

## Instructions for completing the Section 401 Water Quality Certification and Isolated Wetlands Permit Application

The instructions for completing the Section 401 Water Quality Certification (401 WQC) and Isolated Wetlands Permit (IWP) application follow and are organized by sections as indicated on the application form. For optimized functionality in the application workbook, use Excel version 2007 or higher. Note that you must save the file as a macro-enabled workbook and select “enable content” when the security message appears beneath the Excel ribbon. You may alter screen settings and views by using Excel features/functions.

These instructions are intended to help the applicant prepare an administratively complete application in compliance with Ohio laws and rules. Following these guidelines will greatly help reduce delays in processing the application. Answer each question completely. An attachment list has been developed to allow applicants to provide supporting documentation. Attachments must be named according to the provided list and be submitted in the form of an Adobe .pdf file, .jpg or .bmp file along with the application Excel workbook. **Additional documents must support information given within the application form; they are NOT a substitute for completing the form.** For example, “see attached” is not an adequate response to any question or field within the application form.

Appropriate fees must accompany the printed copy of the complete application (see Section 1.4). Failure to submit appropriate fees and/or not filling out all sections completely will result in an administratively incomplete application.

### How Do I Submit the 401 WQC/IWP Application?

Print the entire application workbook, provide applicable signatures in Section 1.3 and submit it along with supporting attachments. ADDITIONALLY choose ONE of the following options:

- Upload an electronic file of the complete application and supporting attachments to the following web link: (no link yet available – coming soon)
- E-mail the complete application and supporting attachments to [dsw.webmail@epa.state.oh.us](mailto:dsw.webmail@epa.state.oh.us)
- Upload the complete application and supporting attachments to the eBusiness Center: <https://ebiz.epa.ohio.gov/>
- If electronic versions of the documents cannot be provided, submit three additional copies of the signed and completed application and supporting attachments.

### Where Do I Submit Printed Copies of the 401 WQC/IWP Application?

The printed copy of your completed application workbook, attachments and fees shall be submitted to: Ohio EPA, Attn: Supervisor DSW/401 Unit, P.O. Box 1049, Columbus, OH 43216-1049

### Who Must Use This Application?

This application must be completed whenever a proposed activity:

- Requires an individual Clean Water Act (CWA) 401 WQC from Ohio EPA. A 401 WQC from the State is required to obtain a Federal CWA Section 404 permit (404 permit) from the U.S. Army Corps of Engineers (USACE) or any other federal permits or licenses for projects that will result in a discharge of dredged or fill material to any waters of the United States.
- Requires a State Isolated Wetlands Permit (IWP) from Ohio EPA for projects that result in the filling of wetlands that are not regulated under the Federal Water Pollution Control Act. Isolated wetlands are not classified as

waters of the United States by the USACE. Nevertheless, they are waters of the State of Ohio and are therefore regulated by Ohio EPA under Ohio's State Isolated Wetlands law ([Ohio Revised Code \(ORC\) Sections 6111.02 through 6111.028](#)). According to Ohio law, the issuance of a general or individual state IWP constitutes the issuance of a 401 WQC for purposes of the Federal Water Pollution Control Act. For more information about isolated wetlands permitting, access the State Isolated Wetlands section on our website: [www.epa.ohio.gov/dsw/401/IWP.aspx](http://www.epa.ohio.gov/dsw/401/IWP.aspx).

**The Other Water Body section of the application is currently under construction and will be available in Version 2 of the application. Until that time, the APPLICATION FOR OHIO EPA SECTION 401 WATER QUALITY CERTIFICATION EFFECTIVE OCTOBER 1, 1996, REVISED AUGUST 1998, should be used for projects involving Lake Erie, dredging, or other water bodies. This application is available at [http://www.epa.ohio.gov/portals/35/401/401appl\\_fis.pdf](http://www.epa.ohio.gov/portals/35/401/401appl_fis.pdf).**

To determine whether you need to submit this application to Ohio EPA, contact the USACE District Office with jurisdiction over your project (<http://www.usace.army.mil/about/Pages/Locations.aspx>) or other federal agencies reviewing your application for a federal permit to discharge dredged or fill material to waters of the State. You can also contact an Ohio EPA Section 401/wetlands coordinator at (614) 644-2001.

