The Richard E. Jacobs Group, Inc.

May 30, 2006

Mr. Randy Bournique
Ohio EPA
Division of Surface Water
P.O. Box 1049
Columbus, OH 43216-1049

Re: Comments Concerning Proposed 401/Wetland/Stream Rules and Mitigation Guidance Document

Dear Mr. Bournique:

On February 14, 2006, the Ohio EPA issued a news release indicating that it would be accepting comments on certain proposed Section 401, wetland, and stream impact and mitigation rules and guidance documents that would be applicable to numerous different types of activities conducted within the state of Ohio. Initially, the deadline for the submittal of comments concerning the proposed rules and guidance was established at April 17, 2006, which deadline was later extended to May 31, 2006.

For ease of understanding, the comments provided below will be grouped into three separate sections. First, comments of general applicability will be provided regarding certain approaches that were taken, or that should have been taken, in drafting the proposed rules and guidance, as well as various issues that should be considered by the agency as it determines whether, or when, it should proceed further with the proposed rule promulgation process. Second, specific comments will be provided regarding the draft rules themselves. Lastly, comments will be provided regarding the draft "Compensatory Mitigation Requirements for Stream Impacts in the state of Ohio" guidance document that was circulated by the agency. That having been said, the specific comments regarding each of these topics are set forth in detail below.

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25425 Center Ridge Road • Cleveland, Ohio 44145-4122
Phone: 440-871-4800 • Web site: www.REJacobsGroup.com

General Comments

1. It is premature for the Ohio EPA to move forward with the proposed rule revisions at this time. As the agency is aware, various cases that are currently pending before the United States Supreme Court may well impact the jurisdiction of federal and state agencies over water bodies, including, but not limited to, waters of the state of Ohio. In addition, as the agency is also aware, the United States Army Corps of Engineers ("Army Corps") will be reissuing the various Nationwide Permits in early 2007. The Ohio EPA should wait to see the results of the pending court cases and Nationwide Permit reissuance before deciding whether, and when, to move forward with the formal rule revisions in question.

2. The Ohio EPA should be required to conduct a detailed study of the costs and impacts associated with the promulgation of the proposed rules and guidance in order to determine whether justification exists for proposing the formal rule revisions that have been contemplated by the agency. Ohio already has comprehensive water quality standards, a general surface water antidegradation rule, and detailed wetland water quality standards. This regulatory framework currently provides adequate protection to waters of the state. The agency should not proceed with the proposed rule revisions absent completion of a study indicating that the current regulatory framework inadequately protects Ohio's waters and should be supplemented by draft rules and guidance such as those recently proposed in February of this year.

3. Similarly, the Ohio EPA should not proceed with formal rule revisions absent completion of a study which justifies the need for such regulatory changes. In 401 certification matters, stream impact and mitigation evaluations are currently conducted using various regulatory guidelines including, but not limited to, Ohio's QHEI/HHEI methodologies. Wetland classifications are based on the standard wetland categories recognized by the Army Corps (i.e., forested, wet meadow, scrub/shrub, emergent, etc.). Wetland quality is evaluated using Ohio's ORAM methodology. There are no studies to suggest that the use of the foregoing regulatory measures in 401 certification matters yields inadequate results. In fact, the Ohio EPA's own press release regarding the proposed rule revisions states that, in Ohio, there has been no net loss of wetlands resulting from individual mitigation projects. Absent completion of a study demonstrating the need for additional regulatory changes, the Ohio EPA should not proceed with the formal rule revisions at issue herein.

4. The proposed rules and guidance require the same level of data collection and site evaluation for all projects regardless of size, scope and/or nature of impact. As with Ohio's isolated wetland permitting program, the rules should impose increasing levels of data collection and site evaluation as the size, scope and impacts of projects increase.

5. Along the same lines, the proposed rules and guidance should contain specific exemptions and/or separate regulatory requirements for the permitting of impacts to man-made structures or features and low quality and/or degraded streams. For example, the rules and guidance should clarify that certain types of man-made structures or features are exempt from regulation (i.e., man-made ponds, etc.). In addition, low quality or limited function features such as ephemeral streams, agricultural or roadside ditches, highly-altered or degraded streams and other such features should be dealt with under specific rules or new provisions added to the proposed rules and guidance. There is no regulatory basis or need to treat such structures and/or features in the same manner as otherwise jurisdictional or higher quality waters.

6. The draft stream mitigation guidance document is based on the premise that mitigation should be afforded at a 1.5:1 ratio. Basing the entire guidance on an arbitrarily established ratio is an entirely flawed concept. In many instances, mitigation at a 1:1 ratio is more than adequate. For instance, if a project impacts agricultural ditches and mitigation is proposed via the implementation of a conservation easement on a high-quality stream with meanders and a large flood plain, requiring mitigation at a 1.5:1 ratio would be entirely inappropriate and unwarranted. Therefore, basing the entire stream mitigation guidance document on a 1.5:1 mitigation concept undercuts the validity of the protocol from the start.

7. The proposed rules and guidance are entirely inconsistent with the stated objectives that the proposed rule revisions and guidance are meant to achieve. Specifically, the Ohio EPA's press release regarding the proposed rule revisions indicated that the draft rules are designed to, among other things, ensure greater clarity regarding Ohio EPA's requirements and make the project review process more efficient and less time-consuming. It is virtually indisputable, however, that the proposed rule revisions and guidance dramatically increase the level of effort, costs and complexity of navigating the 401 certification process. Absent completion of a comprehensive study which demonstrates that this increased regulatory burden will yield significant environmental benefits, the Ohio EPA should not proceed with the formal rule revisions that have been proposed to date.

8. Notwithstanding the foregoing, to the extent that the Ohio EPA decides to proceed with the promulgation of the proposed rules and guidance, the applicability and use of the proposed stream mitigation guidance document should be an optional approach that applicants can choose to utilize for some defined test period of time. The use of the proposed stream mitigation guidance document should then be evaluated at the conclusion of such test period.

9. Thereafter, the required applicability and use of the proposed stream mitigation guidance should not be mandated unless the evaluation of its use during the test period indicates that the benefits yielded as a result of the use of the guidance significantly outweigh the regulatory burden associated therewith.

10. Finally, to the extent that the proposed rules and guidance assert jurisdiction over upland areas, the proposed rules and guidance exceed the authority extended to the Ohio EPA under the Clean Water Act and Ohio Revised Code Chapter 6111.

Comments Regarding Proposed Wetland and Stream Rules

OAC Rule 3745-1-50

1. The definition for "Alternatives analysis" requires revision and clarification. Specifically, the definition should better track the steps in the review and evaluation process in descending order. As such, the definition should be worded as follows: ""Alternatives analysis" means a systematic review and evaluation of practicable alternatives including avoidance, social and economic justification, public need (in the case of Category 3 wetlands), minimization and compensatory mitigation."

2. The words "including natural upland buffer areas around the wetland sufficient to ensure the success of the mitigation" should be removed from the definition of "Compensatory mitigation" due to the fact that the Clean Water Act and Ohio Revised Code Chapter 6111. do not extend regulatory authority to the Ohio EPA over upland areas. However, to the extent that the Ohio EPA proceeds with the rule promulgation process and refuses to delete such language from this definition, a separate definition will need to be added to define the term "sufficient to ensure the success of the mitigation." Furthermore, if the language that was suggested for deletion is not removed from the proposed rule, additional language should be added to clarify that any upland buffer acreage included as compensatory mitigation should be counted toward the mitigation acreage being offered in an applicant's proposal.

3. The definition of "in-kind" should be revised as follows: ""In-kind" means compensatory mitigation of wetland losses by restoring, creating or preserving a wetland of the same hydrogeomorphic and plant community class as defined in this rule." There is no basis for failing to include preservation among the types of compensatory mitigation that is considered to be "in-kind" for purposes of the rule.

4. The last sentence should be deleted from the definition of "Mature forests" in the rule. The sentence is descriptive in nature only, and does not add any substance or scientific significance to the stated definition.

5. The definitions of "Off-site mitigation" and "On-site mitigation" are proposed for deletion from the rule. The agency should explain the basis for the deletion of such definitions from the rule.

6. The phrase "(purely local gains in the area of the project are not societal gains, although societal gains may also be local gains)" should be deleted from the proposed definition of "Public need" in the rule. There is no basis whatsoever for the statement that local gains are not societal gains.

7. The phrase "that is not maintained through mowing, application of herbicide or other means that would result in deleterious affects to either the upland buffer or the adjacent wetland" should be deleted from the definition of "Upland buffer" in the rule. Whether the listed activities occur within an area have no bearing whatsoever on whether the area constitutes "Upland buffer" from a functional standpoint.

8. The last sentence should be deleted from the proposed definition of "Vernal pools" in the rule. Again, the sentence is purely descriptive in nature and adds no substantive or scientific basis to the definition.

9. From a conceptual standpoint, it is notable that the proposed rule contains a definition of "Hydrogeomorphic class." In essence, the proposed rule evidences the Ohio EPA's intent to begin regulating impacts based on the hydrogeomorphic class of the different types of wetlands that may be encountered by permit applicants, including depressions, impoundments, riverine, slope, fringing, coastal, and bogs. This proposed classification assessment will add more time and cost to projects for the regulated community during property assessment, delineation, and permitting. More troubling is the fact that the hydrogeomorphic classification requirement will be used by the agency to impose "in-kind" mitigation requirements upon permit applicants. As discussed later in this comment letter, in-kind mitigation is not always the best approach for all projects. Beyond that, in-kind mitigation requirements using these categories would be extremely difficult (if not impossible) to design, very costly and of limited long-range ecological value. In the long term, wetlands naturally evolve in their plant community structure and functionality. In-kind should be limited to the definition of "Plant community" provided in the proposed rule. Even then, in-kind mitigation should NOT be a requirement, but should simply be a preferred approach that should be evaluated by applicants on a project-by-project basis.

