CSI - Ohio
The Common Sense Initiative

Business Impact Analysis

Agency Name: Ohio Environmental Protection Agency

Regulation/Package Title: Water Quality Standards (WQS) Wetland Antidegradation

Rule Number(s): 3745-1-54

Date: April 1, 2013

Rule Type:

New	X 5-Year Review
X Amended	Rescinded

The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

General Background Information

This rulemaking addresses the water quality standards (WQS) program wetland antidegradation rule found in Ohio Administrative Code (OAC) 3745-1-54.

Wetland antidegradation was first adopted into rule OAC 3745-1-54 in 1998. The wetland antidegradation provisions have a tiered system of protection. A wetland under review is placed into one of three antidegradation categories. These categories are based on a wetland's relative functions and values, sensitivity to disturbance, rarity and the ability to adequately mitigate for its loss through wetland restoration or creation.

Category 1 wetlands are those which support minimal wetland functions. Typical Category 1 wetlands would include wetlands that are acidic ponds created on mined lands, those wetlands that have little or no plants, and wetlands that are hydrologically isolated and comprised primarily of invasive, opportunistic plant species. Category 2 wetlands are those which support moderate hydrological, habitat, recreational and other wetland functions. Category 2 wetlands could be wetlands that are degraded but still have a reasonable potential for reestablishing lost wetland functions. Category 3 wetlands are those that support superior wetland functions. Wetlands assigned to Category 3 would typically have high levels of biodiversity, a high proportion of native species or other high functional values.

The wetland antidegradation rule in conjunction with the all-encompassing antidegradation rule OAC 3745-1-05, establish criteria for the Director to consider when determining whether a lowering of water quality in wetlands will be allowed and what is appropriate mitigation for those impacts.

Regulatory Intent

1. **Please briefly describe the draft regulation in plain language.**
   Please include the key provisions of the regulation as well as any proposed amendments.

   Key Provisions – The wetland antidegradation rule:

   - Requires the no net loss of wetland acreage or functions;
   - Establishes three wetland categories (categories 1, 2, and 3), classifying the wetlands from lower to higher quality;
   - Includes considerations specific to wetlands for the Director in determining whether degradation or a lowering of water quality should be permitted;
   - Outlines procedures and requirements for wetlands that have been impacted without prior approval from the Director; and
   - Includes avoidance, minimization and compensatory mitigation (including mitigation ratio, replacement category, mitigation location, type and follow up monitoring specifics) requirements for each category of wetland.

Draft Amendments – Amendments to the rule revise the compensatory mitigation hierarchy and location requirements for jurisdictional and isolated wetlands to align with the federal requirements. The draft amendments also include in-lieu-fee as a compensatory mitigation option for projects impacting jurisdictional or isolated wetlands. These revisions will bring the rule into agreement with revisions made to ORC Chapter 6111. by Senate Bill 294 in 2012. The Agency is also making minor editorial and reorganizational revisions.

2. **Please list the Ohio statute authorizing the Agency to adopt this regulation.**

Rule Number	Authorizing Statute	Draft Action
3745-1-54	ORC 6111.041, 6111.12, 6111.30	Amend

3. **Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program?**
If yes, please briefly explain the source and substance of the federal requirement.

Yes, the regulation implements federal requirements. The Clean Water Act requires States to adopt water quality standards and to include antidegradation protections and procedures as part of a state's water quality standards.

Each State must develop, adopt, and retain a statewide antidegradation policy regarding water quality standards and establish procedures for its implementation through the water quality management process. The State antidegradation policy and implementation procedures must be consistent with the components detailed in 40 CFR 131.12. The antidegradation implementation procedures specify how the State will determine on a case-by-case basis whether, and to what extent, water quality may be lowered. State antidegradation polices and implementation procedures are subject to review by the Regional Administrator. EPA has clear authority to review and approve or disapprove and promulgate an antidegradation policy for a State.

