, daily maximum concentration limits may be utilized to address such acute risks, whereas additional periodic average limits may address the chronic risks. The dilution factor will relate directly to whether and to what extent a mixing zone is permitted for the subject effluent limit. Usually allowed in Ohio.
- Second, permit writers accommodate Trickier Indicators Effluent limits may also be established for "indicators," which are intended to represent impacts of difficult-to-measure and/or aggregate impacts.
 - For Example: Whole Effect Toxicity ("WET") limitations are examples of such indicator limitations. Ohio EPA has promulgated detailed rules for establishing WET limits.

§ 3.05. Storm Water Discharge Permitting [1] General

- In 1987, Congress included regulation of industrial and municipal storm water to CWA. US EPA issued rules in 1990.
 - <u>Storm water</u> is defined as "storm water runoff, snow melt runoff, and surface runoff and drainage."
- Two types of storm water permits General and Individual (used to be 3)
 - How to apply A storm water discharger may apply for an NPDES permit by filing a Notice of Intent to be covered by a general permit issued by Ohio EPA. Can file for your (1) <u>industrial activity</u>, (2) <u>small municipalities</u>, and (3) <u>construction</u>.
 - But, if a facility can't qualify for coverage under a general permit, it must submit an individual storm water permit application. This process can be burdensome, requiring detailed information about the facility, the waterbody receiving its discharge and data concerning the discharge and its constituents. So go general, if you can.

[2] (1) Industrial Discharges

- <u>Defining Industrial Discharges</u> is complex But, In general, the term means the discharge from any point source used for collecting and conveying storm water which is directly related to manufacturing, processing, or materials storage areas at an industrial facility.
 - Two components:
 - First, identify facility's industrial activity based on industry NAICS codes.
 - Second, define what portions of these facilities are considered to include industrial activity. Consider: industrial plant yards, material handling sites, refuse sites, shipping and receiving areas, manufacturing buildings and raw material storage areas.
 - No Exposure exemption allows facilities to submit a written certification stating no exposure of industrial materials and activities to the discharge to be exempt. For ex. If office discharges are separate from industrial discharges.

[3] (2) Municipal Discharges

- Storm water discharges from municipal separate storm sewers ("MS4s") require permits based on size.
 - Large & Medium MS4s need individual permits.

- Small MS4s get General Permit, which must have a storm water management plans that covers which must include six designated "minimum control measures," as the main way to control discharges.
 - The six "minimum control measures" are: address public education and outreach, public participation, illicit discharge detection sand elimination, construction site runoff control, post-construction storm water management and pollution prevention measures.

[4] (3) Construction Discharges

Certain construction activities must get a storm water permit.

- Ohio EPA promulgated general permits for use by regulated construction storm water discharges.
 - Key requirement is the Storm Water Pollution Prevention Plan, which must address certain sediment and erosion control standards and post-construction best management practice standards.

§ 3.06. Antidegradation

Antidegradation is a federally required component of each state's water quality standards.

- Ohio's antidegradation program <u>describes the conditions under which water quality may</u> <u>be lowered in surface waters</u>.
 - Purpose Existing beneficial uses must be maintained and protected. And, water quality better than that needed to protect existing beneficial uses must be maintained unless lower quality is deemed necessary to allow important economic or social development.
 - When Antideg review triggered in various permitting situations. It is mandated where certain triggering conditions are present that indicate the proposed activity will lower water quality.
 - Public participation procedures are a significant component of the antideg review process. A sliding scale from minimal to elaborate public participation mandates, corresponding generally to the impacts and quality of the receiving water.
 - Not surprising, the quality and regulatory status of the receiving water may significantly impact the criteria and process mandated to navigate the antidegradation review process.
 - For Ex. Water bodies designated "outstanding national resource waters" (as well as other high quality waters) are subject to enhanced standards and procedural requirements where discharges impacting such waters go through antidegradation review. Certain regulatory exclusions and waivers can provide some measure of relief in certain situations from antidegradation review requirements

§ 3.07. Underground Injection Wells

Ohio EPA also has authority to regulate the underground injection of sewage, industrial waste, and other liquid wastes into wells under Safe Drinking Water Act.