- (2) Impoundments - Ohio EPA is specifically identifying impoundments as a hydrogeomorphic class and, presumably, a regulated body of water. Does this definition refer to an open water farm pond? If so, are open water ponds or other man-made impoundments subject to mitigation requirements? Previously, Ohio EPA has not regulated such open bodies of water.
- (5) Fringing – This classification applies to fringe wetlands present around inland lakes or reservoirs. Does this definition also apply to a fringe wetland present around impoundments or open water farm ponds?

Both of the foregoing hydrogeomorphic classifications point out the need to regulate man-made impoundments (structures), be they farm ponds, storm water ponds, or other man-made open water features that may develop areas within them that have the characteristics of a "wetland," separate and apart from true jurisdictional wetlands. As the owner is never given "mitigation credit" for the creation of a man-made feature, there is considerable concern when these areas become subject to regulation after-the-fact and the owner is then required to obtain a permit to impact such man-made features and, even worse, provide mitigation for impacts to such features.

OAC Rule 3745-1-52

1. The introduction to subparagraph (C) in this rule should be reworded as follows: "The director may approve a request submitted pursuant to paragraph (B) above if the applicant demonstrates the following: . . . " Such language revision is necessary to clarify the application of the rule in question.

OAC Rule 3745-1-53

1. Paragraph (B) states that all wetlands will be assigned a wetland classification use based on the landscape position (hydrogeomorphic or HGM class) and the dominant vegetation present. As stated previously, this will increase the costs of delineations and other property assessments. Again, however, the greater concern is in the agency's use of the classification data in relationship to imposing in-kind mitigation requirements.

2. Paragraph (C) establishes wetland tiered aquatic life use (WTALU) designations for wetlands. Simply stated, the Ohio EPA will require applicants to utilize new vegetation IBI and/or amphibian IBI tables to assign one of four new WTALU designations to all wetlands:

- Superior wetland habitat (SWLH)
- Wetland habitat (WLH)
- Restorable wetland habitat (RWLH)
- Limited quality wetland habitat (LQWLH)

This is a significant change to the current regulatory and permitting framework. Moreover, it is unclear why, after the public and wetland professionals have just become accustomed to the use of Ohio EPA's ORAM scoring methodology, the agency would impose a much more complex wetland categorization system on permit applicants. Changes to the current system should only be made if studies demonstrate that there are compelling reasons supporting the need for the changes. The use of the current ORAM approach allows landowners or prospective buyers to quickly determine the wetland types found on a given piece of property, as well the potential permitting requirements that would be applicable to a proposed project.

If the new rules are implemented, there will be a considerable time period where wetland professionals, much less knowledgeable or informed landowners, and potential developers will be very unsure of the regulatory status of sites they are considering for their projects. A much more intensive site review will have to be conducted, potentially during seasons where studies would be difficult at best. Developers, in particular, have only limited periods of time within which sites can be optioned and assessed. If an incorrect wetland assessment is done, the financial penalty could be very significant. To date, it appears that the Ohio EPA has not presented any clear and compelling argument in support of the need to implement these new and complex wetland categorization requirements.

3. Paragraph (D) states that the WTALU designations are equivalent to the following wetland categories:

- SWLH = Category 3
- WLH = Category 2
- RWLH = Category 2
- LQWLH = Category 1

Notably, the proposed rule indicates that WLH is the minimum aquatic life designation to be used for wetland restoration or creation purposes. This means that mitigation of a low quality cattail marsh will require an applicant to create or restore a wetland to the WLH designation. Such an end result is entirely unreasonable and unwarranted.

In addition, in Table 1a, which lists the HGM classes for the wetland classification system for Ohio wetlands, Class II includes impoundments which could be created by beavers or humans. Will constructed farm ponds or private ornamental ponds installed by a home owner become regulated waters of the state? If so, this is a major change from the current regulatory framework and could significantly impact land use/value.

Finally, Table 2a establishes the vegetative index of biotic integrity (IBI) scores for each wetland in order to identify its WTALU classification. The need to undertake such an assessment is going to result in additional cost, resources, and time to all wetland assessment projects in the future. Similarly, it is presumed that all performance monitoring for wetland mitigation projects will have to undergo an IBI evaluation to determine if they meet the minimum WLH (category 2 classification). At this time, it is unclear if the range of IBI scores that have been assigned to the various categories will be accurate.

4. In paragraph (E), subpart (2) should be reworded as follows: "Education – wetlands with known, publicly available educational uses (e.g., nature centers or schools)." The same changes should be made to Table 3 in the rule as well.

5. Similarly, in paragraph (E) of the rule, subpart (3) should be reworded as follows: "Fish reproduction habitat – wetlands that provide important, known reproductive habitat for fish." The same changes should be made to Table 3 in the rule as well.

6. The "Comment" after paragraph (E) in the rule bears mention. The comment is intended to provide an example of how a WTALU can be assigned. While the comment was surely designed to demonstrate the ease with which an aquatic life use designation can be assigned, the comment proves just the opposite. Experienced wetland scientists have difficulty following the example set forth in the comment. This, in and of itself, demonstrates that the proposed process is far more complicated than the system under which we operate today. Moreover, there is no evidence to suggest that following the proposed wetland use designation process will yield any significant environmental benefits that cannot be obtained under the current system.

OAC Rule 3745-1-54

1. As stated in the general comments above, there is no need to revise the current rule whatsoever. Ohio's wetland water quality standards were promulgated in 1998, through the formal rulemaking process, with stakeholder input and involvement. The rules have been in place and effective for approximately eight (8) years, and have afforded adequate protection to Ohio's wetlands since the rules were promulgated. No evidence has been put forth in order to support the need to revise Ohio's existing wetland antidegradation regulatory framework. Absent evidence that the current regulatory process should be changed, and without data to support the proposition that the environmental benefits that would flow from the promulgation of the proposed rules would outweigh the increased regulatory burdens that would be imposed upon the regulated community in Ohio, the Ohio EPA should not move forward with the formal rule revision process as indicated in the February 14, 2006 news release.

2. The last sentence of paragraph (D)(2) contained in the rule should be reworded as follows: "Appropriate wetland evaluation methods may include indices of biotic integrity and/or condition-based rapid wetland assessment methods." The revised wording is needed in order to accommodate those situations where the use of only one of the wetland evaluation methods would be adequate.

3. Paragraph (D)(3) should be deleted from the rule. The director should not have the absolute discretion to categorize wetlands as outstanding national resource waters without first going through the formal rulemaking process.

4. The introduction to paragraph (E) of the rule should be worded as follows: "Alternatives analysis. Antidegradation protections for Ohio wetlands shall be implemented by a sequenced alternatives analysis review. The review shall consist of an examination, in the following order, of avoidance, social and economic justification and, in the case of Category 3 wetlands, public need, minimization, and compensatory mitigation."

5. This change is necessary in order to recognize the reality that applicants must first weigh the social and economic significance of projects before the extent of impact minimization can be determined.

6. Subparagraph (E)(1)(b) requires that "adequate" buffers be provided on avoided wetlands at a given site. See the foregoing comments concerning the legal issues associated with the Ohio EPA's ability to assert jurisdiction over upland areas such as buffer areas. Regardless, to the extent that the agency seeks to move forward with the promulgation of the proposed rules, a definition should be added to clarify what constitutes "adequate" in terms of buffer area.

7. Subparagraph (E)(2)(b)(iii) should be reworded as follows: "The overall and basic purpose of the project and how the purpose relates to the placement, configuration, density and social and economic benefits of the project; . . ." As stated previously, determining the extent of minimization that is warranted depends highly on the social and economic benefits of the project.

8. The word "cumulative" should be deleted from subparagraph (E)(2)(b)(v) of the rule. Simply stated, the applicant should only be required to assess the direct and indirect impacts associated with its project. The agency should be the entity charged with evaluating the cumulative impacts of all projects conducted in a given area.

9. In paragraph (E) of the rule, the second sentence in rule (E)(3) should be reworded as follows: "For the purposes of this rule, "necessary" is defined as required such that the public need could not be achieved by any other means." As currently drafted, the proposed rule sets a standard that is virtually unachievable.

OAC Rule 3745-1-55

1. Generally speaking, the commenters object to the institution of a wetland permitting and mitigation system based largely on the hydrogeomorphic or HGM class or classes of the wetlands in question. As stated above, under the current permitting system, regulatory decisions are made based on the standard wetland classifications that are commonly recognized by the Army Corps. Absent data demonstrating that there is a need to change that system, the agency should not move forward with the formal rule promulgation process as previously stated.

2. Paragraph (A)(2) should be reworded as follows: "Evaluation of the quality of the impacted wetland using wetland assessment methodologies acceptable to the director, including the use of Ohio's ORAM methodology and/or wetland indices of biotic integrity; . . ." Again, this change is necessary in order to afford consultants the discretion to determine the best way to evaluate the quality of the wetland at issue in the given circumstance.

3. The use of a 2:1 replacement ratio for impacts to a Category 1 wetland, as required by paragraph (A)(5) of the rule, is excessive and unwarranted. A new ratio should, therefore, be provided for impacts to Category 1 wetlands. Similarly, the word "minimum" should be deleted from both portions of the first sentence of paragraph (A)(5) of the rule.