In U.S. EPA's Office of Water Agency Operating Guidance, FY1991, States were required to:

- Include wetlands in the definition of "State waters";
- Designate uses for all wetlands;
- Adopt aesthetic narrative criteria and appropriate numeric criteria for wetlands;
- Adopt narrative biological criteria for wetlands; and

- Apply the State's antidegradation policy and implementation methods to wetlands.

OAC 3745-1-54 contains the State's antidegradation requirements specifically for wetlands. Ohio EPA is considering amendments to the rule to make it consistent with U.S. Department of Defense and U.S. EPA's Compensatory Mitigation for Losses of Aquatic Resources 2008 final rulemaking.

4. **If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.**

   Not applicable.

5. **What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?**

   The intent of the wetland antidegradation rule is to ensure there is no net loss of wetland acreage or function. According to the results of the Ohio Department of Natural Resources' Wetlands Inventory, there are 704,032 acres of wetlands in the state of Ohio. Wetlands constitute 2.6% of the total land area of the State. It is estimated that Ohio had about seven million acres of wetlands before European settlement, which translates to a loss of about 90% of the original wetlands in the State.

   Wetlands are economically valuable to society due to the priceless functions they provide. These economic values include flood minimization, groundwater recharge, nutrient and contaminant removal, wildlife and plant habitat, and opportunities for hunting, fishing and other recreation. It is extremely difficult to attach the appropriate dollar values to these important functions. However, these functions benefit the wetland landowners directly as well as benefitting adjacent landowners and, importantly, society at large.

   One of the most frequently cited economic functions of wetlands is flood control. Wetlands act as sponges on the landscape and are particularly valuable in attenuating peak flows in streams and reducing flood events. Watersheds that have lost a large percentage of their wetlands experience flooding at greater frequency, severity and duration than those watersheds with a large percentage of their original wetlands intact. Wetlands act as buffers, absorbing high flows from storms and thereby releasing the water at a slower rate. This helps minimize property damage from flooding and reduces the need for expensive flood control structures. By holding back flows from storm events wetlands also decrease fluctuations in stream levels. This in turn reduces erosion and ensures more stable conditions for streams resulting in improved physical, chemical and biological water quality.

Wetlands are also referred to as "nature's kidneys" for their ability to filter pollutants. Wetlands act as natural purifiers, providing water treatment by removing sediments, nutrients, heavy metals and other contaminants. Because wetlands slow down water flow, such as nitrogen and phosphorus, which can cause algal blooms and fish kills in streams and lakes. Wetlands also remove additional nitrogen through the action of soil bacteria, and wetlands soils bind and tightly hold metal pollutants such as lead, zinc and cadmium. Due to these functions, constructed wetlands are employed as a low cost form of tertiary treatment for municipal and industrial wastewater. The result of the pollutant removal functions of wetlands is high quality groundwater and surface water resources. The natural filtering functions of wetlands benefits all users of water by reducing, or eliminating, expensive treatment of water for municipal, agricultural and industrial users.

Wetlands also provide excellent habitat for a wide range of flora and fauna. Because they are intermediate between upland and deep water resources, wetlands add diversity to the landscape and provide living spaces for a wide array of plant and wildlife species. Wetlands are some of the most diverse and productive natural communities on earth and one third of all endangered species depend on wetlands to complete at least part of their life cycle. This makes wetlands pivotal in the pursuit of many outdoor activities including hunting, fishing, bird watching, hiking and nature study. All these activities benefit Ohioans and contribute significantly to the State and local economies.

6. **How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?**

   The Agency will use the 401/Isolated Wetlands Annual Reports, Integrated Water Quality Monitoring and Assessment Reports and less project mitigation involvement/compliance issues and enforcement by DSW, which could allow the division to focus time on expedited permit reviews/actions.

Development of the Regulation

7. **Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.**
   If applicable, please include the date and medium by which the stakeholders were initially contacted.