Ohio EPA's 401 WQC Program is authorized by Section 401 of the Clean Water Act (33 U.S.C. 1251) and under ORC Section 6111.03(P). Ohio Administrative Code (OAC) [Chapter 3745-32](#) outlines the application process and criteria for decision by the director of Ohio EPA. In order for Ohio EPA to issue a 401 WQC, the project must comply with Ohio's Water Quality Standards ([OAC 3745-1](#)) and not potentially result in an adverse long-term or short-term impact on water quality. The Anti-degradation Rule (OAC 3745-1-05) is included in the Water Quality Standards and includes additional application requirements and public participation procedures. **Because there is a lowering of water quality associated with every project being reviewed for a 401 WQC, every 401 WQC applicant must fully complete a 401 WQC application. Applications for projects that will result in discharges of dredged or fill material into streams and other water bodies shall include an investigation report of the waters of the United States approved by the USACE, habitat assessments and official interagency coordination documentation as prescribed in ORC Section 6111.30.** In addition, applications for projects that will result in discharges of dredged or fill material to wetlands must include a wetland delineation report approved by the USACE, a wetland assessment with proposed assignment of wetland category(ies), official documentation on evaluation of the wetland for threatened and/or endangered species and appropriate avoidance, minimization and mitigation as prescribed in OAC Chapters [3745-1-50 to 3745-1-54](#). Ohio EPA will evaluate the applicant's proposed wetland category assignment and make the final determination either as part of the pre-application coordination or during the 401 WQC and/or IWP application technical review.

### **How Will the Information Included in the 401 WQC/IWP Application Be Used?**

In order to ensure the most efficient and consistent review of every 401 WQC and IWP application, Ohio EPA requires every application be completed and submitted using the Excel workbook and following the same organizational structure.

Information provided in the application will be used to evaluate the project for certification and/or a permit and is a matter of public record. Incorrect, incomplete and/or inaccurate applications may result in delays in application processing or a denial of the 401 WQC and/or IWP. If Ohio EPA determines that the application lacks information necessary to determine whether the applicant has demonstrated the criteria set forth in ORC Section 6111.30, Ohio EPA will inform the applicant in writing what additional information must be submitted. The application will not be considered complete until all required information has been received and Ohio EPA has notified the applicant in writing that the application is determined to be administratively complete. Ohio EPA has 15 business days to conduct this administrative completeness review. A technical review period of 180 calendar days commences on the date Ohio EPA sends notification to the applicant that the application is considered to be administratively complete. Once an application has been deemed administratively complete (i.e., during the technical review), Ohio EPA may request materials to clarify impacts, mitigation or other aspects of the application if it is determined that the application lacks information necessary to determine whether the applicant has demonstrated the criteria set forth in OAC rule [3745-32\(A\)](#) and OAC Chapter [3745-1](#). Furthermore, Ohio EPA must take an action on a 401 WQC application within 365 days of the date of the USACE public notice. If an application is administratively incomplete for more than one year, Ohio EPA may issue a Denial without Prejudice or request that the applicant withdraw the application.

## ***Application for Section 401 Water Quality Certification Cover***

***(Tab Name: 401 WQC Application Cover)***

Enter a version number starting with V1 and the date of submittal (month, date, and year). When submitting revised versions of the application because you want to update application information or based on comments received during the completeness review or technical review, please be sure to update this section by providing a new version number, date and EPA identification number (if known). Revision numbers should be in the following sequence: V2, V3, V4, V5, etc.

Ohio EPA will use this page to record information about the application including date received, 401 WQC coordinator, Ohio EPA ID number, USACE public notice number and project name. DSW will also use this cover page to record fiscal processing information.

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## **Pre-Application, Type of Review and Completeness Checklists**

(Tab Name: Completeness Checklist)

### **A. Pre-Application and Type of Review Checklist**

#### **1. Pre-Application Coordination**

If you plan to apply for a 401 WQC and/or IWP, it is in your best interest to request pre-application coordination. For more information, see the DSW Pre-Application website: [www.epa.ohio.gov/dsw/401/WQC.aspx#pre-app](http://www.epa.ohio.gov/dsw/401/WQC.aspx#pre-app).

1. Pre-application coordination: If pre-application coordination has taken place for this project, indicate that here. If some type of coordination has taken place (meeting, conference call, site visit, etc.), select “yes.” If no pre-application coordination has taken place for this project, select “no” and skip to Section A.2.

2. 401 Contact: Select the name of the Ohio EPA section 401/wetlands coordinator that you have contacted regarding your project.

3. Pre-application request form: If you submitted a pre-application request form, enter the date the form was submitted to Ohio EPA. You can either manually enter the date in the cell or select the cell and pick the date in the pop-up window. To delete or change a date, select the cell and in the formula bar, delete or type a new date.