4. The second sentence of paragraph (A)(5) of the rule should be reworded as follows: "Except as otherwise provided in this rule, replacement is preferred to be in-kind unless local circumstances dictate otherwise." This change is necessary in order to afford the director flexibility to determine the type of replacement that is appropriate in light of the circumstances of the specific project.

5. As stated previously, the use of a 2:1 mitigation ratio for unavoidable impacts to Category wetlands, as required by paragraph (B) of the rule, is inappropriate and unwarranted.

6. The initial part of paragraph (B)(2) of the rule should be worded as follows: "Preservation of natural upland buffers, as specified in paragraph (F) of this rule, around avoided wetlands or the restored or created wetland may occur . . ." This change is necessary in order to ensure that buffer areas around avoided wetlands are included in the calculation of the amount of mitigation acreage offered by an applicant in a permit application.

7. In paragraph (C)(1), it states that compensatory mitigation for Category 1 wetlands may be located anywhere within the boundaries of the Army Corps district. It is assumed, but should be clearly stated, that this includes the use of a wetland bank within the same Army Corps district. Moreover, map 2 in the appendix should be updated to reflect the Army Corps district boundary changes that were recently implemented.

8. In paragraph (C) (2), the Ohio EPA appears to moving away from the use of wetland bank credits for impacts to Category 2 and 3 wetlands. Wetland banking is listed as the third option (of four) in a series of descending preferences by the Ohio EPA. Moreover, the director must approve the use of a bank on a case by case basis. Why is there a perceived push away from using wetland banks to mitigate for impacts to Category 2 and 3 wetlands? This becomes a considerable problem in that the mitigation design requirements (as well as monitoring) are very stringent, thus reducing the potential for even attempting on-site mitigation for many projects. Thus, off-site mitigation at a mitigation bank may well be the only viable option for mitigating some wetland impacts.

Paragraph (D)(3)(a) of the rule should be worded as follows: "The performance and success of compensatory mitigation shall be evaluated by quantitatively comparing the biological, physical, and, where warranted, chemical characteristics of the restored, created, enhanced, or preserved wetlands to the characteristics of natural wetlands of the same type using appropriate wetland assessment methods acceptable to the director, including Ohio's ORAM methodology and/or wetland indices of biotic integrity." Again, this change is necessary in order to afford applicants flexibility with respect to the type of wetland methodology to be used to determine mitigation performance.

9. Paragraph (F)(3) should be worded as follows: "Upland buffer. Preservation of upland buffer, as that term is defined in rule 3745-1-50 of the Administrative Code, is a highly desirable component of acceptable compensatory mitigation." This change is needed in order to clarify that the provision of upland buffers is highly desirable but not required.

10. Subparagraph (F)(5)(c) should be deleted from the rule. In the alternative, the words "Where feasible" should be added at the start of subparagraph (F)(5)(c). This change is necessary due to the fact that it is not always possible to transfer title to the wetland to be preserved prior to any filling of wetlands at the project site.

OAC Rule 3745-32-01

1. Two changes should be made to the definition of "Discharge of dredged material" contained in paragraph (C) of the rule. First, the phrase "the runoff or overflow from a contained land or water disposal area" should be deleted from the rule. In addition, the last sentence should be deleted from the definition. A review of the *Tulloch Rule,* the cases that have interpreted the rule, and the subsequent Army Corps rulemakings clarifies that it is inappropriate to attempt to establish a set cut-off for the amount of dredged material that would constitute incidental fallback. In fact, in its 2001 rulemaking, the Army Corps recognized the inappropriateness of establishing a cut-off point for purposes of defining the term incidental fallback. See 66 Fed. Reg. 4,550 (Jan. 17, 2001) ("The determination of whether an activity results in a regulable discharge of dredged material or produces only incidental fallback involves consideration of the location and the amount of the redeposit. Because of the fact-specific nature of the assessment of these factors, and their interrelated nature, we do not believe it to be feasible or appropriate to establish hard and fast cut-off points for each of these factors. Rather, the totality of the factors will be considered in each case.").

2. The phrase "mechanized land clearing" is used in the definition of "Discharge of dredged material." The phrase in question should be defined in OAC Rule 3745-32-01 in order to clarify that it does not include simple logging, brush hogging and other activities that do not cause significant earthmoving. Mechanized land clearing should include such activities as grading, bulldozing, stump removal and other such practices.

OAC Rule 3745-32-02

1. There is no need whatsoever to revise the current version of this rule.

2. Paragraph (C) should be deleted from the rule. The referenced paragraph appears to establish a precedent for the fact that one type of activity could require both an NPDES permit and a Section 401 certification. Such duplicative permitting is unreasonable and unwarranted.

OAC Rule 3745-32-03

1. In subparagraphs (B)(4)(iv) and (v), the words "data from" should be inserted in front of "a representative number of" in each of these sections of the rule.

2. In subparagraph (B)(4)(b), the introductory language in the rule should be worded as follows: "All sampling submitted pursuant to paragraphs (B)(4)(a)(iv) and (B)(4)(a)(v) of this rule . . ." Similarly, in the introduction to subparagraph (B)(4)(c) of the rule, the introductory language should be: "All habitat evaluation indices required in paragraph (B)(4)(a)(iii) of this rule . . ."

3. The end of paragraph (C)(2) of the rule should be worded as follows: "...if the director concludes that the benefits of the project are outweighed by the lowering of water quality that would result from the activity for which the section 401 water quality certification is sought."

4. Paragraph (D)(2) of the rule should be worded as follows: "The one hundred eighty day review period may be restarted by the director upon submission of substantial revisions to the application increasing the impacts that were proposed in the application that was originally submitted to the Ohio EPA." In other words, the review period should only be restarted if an applicant makes a submission which increases the impacts of its proposed project.

5. In the last sentence of paragraph (E)(1) of the rule, the words "scope of" should be replaced with the word "impacts" in order to clarify the type of change that could require a new application for a section 401 water quality certification.

6. Subparagraph (E)(1)(a) should be revised to indicate that approvals of modifications shall be issued as final actions of the director. Considering the fact that the initial issuance of a 401 certification is not done as a draft action, there is no basis for requiring the processing of modifications in such a manner.

7. Subparagraph (E)(1)(b) of the rule should be reworded as follows: "Applications for modifications seeking to increase the impacts authorized by previously issued section 401 water quality certifications will be subject to all the requirements of rule 3745-1-05 of the Administrative Code." Simply stated, a new antidegradation review would not be warranted unless project impacts were to increase.

8. Paragraphs (E)(4) and (F)(1) and (2) should be deleted from the rule. There is extensive case law indicating that, upon issuance of a section 401 water quality certification, the jurisdiction of the state agency ends and the 401 water quality certification simply becomes part of the 404 permit issued by the Army Corps. See *Keating v. FERC,* 927 F.2d 616 (D.C. Cir. 1991); *Commonwealth of Pennsylvania, Department of Environmental Resources v. City of Harrisburg,* 578 A.2d 563 (Pa. Commw. Ct. 1990); *Harmon Cove Condominium Ass'n, Inc. v. Marsh,* 815 F.2d 949 (3rd Cir. 1987). Therefore, only the Army Corps can modify a permit for a project after issuance of a section 401 water quality certification by the state agency and a 404 permit by the Army Corps.

9. To the extent that the director has the authority to renew section 401 water quality certifications, paragraph (G)(2) of the rule should be revised to clarify that an applicant can file more than one request for a renewal of a section 401 water quality certification.

10. Consistent with the prior comment above, paragraph (G)(4) of the rule should be revised to indicate that renewals of section 401 water quality certifications shall be issued as final actions of the director.

11. Paragraph (H)(1) of the rule should be revised as follows: "The director may propose to deny any application that fails to achieve the criteria established in paragraph (C) of this rule."

OAC Rule 3745-32-04

1. Generally speaking, while management on a watershed basis may well be prudent, the proposed rule places too much of a burden on permit applicants to evaluate how mitigation sites will contribute to watershed and regional objectives. It is far too onerous to impose upon permit applicants the burden of studying and understanding watershed and regional concerns and objectives and crafting mitigation plans in such a manner that addresses those concerns and objectives. The agency is the entity that will have the "big picture" on this issue. Accordingly, the agency should review mitigation plans from a watershed and regional standpoint and comment on such plans appropriately. Permit applicants can thereafter revise their mitigation plans in order to address the comments received from the agency, and ensure that watershed and regional goals and objectives are met. It is unreasonable and inappropriate to ask permit applicants to evaluate watershed and regional issues in preparing mitigation plans for their projects.

The foregoing having been stated, to the extent that the Ohio EPA refuses to alter the approach taken in the rule, certain revisions should be made in order to reduce the scope of the required evaluations to at least the sub-watershed level. Examples of such changes are set forth in more detail below.

2. For example, subparagraph (A)(1)(a)(ii) is far too broad. At a minimum, this portion of the rule should be revised as follows: "Describe aquatic resource concerns in the sub-watershed (e.g., flooding, water quality, habitat) and how the impact site contributes to sub-watershed functions, and identify sub-watershed plans that describe aquatic resource objectives."

3. Similarly, subparagraph (A)(1)(b)(ii) should be worded as follows: "Describe the contribution to sub-watershed functions that the mitigation site or sites are intended to provide."