- Scope the Underground Injection Control ("UIC") program, states that no person may drill a new well or convert an existing well for injecting sewage, industrial waste or other waste without first securing a UIC permit from Ohio EPA.
- What's considered The Director must determine whether the proposed discharges would comply with the federal CWA, Safe Drinking, and RC 6111. Must also get input from ODNR on certain mineral resource, geologic and seismic implications of the discharges proposed in such permit applications.

Three primary types of UIC wells:

- <u>Class I wells</u> are generally used to inject large volumes of hazardous and nonhazardous liquid wastes thousands of feet below ground into porous geologic formations. Only a handful of these highly regulated wells operate currently in Ohio. Extensive data concerning geologic formations, stability and seismic conditions are among the information requirements to site a Class I well. Operating restrictions upon Class I wells also demand various measures to ensure the wastewaters safely reach their intended destination.
- <u>Class IV wells</u> are generally used by hazardous or radioactive wastes or operators of hazardous waste treatment facilities to inject hazardous or radioactive wastes into or in the vicinity of an aquifer that may be used for drinking water. <u>Broadly prohibited except in very limited situations</u>.
 - Ex. A narrow circumstance a Class IV permit may involve injection of contaminated ground water that has been treated and is being reinjected after treatment into the same formation from which it was drawn. Closure of Class IV injection wells is highly regulated.
- <u>Class V wells</u> are generally shallow wells commonly used to inject various nonhazardous fluid wastes directly below the land surface into or above aquifers that might be utilized for drinking water. This relatively common variety of injection well has been utilized for decades or longer in a variety of industries, more frequently today in rural and un-sewered areas.
 - All Class V wells must be registered with Ohio EPA.

§ 3.08. Enforcement ---- We'll cover this at another time

INTRODUCTION

§ 4.01. Scope

The intertwined federal and state jurisdiction over Ohio's wetlands and streams: The nature and extent of federal jurisdiction [4.02 & 4.03] • Ohio's jurisdiction over wetlands and streams [4.04 & 4.05] • Classifications of wetlands and streams [4.06] • Permit process for filling wetlands and streams [4.07–4.14] • Enforcement [4.15]

II. DETERMINING APPLICABLE JURISDICTION

§ 4.02. Federal Jurisdiction under Rivers and Harbors Act [1] Defining Jurisdiction and "Navigable Waters"

Pursuant to the Commerce Power, the federal Government has authority over navigation. Congress first exercised this power in 1899, more commonly known today as the Rivers and Harbors Act. Purpose of this statute was to keep navigable waters, in particular rivers and harbors used for commercial navigation, free from obstruction. Today, the Army Corps of Engineers implements and enforces the Rivers and Harbors Act.

- "<u>Navigable waters</u>" under the Rivers and Harbors Act generally, those waters used or capable of being used for commercial navigation.
 - Strategic Point: Authority and regulation under the Rivers and Harbors Act overlaps with federal authority under the Clean Water Act. Any obstruction or fill placed into the navigable waters subject to the Rivers and Harbors Act, like a dock, water intake or erosion control structure, requires a permit under Section 10 of the Act, plus any state and federal requirements under the CWA.

4.03. Federal Water Pollution Control Act (CWA)

Background: Called the CWA, the Federal Water Pollution Control Act extends far beyond the reach of the Rivers and Harbors Act. The Clean Water Act also governs the quality of "navigable waters." Yet unlike the Rivers and Harbors Act, the CWA defines "navigable waters" as "waters of the United States, including the territorial seas."