   Ohio EPA sent electronic notice to DSW's rulemaking interested party list and posted the Early Stakeholder Outreach fact sheet on DSW's website on January 9, 2013. The comment period deadline was February 8, 2013.

8. What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?

Comments were received from:

- Ohio Wetlands Association – general concerns about how an in-lieu-fee program works, support high fees to deter wetland destruction and appropriately fund high quality mitigation projects.
- Ohio Home Builders Association – suggest including/revising definitions consistent with federal rules, including details on operation and use of fees from in-lieu-fee programs, include/revise rule language establishing the Ohio Rapid Assessment Method for Wetlands (ORAM) as standard in evaluating mitigation projects, address permanent protection for avoided impact to be consistent with change made to Nationwide Permit Regional Conditions and include revised mitigation hierarchy as required by S.B. 294.
- Ohio Environmental Council – questions on mitigation preference and availability of mitigation bank credits, will Ohio Department of Natural Resources (ODNR) administer an in-lieu-fee program, how will in-lieu-fee programs affect mitigation credit costs, concerns with "front loading" of in-lieu-fee credit availability, concerns with in-lieu-fee project protection and maintenance, concern with in-lieu-fee project location requirements (in same watershed assessment unit, etc.).
- Ohio Utility Group – support development of in-lieu-fee program, believes preferred order of mitigation options is too prescriptive – rule should provide enough flexibility to demonstrate that in-lieu-fee mitigation is better than one of the preferred options, request revision to the definition of Category 1 wetlands, make clear that any land entrusted to ODNR or any other entity as part of mitigation bank be held in perpetuity.
- Ohio Wetlands Foundation – supports revision to mitigation hierarchy, requests the rule include criteria for the director to consider in permitting deviations from the mitigation hierarchy, requests clarification on mitigation alternatives for isolated wetlands, requests the rule clarify that mitigation banks are preferred alternative for Level 3 review, rules should include standards applicable to state-sponsored wetland mitigation banks and/or in-lieu-fee programs, rules should clarify procedures for approving and publishing list of wetland mitigation banks and in-lieu-fee programs, require use of ORAM in evaluation of mitigation performance instead of the Vegetation Index of Biotic Integrity (VIBI) for wetlands, rules should severely limit the Director's discretion to require alternative individual mitigation projects.

  In the draft rule support documents, we will to provide links to additional U.S. Army Corps of Engineers information to clarify in-lieu-fee program requirements and clarify that the state is not currently seeking to develop an in-lieu-fee program. This should

alleviate several concerns. A few of the suggested rule revisions will not be made either because they are outside the scope of this current rulemaking and/or are not based on sound science.

9. What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?

The following documents were used in the original drafting of the rule in 1998:

- Water Quality Standards for Wetlands, National Guidance, EPA 440/S-90-011, U.S. Environmental Protection Agency. July, 1990.
- Federal Guidance for the Establishment, Use and Operation of Mitigation Banks. Federal Register: Vol. 60, No. 228, November 28, 1995.
- Mitsch, W.J. and J.G. Gosselink. 1993. Wetlands. Van Nostrand Reinhold.
- Washington State Wetlands Rating System – Western Washington. Second Edition. Washington Department of Ecology. 1993.
- Section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material – restrictions on discharge. 40 CFR 230.10(d).
- Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army concerning the determination of mitigation under the Clean Water Act Section 404(b)(1) guidelines. 1990.
- Washington draft Wetland Water Quality Standards. Washington Department of Ecology. 1993.
- Oregon Freshwater Wetland Assessment Methodology. Oregon Division of State Lands. December 1993.
- Endangered species of Native Ohio Wild Plants; Ohio Department of Natural Resources, Division of Wildlife – Inservice Note 659. OAC 1501:18-1-01(D).
- 40 CFR 1508.8(b) – Terminology and Index-Effects.
- 33 CFR 279.4 (c) – Resource Use: Establishment of objectives-definitions; and 320.4 (1)(a) – General policies for evaluating permit applications – Public Interest Review.
- Jones G., A. Robertson, J. Forbes and G. Hollier. 1990. Dictionary of Environmental Science. Harper & Collins.