4. The level of baseline information required by subparagraph (A)(2)(b) is excessive and unwarranted. Requiring applicants to classify impact and mitigation sites in the manner set forth in the proposed rule will impose far greater timing and cost burdens on permit applicants. In the alternative, the proposed rule should allow permit applicants to classify impact and mitigation sites based on the standard methods recognized by the Army Corps (i.e., the classification of wetlands as either forested, wet meadow, scrub/shrub, emergent; the classification of streams as either ephemeral, intermittent, perennial, etc.). Such classifications are more than adequate for evaluating whether mitigation plans adequately offset the impacts of given projects.

5. In subparagraph (A)(2)(d), the commenters assumed that the wetland rapid assessment procedure ("WRAP") referenced in the rule referred to the ORAM methodology that has historically been employed by the agency. Please confirm whether such is the case.

6. Subparagraph (A)(2)(e) should be revised in various ways. First, the introduction to that subparagraph should be worded as follows: "Existing hydrology. As appropriate for the type and size of the mitigation project being proposed, an applicant shall identify the following: . . ." Second, the requirement to identify the historical hydrology of mitigation sites should be deleted. Compliance with such a requirement would be almost impossible to achieve absent speculation. Third, subsection (v) in subparagraph (A)(2)(e) should be deleted. Absent completion of a study indicating that there are significant environmental benefits that can be achieved if impact and mitigation sites are matched up to this level of detail, the compilation of such water quality analyses should not be required by permit applicants.

7. Consistent with the foregoing, the introduction to subparagraph (A)(2)(g) should be reworded as follows: "Existing soils.

As appropriate for the type and size of the mitigation project being proposed, an applicant shall provide the following: . . . " Again, absent completion of a study demonstrating that significant environmental benefits can be achieved if impact and mitigation sites are matched up to this level of detail, the collection of such data should not be required of permit applicants.

8. As with the prior comment set forth above, at a minimum, subparagraph (A)(2)(j) should be limited to requiring applicants to provide information on a sub-watershed basis. In addition, in subparagraph (A)(2)(j)(ii), the word "estimated" should be inserted in front of the word "percentages" within the parentheses. Finally, applicants should only be required to provide the sizes and widths of natural buffers on-site. Absent legal access to surrounding properties, the provision of information regarding the sizes and widths of off-site buffers is not possible.

9. As with the prior comments, subparagraphs (A)(3)(b) and (c) should, at a minimum, be revised to require the provision of data on no more than the sub-watershed level.

10. Subparagraph (A)(3)(d) should be deleted from the proposed rule. Mitigation site selection and justification should not be based on speculative assessments of future adjacent land uses.

11. Subparagraph (A)(3)(h) should be revised as follows: "Explain how the design is sustainable and self-maintaining. An applicant shall show, by means of a water budget, that there is sufficient water available to sustain long-term wetland or stream hydrology." Without having control of the overall watershed, it would be virtually impossible for permit applicants to provide evidence that a legally defensible, adequate and reliable source of water exists or will exist. Thus, this requirement should be deleted from the proposed rule.

12. Subparagraph (A)(3)(j) should be worded as follows: "Provide a state historic preservation office cultural resource clearance letter, if applicable." As the agency is aware, such letters are not required in all instances.

13. Subparagraphs (A)(4)(d) and (e) should be deleted from the proposed rule. It would be virtually impossible for permit applicants to provide such information at the mitigation work plan preparation stage of a project. Such information is typically not available until projects are bid and work is about to commence in the field.

14. The introduction to subparagraph (A)(4)(f) should be worded as follows: "A description of the planned hydrology for the mitigation site, including, as appropriate: . . ." Not all of the listed data is required for a mitigation work plan for all projects.

Compensatory Mitigation Requirements for Stream Impacts in the State of Ohio Guidance Document

Executive Summary

Page ii

The Ohio EPA states that it typically requires stream mitigation to be done at a ratio of 1.5:1 and higher (mitigation to impact). As one of the stated purposes of this document is to promote discussion of the rules, one of the issues that should be discussed is the appropriateness of a 1.5:1 ratio as the base mitigation ratio. As stated at the outset of this comment letter, the Ohio EPA should consider instances where the base mitigation requirement should be 1:1 (i.e., when impacts involve highly modified (straightened or channelized) streams and the net mitigation proposed by the applicant results in a clearly more functional stream segment of the same length).

Page iii

The appropriateness of the stream model and assessment and use of the Army Corps Savanna District weighting methodology is unclear. The Ohio EPA should provide information on this scoring and weighting methodology regarding the length of use, any published or other success/failure evaluations and, based on this information, provide the public the rationale for its selection for use in Ohio. At a minimum, the reasoning for the changes in the weighting factors that the Ohio EPA revised should be provided. It would be beneficial to see how extensively this method is used nationwide, and which other states have adopted this methodology. An overall question should be raised regarding the data used by the Ohio EPA that indicates that the current stream evaluation system is inadequate. It appears that with the proposed rules, considerably more baseline and monitoring studies will be required in assessing impacts and mitigation. This will potentially increase the complexity of a permit evaluation review, not standardize or simplify the permitting process. This complexity is magnified due to the subjectivity of some of the factors to be considered in the evaluation.

Page v

Again, the Ohio EPA used a base ratio of 1.5:1 in establishing the calculations for the weighting factors on the grounds that this ratio was used "historically". As is discussed in detail in the following sections, many streams, especially those that are man-made or highly disturbed, should qualify for a 1:1 mitigation ratio if the net result would improve stream functionality.

Ohio EPA states that Limited Resource Waters (LRW) will be excluded from the weighting factor evaluation and alternative mitigation such as post-construction best management practices would be appropriate.

The Ohio EPA should specifically identify ephemeral streams as a separate stream category, as that stream type is a federally-defined stream type that is typically identified on a wetland delineation, and easily understood by the public, without additional environmental study. Although the proposed mitigation for an ephemeral stream appears to be a reasonable approach, the Ohio EPA should indicate if it has had any discussions with the Army Corps as to coordinating appropriate mitigation for such streams. If the Army Corps continues to require function for function mitigation, LRW streams will still require actual stream mitigation on a federal level, thus negating the Ohio EPA approach.

The Ohio EPA should also consider the use of two additional stream categories for purposes of permitting and associated mitigation: (1) man-made ditches (other than those done as mitigation), typically linear, with little or no riparian or bank cover and serving some primary function other than as a stream; and (2) highly modified (channelized) natural stream segments, typically linear, with little or no riparian or bank cover and non-functional floodplains. The inclusion of these categories could clearly separate and simplify the assessment of impacts and associated mitigation, while leaving the more complex evaluations for impacts to more natural and true stream systems. As is pointed out in several sections below, the attempt to combine permitting of man-made and natural systems leads to many concerns.

1.0 Introduction and Applicability

In an effort to provide constructive comments to the proposed stream mitigation rules, it is essential that the overall framework for stream mitigation be opened for discussion. The Ohio EPA should review its perspective in the regulation of various state waters. The agency needs to reconsider its permitting approach regarding man-made and significantly altered watercourses.

It should be noted that, on page 2 of the guidance document, it is stated that the director "may determine in any specific situation that a State Water Quality Certification should be .....modified, suspended, or revoked." As stated above, case law suggests that there are limitations on the ability of states to act after issuing a water quality certification. That point is worth repeating in light of the statement made at the outset of the guidance document.

1.1 What is a stream?

It is significant that the Ohio EPA is asserting jurisdiction and retaining the right to require mitigation for impacts to not only "streams" but also "other watercourses" that do not meet the definition of "streams." In a Fact Sheet prepared by the Ohio EPA (January 2003) entitled "Ohio EPA's Primary Headwater Stream Project: Key Findings", in a section identifying "Watercourses Not Considered Primary Headwater Habitat Streams," the following statement is found: "Ohio EPA does not consider grass waterways or other watercourses without a defined bed and bank primary headwater

streams." Although it may be understandable that Ohio EPA does not wish to inadvertently relinquish jurisdiction over such waters, it is difficult to envision such waterways as having any significant or even discernable impacts to Ohio's water quality. It appears that such waterways must be man-made and maintained ditches, or agricultural shallow drainages or grassed swales found in residential subdivisions or golf courses. Many of these grassy swales with no bed or bank would not meet the definition of federally regulated streams or wetlands. It is, therefore, difficult to understand how the regulated community is to identify such watercourses. Without a clear definition of regulated waters, the public is left with uncertainty as to its legal right to do work, even for work that is necessary as part of its normal activities. Common examples would include active agricultural ditches or residential drainage swales. Even some of these may technically have a "bed and bank" and, thus, become a "stream," given the agency's working definition of a stream (see next section). The mere fact that the potential exists for permitting and mitigation requirements to apply to work in grassy swales or other such non-stream watercourses simply provides an added and unnecessary level of uncertainty for the public in everyday activities or the planned development of sites in Ohio.

1.1.1 Important Definitions

The following definition is provided for a stream: "a surface watercourse having a channel with a well defined bed and bank, either natural or artificial, which confines and conducts continuous or periodic flowing water." Although this has been a commonly used definition, for purposes of mitigation, which this document addresses, some consideration should be given to modifying this all-encompassing definition.

Several items should be re-visited. First, man-made drainages/channels need to be placed in a separate category, not as "streams" but as "man-made other watercourses." Although this may, at times, conflict with Ohio EPA's historic interpretations of a regulated stream, it would provide the public with a bright line rule regarding what activities are allowed and what activities are prohibited. Two common examples are provided for purposes of illustration.