- Prohibits The CWA prohibits any discharge of pollutants, including any dredge or fill material, into the "waters of the United States" without a permit. Section 404 requires that dredge or filling activities must be permitted by the Army Corps of Engineers.
- By regulation and case law, the definition of "waters of the United States" was extended to almost any surface water body or wetland. That interpretation of federal CWA jurisdiction was seriously challenged by the decision of the U.S. Supreme Court in Solid Waste Agency v. United States Army Corps of Eng'rs, 531 U.S. 159 (2001). Further discussion in class
- Interim solution the Interim Jurisdictional Guidance states that the agencies will assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally, and wetlands that directly abut tributaries. determinations will be

made on a case-by-case basis focused on whether the waters have a "significant nexus" with a "Traditional Navigable Water."

• Rappano Case and current status discussed in class.

4.04. Ohio Jurisdiction over Wetlands and Streams

Background: The CWA allows states to take primary implementation and enforcement of the CWA. One of the reasons that Ohio EPA was created was to accept delegation of the CWA program.

Long before the passage of the Clean Water Act, however, the State of Ohio had asserted jurisdiction of <u>"waters of the state," which are defined as essentially any water in the state</u> except "those private waters that do not combine or effect a junction with natural surface or <u>underground waters.</u>" Notably, not tied to the "navigability" of the water, in contrast to federal authority.

- Strategic Point: Because of jurisdiction over "waters of the state," some Ohio regulators have spoken in terms of the state "owning" the groundwater. But Ohio Supreme Court clarified that landowners own real property rights in the groundwater beneath their property, regulation and interpretations are undergoing reconsideration.
- Ohio statutory authority actually is broader than the authority under the CWA. Specifically, R.C. Chapter 6111 governs not just the addition of pollutants to water, but also includes wastes, which can be nearly anything but water itself.
- When feds pulled by jurisdiction after SWANCC, Ohio began isolated wetlands program to fill the perceived gap in regulation protecting wetlands that were not hydrogeologically connected to federal navigable waters.
 - These waters known as "waters of the state." "lisolated wetlands" in Ohio are defined as "wetlands that are not subject to the Federal Water Pollution Control Act." Discharges of dredge or fill material into Ohio isolated wetlands without a permit is prohibited.

III. DETERMINING TYPES OF WETLANDS AND STREAMS

4.05. Delineating and Categorizing Wetlands

Definition: Wetlands are "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."

- Warning: Wetlands are not always wet. Wetlands are defined by the three elements of land having (1) sufficient hydrology, (2) hydrological plants, and (3) hydrological soil types. Only two elements must be present at any time to constitute a "wetland."
- Warning: Because wetlands are water bodies and thus have dynamic boundaries, actual delineations are required because no inventory captures the constant changes. There's a Nationwide Inventory of Wetlands and aerial photographs showing wet areas in the past, while insufficient for delineation, are relevant evidence where an alleged wetland has been filled without a permit.

In Ohio, wetlands must also be categorized for purposes of antidegradation review and, ultimately, for mitigation requirements, based on "the wetland's relative functions and values, sensitivity to disturbance, rarity and potential to be adequately compensated for by wetland mitigation." Typically, this information is collected during the wetland delineation, though it is not expressly part of the delineation process.

Checklist: Wetland functions and values

The following is a non-exclusive list of wetland functions and values relevant to categorizing Ohio wetlands:

Nutrient removal or transformation Sediment or containment retention Water storage Sediment stabilization Shoreline stabilization Maintenance of biodiversity Recreation Education and research Habitat for threatened or endangered species Regional significance functions

- Assessing a Wetland in Ohio Ohio Rapid Assessment Method (ORAM) is used most often. For isolated wetlands, ORAM Version 5.0 is specified by statute.
 - Wetlands are categorized as Category 1 (low quality and function), Category 2 (moderate quality and function) and Category 3 (high quality and function).