4. Site visit/meeting/conference call occurred: Enter/select the date that the pre-application site visit, meeting or conference call was held.

5. Date of Ohio EPA's follow-up letter: Enter/select the date of Ohio EPA's pre-application meeting follow-up letter.

6. Date of Applicant's response letter: Enter/select the date of the applicant's response letter.

#### **2. Type of Review**

Select “yes” or “no” from the dropdown menu next to the review type to indicate the type of review that is anticipated for this project. More than one review type may be selected. When an after-the-fact (ATF) review is selected, be sure to ALSO MARK the type of review that would be required based on the impacts. If you are unsure, contact a 401 WQC coordinator at (614) 644-2001.

**1. Section 401 WQC Review:** A 401 WQC from Ohio EPA is required before obtaining a federal CWA Section 404 permit from the USACE or any other federal permits or licenses for projects that will result in a discharge of dredged or fill material to any waters of the United States. After your application is considered administratively complete, Ohio EPA will conduct the technical review and take action on your application in 180 calendar days or less. This is in accordance with ORC Section 6111.30.

**2. State Isolated Wetlands Level One Review:** When a project proposes to place fill into one-half acres or less of category 1 or category 2 isolated wetlands, an IWP level one review is required. Once the application is considered administratively complete, Ohio EPA will conduct the technical review and take action on your application in 30 calendar days or less.

**3. State Isolated Wetlands Level Two Review:** When a project proposes to place fill into more than one-half acres of category 1 and/or more than one-half, but less than or equal to three acres of category 2 isolated wetlands, an IWP level two review is required. Once the application is considered administratively complete, Ohio EPA will conduct the technical review and take action on your application in 90 calendar days or less.

**4. State Isolated Wetlands Level Three Review:** When a project proposes to place fill into more than three acres of category 2 and/or any size category 3 isolated wetlands, an IWP level three review is required. Once the application is considered administratively complete, Ohio EPA will conduct the technical review and take action on your application in 180 calendar days or less.

**5. After-the-fact Review:** An ATF 401 WQC or IWP application may be required if all or part of the proposed project that impacts waters of the state has already been implemented. ATF applications are subject to the same review criteria and review timelines as 401 WQC and/or IWP applications. Therefore, an ATF application may not be acceptable for projects where Ohio EPA would clearly not have authorized the impacts. In those instances, remaining options for resolving the violation include potential enforcement actions and/or restoration of impacted water bodies.

**Consequently, Ohio EPA strongly recommends that you request pre-application coordination to determine next steps for an ATF project.**

## ***B. Section 401 WQC Administrative Completeness Checklist***

This section will only be visible on the application form when “yes” is selected in A.2.1. This section serves as checklists for both the applicant and the Section 401/wetlands coordinator. Indicate that you have provided the specified content, that you have included it in the appropriate location within the application and that you have provided the applicable attachments by selecting yes, no or not applicable in the box to the left of each of the required items.

ORC Section 6111.30 requires applicants for a 401 WQC to include specific items necessary for the Agency’s review of the application. The intention of the statute is to ensure the Agency has the basic information necessary to begin review of 401 WQC applications. The completeness review, completed within 15 business days, is considered a purely administrative review. This should not be confused with the more in-depth technical review which is to be completed within 180 calendar days from when the application is considered administratively complete.

## ***C. State Isolated Wetland Level One Administrative Completeness Checklist***

This section will only be visible on the application form when “yes” is selected in A.2.2. This section serves as checklists for both the applicant and the Section 401/wetlands coordinator. Indicate that you have provided the specified content, that you have included it in the appropriate location within the application and that you have provided the applicable attachments by selecting yes, no or not applicable in the box to the left of each of the required items.

The ORC Section 6111.022 requires applicants for IWP level one review, to include specific items necessary for the Agency’s review of the application. The intention of the statute is to ensure the Agency has the basic information necessary to begin review of the IWP application. The completeness review, since it must be completed within 15 business days, is considered a purely administrative review. This should not be confused with the more in depth technical review which is to be completed within 30 calendar days from when the application is considered administratively complete.

## ***D. State Isolated Wetland Level Two Administrative Completeness Checklist***

This section will only be visible on the application form when “yes” is selected in A.2.3. This section serves as checklists for both the applicant and the Section 401/wetlands coordinator. Indicate that you have provided the specified content, that you have included it in the appropriate location within the application and that you have provided the applicable attachments by selecting yes, no or not applicable in the box to the left of each of the required items.