Currently, if a farmer wishes to relocate a constructed drainage ditch due to a change in field use or construction of a building, there is considerable question as to the right of the farmer to do so. There is even a reasonable concern that such an activity might require "mitigation" and preservation. This is not referring to the "agricultural grassy waterways" noted in Section 1.1.2, but a functional ditch that almost always will have a defined bed and bank. A farmer should not need a permit to authorize, and should not be required to "mitigate" for, impacts to a ditch that he constructed. Although the Ohio EPA may state that this would not be done, the right to regulate the relocation of the ditch is implied throughout this proposed mitigation document. The question becomes further complicated if the farmer wishes to sell or sells his land, and the next owner decides to relocate the ditch. Furthermore, considerable studies by the owner may be required before a decision may be reached by the Ohio EPA regarding the right to move the ditch. It is worth noting, however, that while all of the foregoing analyses may need to be conducted before the farmer or a subsequent property own may relocate the man-made ditch, surely no "credit" was given to the farmer for "creating" the ditch in the first place. A similar argument could be made for private, constructed ponds, especially those that develop wetland fringes.

A second common scenario where a drainage ditch (not a roadside ditch such as referenced in Section 1.1.2) is constructed as part of a development. This may simply lead to a storm water pond, or eventually discharge into a storm sewer line. Again, this could arguably qualify as a stream under the definition in the proposed guidance document and, thus, activities within that constructed ditch would technically be regulated and mitigation may be required. Although the Ohio EPA may contend that disturbing such a drainage ditch would impact water quality downstream, a simple requirement that sedimentation and erosion controls be installed would serve to prevent such impacts.

Man-made streams appear to create an inherent penalty to landowners who undertake specific "improvements" to their land. For instance, a landowner may wish to provide a "natural" drainageway to carry roof rain water from a constructed structure, or construct a small ornamental pond in a back yard or field. From the definition of regulated waters, such drainages or ponds may be viewed as regulated under the guidance document and, to the extent that such is the case, altering them at some later date could arguably require a permit or even mitigation. These are not hypothetical situations, but situations that arise on a regular basis. The owner is given no "credit" for construction of such features, but is potentially penalized in the future, especially if the land is put up for sale. Such a result is clearly unfair and unwarranted.

Another stream category should be incorporated into Ohio EPA's stream categories: heavily modified, channelized streams, which are typically maintained watercourses (or streams) that have become linear in nature, lack shrub or tree cover on their banks and have no floodplains. Placing such streams or drainages into a separate category for addressing impacts and mitigation would clearly ease the regulatory burden on the public and provide for a simple mitigation solution that would clearly maintain or improve water quality and stream habitat. For instance, if the proposed activity would simply involve relocating a stream or ditch to allow a better use of the site, basic guidelines that are clearly understood and easily implemented could be established to address Ohio EPA's concerns. Implementing such guidelines would eliminate the need for complex and costly studies, reduce regulatory review time, and provide for some consistency in permitting. Such guidelines could include: (1) no reduction in overall stream/drainage length; (2) maintenance of similar bed material; (3) maintenance of similar or better bank riparian cover; (4) maintaining floodplain width (if it exists); and (5) stabilization of bed and bank before relocating flow into the channel. Mitigation should be limited to a 1:1 ratio, as following such guidelines would not result in any decease in either stream habitat or impact to the state water quality. In such projects, the Ohio EPA may encourage improvement of the resulting relocated stream or ditch. If such is the case, the activity should qualify as a true stream mitigation project.

It should be very obvious that certain stream improvement projects should not need to be evaluated following a complex and "scientific" weighting evaluation. If a stream is linear, lacks riparian cover, and has little if any functional floodplain, a compensatory stream mitigation design that creates sinuosity, provides improved bank (riparian) cover, creates an improved floodplain, and/or controls down-cutting of equal length should clearly qualify as more than adequate mitigation without any need for lengthy, complex, and costly weighting analyses.

1.1.2. Watercourses which are not streams

Comments provided above regarding watercourses that do not meet the definition of a stream are applicable here. Further definitions are necessary in this area. It should be stated that roadside ditches are NOT regulated, and that ordinary

maintenance activities are allowed. Similarly, agricultural grassy waterways (grassy swales) should not be regulated in any situation. If the "grasses" are not wetland species, they are not wetlands -- otherwise, they might qualify as wetland swales. As noted above, further consideration should be given to the placement of other man-made ditches or drainageways in a separate regulatory category.

2.0 Protecting Water Resource Integrity: Ohio Water Quality Standards

Page 6

Ohio EPA states that certain perturbations such as channel straightening can cause profound negative impacts to a stream. This acknowledgment should carry considerable weight in addressing impacts and mitigation requirements when the stream to be impacted has been channelized and/or straightened.

Incidentally, the quote on page 6 from Ohio's antidegradation rule is incorrectly recited in the guidance document. If cited, the complete, correct language from the rule should be incorporated into this section of the guidance.

Page 8

6) Limited Resource Water (LRW)

It is unclear why Ohio EPA does not simply add a category that defines "true ephemeral streams." According to the Ohio EPA, such streams completely lack water on a recurring annual basis. Such a stream category is defined by various agencies as a stream that carries water for a short period only after rain events and typically has no groundwater component. Ohio EPA subsequently addresses mitigation for such streams as a special case. Adding this stream category would allow the public to clearly and easily identify such waters without any costly and complex stream investigations. In fact, if a wetland delineation is done on a site, the Army Corps typically identifies streams (or sections of streams) found on the delineation site as perennial, intermittent or ephemeral. It is not suggested that the LRW category be removed, but that ephemeral streams be added.

Page 11

There is a statement on this page of the guidance document as follows: "Although the PHWH use designations have not been promulgated into rule yet, applicants should utilize these evaluation methodologies where appropriate in order to better facilitate the review process." The commenters object to such a suggestion. Such practice will only lead to the age-old policy vs. rule debate, and could cause serious problems in the permitting process. Regulatory decisions should only be based on methodologies that have undergone the formal rulemaking process.

3) *Class I* PHWH

The Ohio EPA has stated that these streams are ephemeral headwater streams which do not provide a significant aquatic life function, but do have important water quality functions. The Ohio EPA states that they may be given their own classification. This should be done, and the classification should simply be called "Ephemeral Streams."

Page 13

On this page of the guidance document, there is a statement as follows: "OAC Rule 3745-1-54 is currently in the process of revision to provide a single rule applicable to Section 401 water quality certification reviews for wetlands, streams, and lakes." Such is not the case. There are separate rules for streams and wetlands.

3.0 State Water Quality Certifications (Clean Water Act, Section 401)

Page 15

The Ohio EPA has indicated in the Executive Summary that LRW, specifically ephemeral streams, have limited aquatic functions and may be mitigated by the use of post-construction best management practices. Given this view, the Ohio EPA should reconsider its individual water quality certification limitation of 300 linear feet of impact to ephemeral streams. This 300-ft limitation functionally eliminates the use of a Nationwide Permit No. 39 in Ohio, although the Army Corps would still process an application proposing such impacts as a Nationwide Permit. The 300-ft limitation forces an applicant to navigate the rigorous individual 401 water quality certification process, including a lengthy and very costly antidegradation review, in order to obtain authorization of a project that qualifies for a Nationwide Permit at the federal level. Such is an unnecessary and unduly burdensome result for permit applicants. Due to the current requirement to comply with Phase II storm water standards, water quality is still protected, even under a Nationwide Permit.

4.0 Compensatory Mitigation

Page 16

As noted above, the Ohio EPA should consider at least two additional categories of impacts to drainages that qualify as streams that would pass the complex methodology described in such detail in the mitigation document.

The first category would cover streams that are man-made, relatively linear in nature, with little or no overhanging bank (riparian) cover, and with limited (if any) adjacent floodplain. This category would cover many active or even recently abandoned agricultural drainageways that technically may qualify as streams, constructed drainageways used as storm water channels within subdivisions, roadside ditches, and other such man-made features. Even though this would not solve the problem of owners "creating" regulated streams and other waters on their property by constructing small drainage ditches or ponds, it could provide relief to the regulated public without endangering the waters of Ohio and its natural stream resources and water quality. Identification of such a stream could be easily documented as part of a wetland delineation or even with site photographs, if no delineation is necessary. Mitigation could be set for impacts to such streams at a 1:1 ratio, with "in-kind" relocation as a preferred option. As noted above, in-kind replacement could include at least a similar stream bed material, bank restoration with similar or even more extensive bank cover, potentially increasing shading and woody detritus input to the relocated stream, and construction and bed and bank stabilization prior to allowing flow to be diverted into the new channel. In many cases, this would allow an optimal use of a site, with a timely, consistent and appropriate level of permit review.

A second category would include similar situations, but with highly disturbed natural streams. The definitive criteria for such streams would be prior channelization that has created a stream with little or no sinuosity, with a secondary characteristic of a disconnection with any floodplain. The Ohio EPA has stated that certain perturbations such as channel straightening can cause profound negative impacts to a stream, both within the segment of stream directly impacted and even further downstream. Recognition of this highly disturbed nature should be reflected in the evaluation of impacts and mitigation. If such a stream segment is impacted, mitigation ratios should be set at 1:1, as long as downstream water quality or aquatic habitat is not negatively impacted. If mitigation for such stream segments includes increased sinuosity, bank stabilization (with a preference for bio-stabilization), the mitigation should be considered sufficient, without any need for conducting a full weighting factor evaluation. Even though the impact and mitigation is not "scientifically documented," any trained stream biologist/ecologist can quickly evaluate such impacts and proposed mitigation and make a reasonable determination if the proposed project will result in equal or better aquatic habitat and water quality for the state of Ohio. This would clearly speed up the permit review and evaluation process. If the Ohio EPA feels that the particular project impact and mitigation warrants further review, the agency can always require additional studies at that time.