4.06. Determining Stream Types

[1] Stream Classification Based on Flow

Background: Similar to wetlands, which are not always wet, streams do not have to carry water over the course of an entire year in order to be subject to regulation.

- Three types of streams:
 - (1) intermittent carry flow for part of the year.
 - (2) ephemeral carry water only during a runoff event.
 - (3) perennial carry flow year round.
- Flow classification affects the level of regulation.
 - The Army Corps asserts jurisdiction over all streams that are tributary to navigable waters within the terms of the 2008 Interim Jurisdictional Guidance, as well as non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally.
 - The State of Ohio asserts jurisdiction over all streams as "waters of the state."

[2] Categorizing Stream Quality

 Ohio EPA, in consultation with ODNR, categorizes water bodies, including streams, in terms of water quality and ecological or recreational value for purposes of antidegradation review.

- Categories range from "limited quality waters" to "general high quality waters," "superior high quality waters" or "outstanding quality waters."
 - Like the wetlands antideg, the level of alternatives analysis, treatment level and mitigation increases with the quality of the stream.

IV. NAVIGATING WETLAND AND STREAM PERMITTING PROCESS

4.07. CWA Section 404 Process

- The Clean Water Act <u>prohibits the discharge of any pollutants</u>, including dredge or fill <u>material</u>, into jurisdictional waters without a permit. Permits for dredge and fill activities are issued by the Army Corps of Engineers pursuant to Section 404 of the Clean Water Act.
- The Army Corps cannot issue a 404 permit without providing the delegated state or local enforcement entity the opportunity to certify that the dredging or filling will not violate water quality standards that the state is responsible for enforcing.

§ 4.08. Section 404 Individual Permits

Generally, for impacts to 0.50 acres or more of wetlands or 300 linear feet of perennial and intermittent stream, or 500 feet of combined (ephemeral, linear and intermittent wetlands), an Individual Permit from the Corps is required. Has public notice, possible hearing and separate 401 cert from Ohio EPA. This permit requires its own Public Notice, a possible Public Hearing and a separate 401 certification from Ohio EPA.

§ 4.09. Small Impacts and Nationwide Permits Under Section 404

For impacts less than 1/10th of an acre, no permit is required by the Army Corps and no mitigation is required. However, a post-construction notice is required.

Warning: Ohio's isolated wetlands regimes do not have a de minimus threshold under which no permit is required.

- For small impacts between one-tenth to one-half of an acre, or for specified recurring activities such as maintenance, the Corps has issued (and Ohio EPA has certified) a series of Nationwide Permits ("NWPs") tailored to specific types of activities commonly the subject of Section 404 permitting.
- These permits do not require an application, but most of them require Pre-Construction Notification.

Strategic Point: Use a Nationwide Permit if you can. Faster! Easier! Than general or individual.

§ 4.10. Compliance with Other Federal Requirements

All Section 404 permits, even Nationwide Permits, attach general conditions to every authorization to dredge or fill.

For example, these conditions include a requirement that when an applicant discovers any previously unknown historic or archeological remains, the applicant must cease work and notify the Corps so the Corps can determine whether the remains are subject to the National Historic Preservation Act.

Fun Fact Warning: As a federal undertaking, issuance of a 404 permit must also comply with the Endangered Species Act and coordinate with the U.S. Fish and Wildlife Service. In practice in Ohio, the applicant must contact the USFWS for a determination

of habitat for the Indiana Bat within a 5 mile radius of the project. If identified habitat is within the 5 mile radius, the applicant faces timing and activity restrictions as well as other obligations.

§ 4.11. Ohio EPA Section 401 Certifications

- Ohio EPA must certify that any impacts to wetlands or streams will occur in compliance with state water quality standards under the CWA.
- This review of proposed impacts is called an "<u>antidegradation review</u>." *Different levels of analysis apply based on the category of wetland at issue.*
- The Section 401 certification process starts with the submittal of an application to Ohio EPA, and includes extensive documentation regarding the proposed project and preconsultation with other agencies such as the ODNR.
 - Timelines: Ohio EPA looks to expedite. Ohio EPA will make a Completeness Review of the application within 15 days of receipt. The required Public Notice must be sent to the appropriate newspaper within 21 days. The application will be processed in 180 days.