- Wisconsin Water Quality Standards for Wetlands. Wisconsin Department of Natural Resources. Chapter NR 103. July 1991.
- Mid-Ohio Regional Planning Commission Manual.
- Parker, G.F. 1989. "Old-growth forests of the central hardwood region." Natural Areas Journal:9(1).
- 40 CFR 1508.8(b) – Terminology and Index-Effects.
- North Carolina proposed Wetland Water Quality Standards (15A NCAC 2B.0101, Subchapter 2B). August 1994.

The following documents were used in current review of the rule:

- 33 CFR Parts 325 and 332 and 40 CFR Part 230 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule 2008.
- Senate Bill 294, 129th General Assembly of the State of Ohio.

10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn't the Agency consider regulatory alternatives?

Not applicable. The rule amendments are being driven by the necessity to be consistent with federal and state laws.

11. Did the Agency specifically consider a performance-based regulation? Please explain. ***Performance-based regulations define the required outcome, but don't dictate the process the regulated stakeholders must use to achieve compliance.***

The wetland antidegradation rule is to be considered to be performance-based regulation. The Agency has set in the rule the expected outcome and leaves it up to the permit applicant to determine how they will meet the rule requirements.

12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?

Ohio EPA is the delegated state agency for the water quality standards program. Only a review of existing Ohio EPA rules was necessary and no duplication was found.

13. Please describe the Agency's plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.

The Agency will put the effective date of the adopted rules three months out from the date of adoption, which provides for U.S. EPA's review and approval and gives the Agency time to update outreach/compliance assistance materials.

Adverse Impact to Business

14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:

- **a. Identify the scope of the impacted business community;**
- **b. Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and**
- **c. Quantify the expected adverse impact from the regulation.**
  The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a "representative business." Please include the source for your information/estimated impact.

  Water Quality Standards, including antidegradation, affect the business community indirectly through other regulatory programs that are designed to assure compliance with requirements based on meeting the standards. For this rule these requirements take the form of terms and conditions imposed through the 401/isolated wetlands program for any activity that places dredge or fill materials into waters of the state. Though there is no direct cost associated with this rulemaking, the Agency has evaluated potential costs the business community might incur through the Section 401/isolated wetlands permitting program.

  a. The wetland antidegradation rule impacts anyone or any project where proposed impacts to wetlands through dredge and fill activities are subject to regulation under the CWA Section 401 Water Quality Certification or state isolated wetlands permitting program. This may include local and state governments, the federal government, businesses, industries and private property owners.

  b. Adverse business impacts of the wetland antidegradation rule include 1) project planning and alternatives analysis including avoidance and minimization of wetland impacts and 2) providing compensatory mitigation for any proposed wetland impacts in accordance with the requirements set out in the rule.

c. Quantifying the adverse impact to the business community imposed by the wetland antidegradation rule is difficult because many site-specific factors affect the project cost. The rule establishes project planning requirements, such as alternatives analysis, that guide an applicant towards selection of a preferred project that will most likely be approved by the Agency. Most applicants would follow a similar planning process, if it were not required, to ensure wise use of time and resources on a proposal that meets applicable laws and rules. For these applicants, the cost of the rule is the cost of completing the required application forms. This cost would vary depending on the size and complexity of the proposed project. Other applicants, however, may not perform the planning prior to project submittal without rule requirements. For these applicants, the rule most likely reduces cost or does not increase costs because the preplanning reduces the number of changes required to be made after the project is submitted for review. Changes to design and engineering or even site location can be costly. This cost would also vary depending on the size and complexity of the proposed project.