The proposed weighting factor evaluation should only be applied when a natural stream that has not been "heavily impacted" is being proposed for impact by a project. As is discussed below, the proposed methodology is quite extensive, requires the hiring of highly trained stream biologists, and should be used only when there is a potential for real impacts to the state's waters.

4.1 Goals for Compensatory Mitigation

Page 17

The general goals for stream restoration are reasonable, as long as a distinction is made between natural and man-made streams in the approach to reaching those goals. On-site relocation of man-made drainages/streams should be accepted as functional mitigation, as long as they meet certain set and standard criteria. No net loss for man-made streams should be just that -- not mitigation at a 1.5:1 ratio. A case for 1:1 ratio has already been made.

Pages 18-19

Mitigation credits from stream preservation should not be limited to 70% of the necessary total. In certain situations, high-quality preservation projects may warrant allocation of 100% of the necessary mitigation requirement.

Mandating "sufficient forested riparian areas" for impacts to man-made streams that did not have such cover to begin with is inappropriate.

Creating a functional floodplain associated with an impacted man-made stream, where one did not exist in the first place, should be optional, as such creation is not typically practical in situations of that nature.

Requiring protection in perpetuity for relocated man-made streams does not recognize that the original stream was man-made and may need to be relocated again if the site use changes in the future. Protection in perpetuity should be limited to natural systems, or man-made streams that have been "naturalized" as part of a true stream mitigation project.

Applying the measurable success criteria is not appropriate for relocation of man-made streams. Criteria should be limited to vertical bed stability, bank stability, and appropriate survival of bank vegetation. There should be no need for monitoring of chemical or intense biological monitoring.

The guidance document contains the following statement: "Whenever possible, the implementation of compensatory mitigation projects should occur prior to or at the same time that the impacts authorized under the Section 401 Water Quality Certification are occurring." Unfortunately, this is not always feasible. The agency should provide flexibility in the rules to deal with such situations.

These concerns stem from the agency's efforts to treat all watercourses as equal, regardless of their origin, existing functions or even functionality. All watercourses are not equal, however, and should not be treated as such.

Pages 20-21

4.2.1 Post-Construction Best management Practices

The Ohio EPA reiterates that for streams that meet the definition of Limited Resource Waters or truly ephemeral streams, effective post-construction BMP's may be sufficient as compensatory mitigation. If this is the agency's current position, the Ohio EPA should revise its 401 water quality certification limitation of 300 feet of impact to ephemeral streams. Furthermore, the Ohio EPA should coordinate with the Army Corps to ensure that its view of compensatory mitigation is acceptable to the Army Corps.

4.2.2 Stream Relocation

Again, it needs to be noted that man-made "streams," such as agricultural ditches, drainage ditches and other such "streams," should not be required to be protected in perpetuity if they are relocated. They were created by a landowner for a specific purpose, and a relocation, if done properly, will not result in any loss of "aquatic habitat" or a reduction in water quality. If, over the years, site use changes, a previous relocation should not preclude an additional change or a second relocation. The notes above regarding the "Goals for Compensatory Mitigation" section of the guidance document identify the problems with this issue.

4.2.3 Stream Restoration

Page 24

An important point appears to be missed in the "credit allocation" for riparian restoration. In many projects, the restoration of stream corridors in relatively urban areas is critical. In many such instances, available corridor width is very limited and may vary considerably in different segments. Regardless, the restoration of even a limited riparian zone or floodplain may have a great ecological value. A provision for such circumstances needs to be made in order to provide increased credit for such projects.

4.2.4 Stream Preservation

Page 25

Although the Ohio EPA wishes to promote the restoration of impaired waters in Ohio, a distinction still needs to be made between "impaired" waters and man-made "ditches/streams." In this instance, the functionality of the man-made ditch/stream is not "impaired," but properly functional. Therefore, logic should allow the use of preservation of a highly functional natural stream as appropriate mitigation for impacts to such ditches/streams. There should not be a limit of 70% credit where impacts exceed 500 linear feet of man-made streams. In this case, no net loss of true streams will result, and 100% credit should be afforded.

4.2.5 Riparian Buffer and Floodplains

Page 26

The Ohio EPA states that it does not generally exercise direct regulatory authority over riparian areas adjacent to streams. However, it does exercise that authority when it deems it necessary to fully address impacts to water quality under Section 401. In this instance, the Ohio EPA should recognize that it needs to view this issue in the context of the proposed impact. If the proposed impact is to a stream with little if any existing "riparian" buffer, the proposed mitigation should not be required to create a set riparian buffer. In many instances, this would preclude an on-site mitigation proposal. By setting such a pre-established condition, regardless of the state of the waterbody to be impacted by the project, the Ohio EPA may well be venturing into regulating riparian buffers where no net impact to water quality is evident. More importantly, as stated above, regulating such areas is beyond Ohio EPA's statutory authority.

4.4 Legal Protection of Mitigation Areas

Although it has been stated several times above, it is critical to distinguish man-made ditches/streams from natural streams, and to place those streams in a separate category. As the Ohio EPA states, "in order for a mitigation area to qualify as compensatory mitigation for streams, legal instruments....must be put into effect for the property in question." Since the "stream" may well have been created by the landowner in the first place, forcing that landowner or a subsequent landowner to "protect" a relocated stream forever is not appropriate. Examples of such instances were provided above, and are common occurrences across Ohio. Those examples occur every day in reviews of sites for sale or reuse by an existing owner. By placing these ditches/streams in a separate category, a different protection scenario could be put in place rather than treating mitigation for such impacts in a true stream mitigation fashion.

4.5 Maintenance

Page 29

Again, the need to place man-made ditches in a separate category is highlighted here. Man-made ditches that are relocated may well need periodic maintenance, which should not be the case for more natural stream restorations or relocations.

A second exception should be noted here. Restored urban stream restoration projects are subject to extremely flashy flows. Unless the stream is fully armored, and thus not very "natural." it should be anticipated that there may well be instances where periodic repair will be required, even in the best-designed streams.

5.0 Use of Weighting Factors to Evaluate Compensatory Mitigation Plans

Page 29

The Ohio EPA has indicated that the historical agency approach to evaluating stream impact and mitigation issues has resulted in lengthy review times and a lack of standardization during the Water Quality Certification review process. However, it appears that in an attempt to standardize the review procedures, the Ohio EPA has taken a "one-size fits all" approach, regardless of the actual type of waterway impacted. In reality, the proposed rules and guidance would actually increase the complexity of the permitting process for projects with limited impacts to low quality resources.

Page 30

Two forms have been developed for use, and the weighting factors were stated to have been selected for scoring impacts and mitigation projects based on availability of existing information in order to reduce the burden of data development during the application process. It should be noted, however, that the vast majority of Ohio's drainageways and streams have not been investigated as described by the Ohio EPA. Few proposed developers will treat a known perennial stream as an encumbrance that they expect to impact in any major way, such as culverting or relocation. The majority of impacts to "streams" involve ephemeral or intermittent streams that are typically not mapped, or man-made drainageways commonly viewed as field ditches. If permitting time frames and reducing the regulatory burden is a concern of the agency, heeding the comments noted in the previous sections of this letter and providing a separate permitting approach for impacts to man-made "drainages/streams" would simplify the review process as desired, yet still protect the waters of Ohio. There should be no need to compile the data required by Forms A and B for relocating agricultural ditches or other linear, man-made channels, unless some unusual circumstances exist. At most, abbreviated versions of Forms A and B could be used to assess agricultural ditches and other man-made channels. Form A could specify length of impact, a measure of "sinuosity," and identify riparian cover and floodplain extent, if either is present. Form B could repeat this information for the proposed relocation project. If a net loss results, additional mitigation, such as preservation, could be added.

Page 31

Form A

Although the Ohio EPA has indicated an intent to minimize the need for data collection, the very first question on the table requires that a formal study of the stream be conducted. This is a reasonable requirement **if** the stream is a natural stream that has not been previously evaluated, even though it generally triggers the engagement of a stream consultant.

However, if a stream category isadded to cover drainageways that are ephemeral, man-made and/or heavily impacted/altered (linear channelization), it would eliminate the need to conduct the detailed evaluations required by the proposed guidance and would allow such drainageways to be grouped using a clearly understood, and quite functional, categorization process.

5.2 Weighting Factors

Page 34

As stated above, weighting factors should not have been set using the historic ratio of 1.5:1 (mitigation to impact) for streams. Although there is justification in many cases to use such a minimum ratio for wetland mitigation purposes (which is how this ratio was most probably derived), in many instances, the overall benefit of a restored stream would clearly be sufficient to mitigate for impacts. Mitigating for impacts to a stream with few meanders, that is cut off from its floodplain and is in the process of down-cutting, by creating a naturalized stream with more sinuosity, a floodplain and stopping or even reversing down-cutting, should be sufficient, even it the length of the mitigated stream is equal to, or perhaps even slightly less than, the length of the impacted section of stream. One function of stream mitigation that should be considered is the cost of design and implementation. Stream construction costs typically far exceed wetland construction costs. Requiring additional footage of mitigation, when doing so is clearly unnecessary from an environmental equivalency standpoint, is simply unwarranted and does nothing other than add to the overall cost of a project.