4.12. Alternatives Analysis

Ohio alternatives analysis is a tiered scheme that applies the least rigorous analysis to low quality, Category 1 wetlands and progressively more rigorous scrutiny as the category and water quality go up.

- An applicant to fill a <u>Category 1</u> wetland must show (1) no practical alternative with less impact exists, (2) storm water and water quality controls will be installed, (3) the impact will not result in significant degradation to the aquatic ecosystem, and (4) the designated use is replaced by a category 2 or category 3 wetland.
- An applicant to fill a <u>Category 2</u> wetland must meet all the requirements for Category 1 plus undertake a more in-depth review of alternatives and efforts for minimization. In addition, the applicant must show that filling the Category 2 wetland is "necessary to accommodate important social and economic development in the area where the water body is located," though these terms are not defined.
- An applicant to fill a <u>Category 3</u> wetland Category 1 and 2 wetlands requirement, plus presumption that alternatives exist. Not only must the applicant show that the project meets "important social and economic development in the area," the applicant must also separately show that the project "is necessary to meet a demonstrated public need."
 - "Public need" is defined as "an activity or project that provides important tangible and intangible gains to society, that satisfies the expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments."

Warning: There's a strong preference against filling a Category 3 wetland. Ohio EPA has in the past required a demonstration of "public need" that is separate and unrelated to any social or economic benefit. Therefore, identifying a public need that "provides important gains to society" but is not a "social benefit" has proven exceedingly rare to date.

§ 4.13. Mitigation Requirements

Policy: The policy of the Army Corps and of Ohio EPA is to have No "Net Loss" of wetlands.

- To effect that, the Army Corps has a basic policy of requiring at least 1.5 acres of mitigation for every acre filled. In addition, the Army Corps can and does require financial assurance for completion of mitigation projects.
- Ohio EPA's 401 mitigation requirements are more expansive, with ratios as high as 4 acres for every acre filled, depending on the category and other characteristics of the wetland. Filled wetlands must be replaced with wetlands of the same or higher quality. Mitigation ratios increase if the mitigation is not onsite. And, for Category 2 and 3 wetlands, mitigation must be in the same watershed.
- Mitigation often is accomplished through purchasing mitigation credits from approved wetlands mitigation banks that are intended to establish the "functions" of wetlands that are eliminated elsewhere.
- Other methods of mitigation include restoring or creating wetlands, preserving wetlands, and enhancing wetlands.
- Wetland mitigation banks recognized by the Army Corps and Ohio EPA must enter into a written agreement with the Mitigation Banking Review Team (MBRT) pursuant to a 1995 Army Corps guidance document. The MBRT includes the Army Corps, U.S. Fish and Wildlife Service, Natural Resource Conservation Service, ODNR and Ohio EPA. Upon entering into an agreement, mitigation bankers are entitled to sell up to 30% of credits to fund construction.

§ 4.14. Permitting under Ohio's Isolated Wetlands Regime

Ohio's permitting scheme for filling Isolated Wetlands aligns with Section 401 certs. By statute, Isolated Wetlands must be assessed using ORAM 5.0. Level of review varies depending on the size and category of wetland impacted.

§ 4.15. Enforcement

Filling wetlands and streams is subject to penalties up to \$51,570 per violation, with each day constituting a new violation. "Knowing" unlawful filling activities are subject to criminal prosecution. Violation of the Clean Water Act can be a felony. Violations of RC Chapter 6111 are subject to fines of up to \$25,000 and one year in prison. Ohio EPA and the Army Corps are also entitled to injunctive relief to require illegal fill to be removed and wetlands and streams to be restored.