The rule also establishes compensatory mitigation requirements for any proposed wetland impacts. The cost associated with mitigation varies widely based on quality of wetland being impacted, size/extent of impact and location and type of mitigation required. The rule contains an increasing set of mitigation requirements with increasing quality of wetland being impacted, thus reducing some costs for impacts to lower quality wetlands (Category 1 and 2) through more streamlined and flexible requirements. Wetland mitigation costs within the watershed will be easier and cheaper to obtain at a cost of approximately $40,000 per acre. Wetland mitigation outside the watershed may cost slightly more at a ratio of one and one half acre for every acre impacted.

Draft rule amendments align mitigation location hierarchy with the federal requirements and include another mitigation option – an in-lieu-fee program. Use of mitigation banks and in-lieu-fee programs streamlines the requirements and provides a greater level of predictability to the permit applicants that the proposed mitigation plan will be approvable – saving time and reducing costs associated with permit application preparation and reducing project delays.

15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?

The goal of the wetland antidegradation rule is to balance the protection of Ohio valuable wetland resources with the social and economic need for projects that impact these systems. This rule, along with the other wetland water quality standards rules in OAC Chapter 3745-1,

is intended to provide a greater level of predictability in assessing the relative quality of wetlands, the appropriate level of protection based on the level of quality, the corresponding degree of regulatory review required and the costs of mitigation projects to compensate for wetland impacts to high quality wetlands and streamlines the assessment and approval process for impacts to lower quality wetlands.

The draft rule amendments are intended to bring more consistency, predictability and flexibility in to the Section 401 water quality certification and isolated wetlands permitting process.

Regulatory Flexibility

16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.

Flexibility has been built into the existing and draft wetland antidegradation rule. This flexibility applies to businesses of all sizes. Ohio's categorization of wetlands from low to high quality ensures that businesses are required to meet a level of protection that most closely match the actual wetland quality and importance to the aquatic environment in their immediate location. In other words, Ohio standards do not impose a one-size fits all mandate.

17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?

The first time paperwork violation waiver is not applicable to this rule package. The rules in OAC Chapter 3745-1 contain standards for CWA permitting programs to enforce. No paperwork or permits are required by the standards themselves.

18. **What resources are available to assist small businesses with compliance of the regulation?**

- Ohio EPA's Office of Compliance Assistance and Pollution Prevention (OCAPP) is a non-regulatory program that provides information and resources to help small businesses comply with environmental regulations. OCAPP also helps customers identify and implement pollution prevention measures that can save money, increase business performance and benefit the environment. Services of the office include a toll-free hotline, on-site compliance and pollution prevention assessments, workshops/training, plain-English publications library and assistance in completing permit application forms. Additional information is available at: http://epa.ohio.gov/ocapp/ComplianceAssistanceandPollutionPrevention.aspx

- Ohio EPA also has a permit assistance web page (http://.epa.ohio.gov/dir/permit_assistance.aspx) that contains links to several items to help businesses navigate the permit process, including the Permit Wizard, Answer Place, Ohio EPA's Guide to Environmental Permitting, and eBusiness Center.
- Ohio EPA maintains the Compliance Assistance Hotline 800-329-7518, weekdays from 8:00 a.m. to 5:00 p.m.
- U.S. EPA Small Business Gateway also has information on environmental regulations for small businesses available at: http://www.epa.gov/smallbusiness/ and a Small Business Ombudsman Hotline 800-368-5888.
- The Division of Surface Water's Water Quality Standards program web page contains background information and direct links to sections of the regulations. Additional information is available at: http://epa.ohio.gov/dsw/wqs/index.aspx.
- The Division of Surface Water's Antidegradation web page contains background information, support documents and guidance for rule implementation. Additional information is available at: http:// epa.ohio.gov/dsw/rules/antidegguide_2003.aspx.
- The Division of Surface Water's 401 Water Quality Certification and Isolated Wetland Permitting Section web page contains background information and wetland mitigation information. Additional information is available at: http://www.epa.state.oh.us/dsw/401/index.aspx.