The Ohio EPA states that it has recognized that stream preservation projects tend to be "...a much less expensive mitigation alternative..." This may not be true, as some preservation projects protect not only the stream itself, but a significant amount of the watershed for that stream also, at least within the project's boundaries. In those instances, the cost may equal, if not exceed, stream restoration costs. Regardless, simply because an option is less expensive should not make it less acceptable. The Ohio EPA does continue the sentence quoted above with "... which in many cases does not replace the resource being lost." For these two reasons, the preservation ratio has been designed to be higher than granted for stream restoration activities. Although the first reason is somewhat suspect, the second is clearly not applicable in many cases. Two examples are provided to illustrate this point:

1. Urban stream. If a stream is an urban stream passing through an area with no potential for recovery and little function other than to carry water, preservation of a high value stream within that watershed should be a primary consideration and no penalty for its use imposed by mandating a "higher" ratio. Water quality and habitat is not lost, and the potential for a future impact is permanently removed.

2. Man-Made Drainageways/Streams. As described above, many regulated waterways were added to Ohio's "stream resources" by farmers, developers and other citizens, with no stream creation "credit" ever having been afforded to such individuals and entities. Regardless, these "streams" may now be subject to regulation and preservation. These types of linear ditches should not be counted, or viewed, in the same way as true Ohio streams. The owner of these "streams" should have the right to modify, relocate and even fill such streams without prior approval from the state or federal government. If they are to be regulated, preservation should be accepted at a 1:1 ratio for these "streams."

5.2.1.3 Default Methodologies for LRW, MWH, Class I PHWH and Class II PHWH Streams

Page 38

The Ohio EPA should consider adjusting the default weighting factor in Form A MWH, LWH, Class II PHWH streams to reflect a base mitigation ratio of 1:1, not 1.5:1.

5.2.3.1 Primary Priority

Page 41

Bullet point 1 should have the following addition at the end of the sentence: "... Research Reserves **provided the stream segment has not been altered by man-made activities**."

Bullet point 4 is unclear. The Ohio EPA appears to require that a stream be evaluated using another study to determine if it scores above 7 for "Candidate Streams for Protection and Restoration." An applicant should not have to conduct another study to identity such streams for the Ohio EPA. They should be pre-identified. This simply places another permit application burden, and additional costs, on the applicant.

Bullet point 5 should have the following addition at the end of the sentence: "... which the stream flows **provided the stream segment has not been altered by man-made activities**." In fact, consideration should be given to including this addition to the introductory sentence to this section.

The final bullet point should be deleted from this section of the document. The Ohio EPA should not be able to unilaterally identify stream segments as "Primary Priority" waters without going through formal rulemaking.

5.2.3.2 Secondary Priority

Page 42

Bullet points 7 and 8 are unclear. In the seventh bullet point, the Ohio EPA appears to require that a stream be evaluated using another study to determine if it scores between 3 and 7 for "Candidate Streams for Protection and Restoration." An applicant should not have to conduct another study to identity such streams for the Ohio EPA. They should be pre-identified. This simply places another permit application burden, and additional costs, on the applicant.

The final bullet point should be deleted from this section of the document. The Ohio EPA should not be able to unilaterally identify stream segments as "Primary Priority" waters without going through formal rulemaking.

5.2.4 Existing Geomorphic Integrity

Page 43

The Ohio EPA states that "in some instances, data.....equivalent to.... a Level III analysis...must be collected... and compared to a reference stream conditions obtained form stable reaches of the same type and stream type." It is not clear when this will be required, but this is a very expensive procedure to complete, and there is not certainty as to the ability to access a stable stream of the same type. Most land in Ohio is privately owned, and no applicant should be burdened with this requirement. Although the Rosgen methodology is frequently used, it is not universally accepted and may not be appropriate for many evaluations in the northeast, especially when selecting a "stable" stream.

Page 44

Continued reference is made on this page to "natural, referenced stream conditions." If the Ohio EPA wishes to use this criteria, it should provide a database the public can access in order to facilitate the use of this information as a reference, and not make each applicant collect its own information. Requiring the applicant to find a stable reference reach could be cost-prohibitive, regales of the difficulty inherent in obtaining private property access rights, and may well preclude the use of on-site mitigation as a project option.

5.2.5 Floodplain Quality and Riparian Weighting Factors

Page 45 and (and Table 3 on Page 46)

Floodplain and riparian buffer widths do not seem to take into account the actual watershed of the stream within a project area. Setting an arbitrary width and then increasing that scoring when widening the width is based on a generally large stream system. If a riparian zone is actually outside the watershed, such as occurs in steep-sided streams in hilly areas and smaller streams, a more appropriate evaluation would be to score the amount of buffer in relation to the total watershed of that stream within the project area.

Page 47

Some clarification needs to be given regarding the term "appropriate densities based on regional conditions." Information regarding these data should be readily available to the public (as a potential applicant). If this information is not available, it may be a source of dispute in applications and should not be required as part of the permit application process.

5.2.5.1 Adverse Impact Weighting: Existing Floodplain Quality

Page 48

This section contains the following statement: "In cases where it is evident that an applicant has altered the floodplain elevations or the condition of the wooded riparian corridor prior to the submission of the application to the Ohio EPA in order to reduce the weighting factor scores generated using Form A, a higher weighting factor score will be assigned based on available information regarding pre-construction conditions." This is not an acceptable condition. Unless the pre-application activity was illegal, the Ohio EPA has no right to evaluate the motives for the activity and then unilaterally act on that determination. For instance, if a landowner wishes to log an area prior to its sale or use for another project, whether to generate income or simply provide a better view of a certain area, the landowner should not be penalized for that legal activity.

5.2.5.2 Stream Mitigation Weighting Factors: Riparian/Floodplain Preservation

Page 48

It is not appropriate to require "forested" riparian stream buffers in all cases, especially if the impacted stream did not have a similar riparian buffer prior to the project. There is no empirical data that forested buffers are inherently superior to overhanging scrub/shrub cover. In fact, depending on the size of the stream, shrubs located on stream banks provide better bank protection than trees and may provide a better source of woody debris considered beneficial to stream habitat. In areas where a limited capability for a natural progression of meandering exists, stream bank stability is very important. Again, restoration must reflect impacts as much as possible.

Another option should be considered: buffer averaging, rather than a simple width requirement. If a buffer is preserved that accounts for a higher percentage of protection for that stream's watershed, minimum widths should be automatically waived. This makes sense from an ecological perspective, and in many instances may allow for a more appropriate site development.

5.2.6 Adverse Impact Weighting Table: Impact Category

Page 51, Table 4.

It is not clear why a "Moderate Impact" weighting factor is set to 1.0 for Enhanced Culverts 150-300 ft. An enhanced culvert of this length is, in many instances, providing a cooling function to streams, similar to heavy forest cover or even overhanging shrubs. Although it lacks a direct detritus feed, these areas can support fish, invertebrates and allow up and down stream migration in a natural fashion. Placing this under the "Minimal Impact" category would cover many typical road crossings and would encourage the installation of such structures.

A standard road crossing of under 30 feet, if placed at grade, should have minimal impacts to a stream. By having such a minimal length, small one-lane dirt roads would qualify for a "Minimal Impact" weighting factor.

Page 52

The statements addressing **Shading and clearing** should be amended to indicate that they only require mitigation if suche actions are the direct result of the permitted activity.

5.2.7 Stream Mitigation Weighting Factors: Stream Channel Restoration/Relocation Design

Page 53

Several points need to be made regarding this section.

First, as has been discussed previously, the weighting factors should be readjusted to start at a base 1:1 ratio.

Second, a separate and much simpler mitigation table should be prepared for use for impacts to man-made and highly disturbed (channelized) and linear streams. This would place relocation projects in a separate category, clearly commensurate with impacts, rather than imposing an arbitrary weighting factor of 1.0.

The overall stream credit intent seems to be geared towards compensation for significant stream impacts. Stream mitigation credits are approved if significant amounts of data are provided before and after a mitigation project is done. In some instances, this is required, where impacts are significant and mitigation is extensive. However, the Ohio EPA should recognize that in situations where benefits are intuitively evident, even if not easily "proven" or fully measurable without extensive and costly studies, setting strict "mitigation rules" will not benefit the waters of Ohio. Flexibility should be built into the rules and guidance to allow experienced biologists to make reasonable ecological judgments on a case-by-case basis.

It appears, therefore, that the Ohio EPA is unwilling to provide credit in many instances where mitigation activities will clearly yield substantial environmental benefits. This appears to be even more evident in the treatment of "additional benefits" by the Ohio EPA. Specifically, in Appendix C, page C2, the agency states that "the allocation of secondary or tertiary benefit mitigation credits will not be applicable in many situations." The guidance goes on to imply that an applicant would have to implement an extensive monitoring program for a stream mitigation segment before secondary and tertiary benefit credits are able to be awarded. Several problems are posed by these statements and implications. For example, if a culvert with a five-foot drop is currently isolating a tributary from a stream, its removal and replacement with a cascade/pool stream segment is ecologically desirable. The project reconnects the tributary back to a natural state. However, "proving" or quantifying the benefits associated with this activity would be difficult. In fact, it may be impossible to monitor the upstream or downstream segments as they may well be located on private property where site access is unavailable. Absent the clear ability to "prove" the benefits of such a project, an applicant would receive no mitigation credit for this clearly desirable activity under the proposed rules and guidance.

Another similar example would be a potential mitigation project aimed at stabilizing an eroding 50-ft high bank along a major river. The effort and cost required to undertake the project would be significant. The eroding bank may well be contributing significant sedimentation to the downstream area, removing overhanging shade and cutting into property along the bank.

The entire bank along the eroding curve might only be 200 or 300 feet long. Under the proposed rules and guidance, while restoration of such a bank would be clearly desirable, it would appear that an applicant would have a difficult time justifying an entitlement to secondary or tertiary mitigation credits. Specifically, a calculation using a sediment transport model could be developed, with enough data, but documenting downstream "improvements" would be nearly impossible. Without a reasonable biological assumption of benefits, this important and ecologically sound project would not be proposed or completed because, under the proposed rules and guidance, secondary or tertiary mitigation credits may be difficult to justify. This is not an uncommon situation. Although the Ohio EPA indicates that some projects would or could be reviewed on a case-by-case basis, it is often the case that once criteria are set, they must be followed to the letter. Therefore, flexible criteria should be developed in order to clearly accommodate such situations and remove perceived barriers to the completion of creative and beneficial projects.

5.2.7.1 Stream Restoration Design Scoring

Page 55

Many "good" restoration projects require at least some "rigid" methods as they occur in areas with urban storm flow inputs, creating "flashy," high flow conditions. Many such streams experience significant down-cutting, and effective controls include rock veins or other rock armor. Regardless, these projects are still viable and highly valuable and should not be "down-graded" due to the use of "rigid methods."

5.2.7.2 Stream Relocation Design Scoring

Page 56

Ohio EPA states that a relocated stream has to have characteristics similar to a natural stream, with riparian buffers at least past the flood prone width. A relocation project should only be required to mitigate for the condition of the stream it is impacting, even if that stream has sections that are currently rip-rapped and serve primarily as a storm water conduit.

5.2.8 Stream Mitigation Weighting Factors: Riparian Restoration and Enhancement

Page 58

In this section of the guidance, the Ohio EPA implies that a restoration project would require schedules for maintenance and monitoring exceeding five years. It is arbitrary and capricious to differentiate between enhancement and restoration projects in such a manner.

Moreover, it is arbitrary to say that restoration projects will require in excess of five years of maintenance and monitoring. While in some situations that may be true, it may not be the case with every restoration project.

5.2.9 Stream Mitigation Weighting Factors: Watershed Location

Page 63

In this section of the guidance, a weighting factor of 0.0 is given for out-of-watershed mitigation. Assigning such a weighting factor to out-of-watershed mitigation projects, in a vacuum, is arbitrary and capricious. Projects should be judged based on the facts of the given circumstance and credited accordingly. Some credit should be given even for out-of-watershed mitigation if the facts of the situation so dictate.

5.2.10 Stream Mitigation Weighting Factors: Control

Page 63

There appears to be conflict of concerns within the Ohio EPA with respect to the establishment of guidelines for mitigation. On one hand, mitigation is considered as most appropriate if done "on-site," if the opportunity exists. In many projects, this opportunity does exist and is the preferred solution. However, due to the location of the proposed project, it is difficult, if not impossible at times, to find approved conservation groups to take easements for relatively narrow corridors of stream mitigation. This is especially true if the project site is landlocked and access is difficult. Many landowners are willing to impose a deed restriction, which is a legal and enforceable document, as a means of protection. As this is a legal instrument, it should not be "dismissed" with a weighting of 0.0. It is recommended that this be changed to at least a weighting factor of 0.1.

Secondly, and especially with subdivision developments, a "third party," such as a homeowners association, either controls the mitigation area or, in many cases, owns it in fee. With proper structuring of the homeowners association bylaws, and if necessary, it is possible to dedicate an annual conservation fee to provide for the inspection and maintenance of the mitigation area. In situations where such can be arranged, the resulting protection is more than sufficient to protect the resource. In these types of situations, and even in circumstances where it is difficult to find an approved conservation group to hold an easement due to access issues, it is recommended that this type of control be accepted as an option, and if coupled with a deed restriction, be given a weighting factor of 0.2.

A third party conservation easement should not be mandated as the only acceptable means of preservation of mitigation projects. It should be a preferred option, but other factors, such as "on-site" or "within watershed" mitigation locations, should be considered and allowed with other means of protection (i.e., deed restriction, other third party control, etc.).

If other options are not available, many communities may well end up with mitigation being done in different locations, and opportunities to improve and protect the local habitat may well be lost.

5.2.11 Stream Mitigation Weighting Factors: Impact/Mitigation Relationship

Page 64

In this section of the guidance, out-of-kind mitigation is given a 0.1 weighting factor. This would appear to be an arbitrarily established weighting factor that does not take the circumstances of a given mitigation project into consideration. It could well be that a certain type of feature is lacking in a given area, and that an applicant would be willing to provide such mitigation even if it is out-of-kind. Similarly, the proposed mitigation being offered might be far more environmentally valuable than the resource being impacted, yet out-of-kind. In such situations, the mitigation being offered would be entitled to far more than a 0,1 weighting factor. Thus, flexibility must be built into the rules and guidance in order to accommodate such situations.

5.2.13 Stream Mitigation Weighting Factors: Supplemental Water Quality Activities

Page 65

Clarification needs to be provided regarding the types of projects that would qualify for this type of credit. For example, would the Ohio EPA consider the construction of off-channel detention facilities in ephemeral stream channels as a supplemental water quality activity if they are not surrounded by forested riparian buffers?

Page 66

Similarly, will the Ohio EPA consider storm water projects that oversize their facilities to recapture storm water flows in areas where flooding is an issue as a watershed improvement action? This over-sizing of new storm water facilities is at times the only viable opportunity for communities in certain areas to regain some measure of relief from conditions that pre-date current storm water regulations. Credit should be granted for such projects.

5.3 "Average Case" Weighting Factor Analysis

Table 7 (Page 70) should be recalculated with a 1:1 mitigation ratio as a base.

6.0 Required Information

Page 69

This section of the guidance contains a list of the types of information that is required for consideration of a mitigation proposal. The inclusion of certain items on the list in the guidance shows a lack of understanding of the development and construction processes in general.

The second bullet point requires the submission of a storm water pollution prevention plan (SWPPP) with the application. This information is not typically prepared until after a permit is issued, due to the costs involved in preparation, unknown phasing of construction (many times dependent on the season work will occur) and other factors. The SWPPP is nearly always put in place just prior to the commencement of earth work activities. Detailed plan submission and approval should be more appropriately made a permit requirement or condition.

The fourth bullet point requires that information be provided regarding the names, addresses and phone numbers of all parties responsible for mitigation and monitoring. If this means the applicant, that information is already provided. If this is intended to identify the specific person(s) or firm(s) that will conduct the mitigation and monitoring, that information is frequently unknown at the application stage, as such work is typically bid once the permit is issued. In fact, monitoring is generally bid on a year-by-year basis. As long as the applicant is responsible, that should be sufficient for the agencies.

Page 71

The third bullet point on this page requires a schedule of construction for "significant" activities. As noted above, a permit application has no set approval date, thus a detailed construction schedule cannot be prepared. If this is considered necessary, it can be made a permit condition.

The sixth bullet point on this page requests a description of equipment to be used for construction. The choice of equipment is generally left to the selected construction firms, within contract obligations. Contracts are generally written so that site conditions at the time of construction (season) can be taken into consideration, and often provide that alternative equipment can be proposed if approved by the client. Specifying equipment in a permit application, in other than general terms, is unworkable.

7.0 Monitoring and Contingency Plans

Page 71

The Ohio EPA should define the term "major mitigation projects," either by linear feet of stream work or some other factor. Monitoring efforts should be commensurate with the impacts of the given project.

7.1 Monitoring Plans

Page 71

Again, the second bullet point refers to the identification of the person(s) responsible for monitoring work. Please refer to the comments made above as to why requiring such information at the application stage is unworkable.

Page 72

The third bullet point on this page should read "Biological **and/or** chemical water quality monitoring plan." For many stream mitigation projects, chemical sampling is simply not appropriate.

8.0 Planting Plan

Page 73

The sixth and seventh bullet points are unnecessary and could be covered by a general permit condition requiring that all plants to be used must be appropriate for the geographic area of the mitigation site. Again, details such as plant procurement companies and information on transplanting are determined after a permit is issued and a construction schedule is prepared. As long as plants are native and survival rates are established in the permit conditions, there is no need for this level of detail in an application.

9.0 Construction Practices

Similarly, aside from including in a permit application general statements regarding the construction practices to be employed, it is typically infeasible to provide specific, detailed construction plans at the time a 401 certification application is submitted. The provision of detailed construction plans and work specifications is more appropriately included as a permit term or condition.

Finally, the guidance states that earth work within the stream channel should be scheduled during low flow periods, and that stream flows should be diverted around the work area to prevent undue erosion during construction. This should only be required to the extent practicable. In many instances, this would counter the need to start mitigation construction before or contemporaneously with the stream impacts of the given project. In fact, it could change the original weighting factor for scheduling work. There is no set or definitive timing as to the processing of a permit application and, therefore, the start date of a project is usually unknown. Furthermore, in connection with stream relocation projects, this is not even necessary, as a new channel can be constructed before stream flows are ever routed to the relocated stream channel.

Conclusion

As stated previously, please consider this correspondence the formal comments concerning the proposed 401/wetland/stream rules and mitigation guidance document that were distributed for public comment in February of this year. We would urge the Ohio EPA to thoroughly review, and give full consideration to, the comments provided herein before the agency decides whether to propose formal rule revisions as originally stated.

Thank you in advance for your thorough consideration of the comments expressed in this letter.

Sincerely,

THE RICHARD E. JACOBS, INC.

Dominic J. Salomone

DJS:bls