The ORC Section 6111.023 requires applicants for IWP level two review to include specific items necessary for the Agency’s review of the application. The intention of the statute is to ensure the Agency has the basic information necessary to begin review of the IWP application. The completeness review, since it must be completed within 15 business days, is considered a purely administrative review. This should not be confused with the more in-depth technical review which is to be completed within 90 calendar days from when the application is considered administratively complete.

## ***E. State Isolated Wetland Level Three Administrative Completeness Checklist***

This section will only be visible on the application form when “yes” is selected in A.2.4. This section serves as checklists for both the applicant and the Section 401/wetlands coordinator. Indicate that you have provided the specified content,

that you have included it in the appropriate location within the application and that you have provided the applicable attachments by selecting yes, no or not applicable in the box to the left of each of the required items.

The ORC Section 6111.024 requires applicants for IWP level three reviews to include specific items necessary for the Agency's review of the application. The intention of the statute is to ensure the Agency has the basic information necessary to begin review of the IWP application. The completeness review, completed within 15 business days, is considered a purely administrative review. This should not be confused with the more in-depth technical review which is to be completed within 180 calendar days from when the application is considered administratively complete.

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### **Acronyms**

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## **SECTION 1: Administrative Information**

**(Tab Name: Administrative)**

### **1.1 Applicant Information**

**1-13. Applicant Contact Name and Title:** Provide the contact name (First, Middle Initial, Last), company name, telephone number, fax number, an alternate telephone number (if desired), email address, the company website, and the company's mailing address (not the project address), including the street, city, state and zip code.

**14-26. Applicant Technical Point-of-Contact:** A technical point-of-contact name and appropriate contact information MUST be provided. The technical point-of-contact may be the applicant contact listed above, or it may be someone else within the company that has the authority to act in the applicant's behalf in regards to the processing of this 401 WQC/IWP application. The technical point of contact is not the applicant's consultant. For complex projects or projects with multiple contractors and responsible parties, designation of a single point of contact will speed up the process and enable more timely responses to requests for information.

### **1.2 Consultant/Agent Information (if applicable)**

**1-13. Consultant/Agent Technical Point-of-Contact:** The primary consultant/agent's role is to oversee the processing of the 401 WQC/IWP application and to make the day-to-day decisions regarding the application. You are not required to have an agent. If you choose to be represented by an agent, provide the agent's information in 1-13 of this Section. Ohio EPA recommends that the primary agent be a consultant familiar with the 401 WQC and/or IWP regulatory process.

**14-26. Other Consultant/Agent:** You may choose to provide contact information for a secondary consultant/agent. You are not required to have a secondary consultant/agent. The secondary consultant/agent would not have the authority to make decisions on your behalf regarding the processing of your 401 WQC/IWP application. Provide the secondary consultant/agent's information in 14-26 of this Section. The secondary consultant/agent's role would strictly be to provide additional technical information regarding the 401 WQC/IWP application, such as engineering diagrams, stormwater pollution prevention plans, etc. that are not routinely prepared by the primary consultant/agent.

**27. Main Point of Contact:** From ALL of the contact information entered above, indicate which ONE is to be the designated point of contact for all correspondence and questions. Ohio EPA will direct all communications, letters, phone calls and e-mails to this person.

### **1.3 Agent Authorization and Application Signatures**

**Statement of Authorization:** To designate and authorize a primary consultant/agent to act on your behalf in the processing of this 401 WQC/IWP, print your name and sign and date on the appropriate lines. By signing this document, you are certifying that the consultant/agent named in Section 1.2. is authorized to act in your behalf in the processing of the 401 WQC/IWP application, and may furnish supplemental information in support of the application.

**Regardless of whether or not you designate a consultant/agent, you MUST sign the 401 WQC/IWP application in Section 1.3.** Print your name and sign and date on the appropriate line. If you have designated a consultant/agent, then this person must also print their name and sign and date on the appropriate line. These signatures certify that the information that is contained in the application is true, complete and accurate. Failure to have the necessary signatures in this portion of the application will result in the application being considered administratively incomplete.

### **1.4 Fees**

**(Tab Name: Fees)**

ORC Section 3745.114(A) requires payment of appropriate fees when the 401 WQC application is submitted. Indicate whether you are exempt from fees. If you are, provide an explanation of how you meet the exemption in the cover letter (Attachment 5.1), provide documentation in the fees section (Attachment 5.2) and skip to Section 1.5. If you are not exempt, complete Section 1, Section 2.2, Section 3.2 and Section 3.3. **Impact review fees for both WQCs and IWPs**



will auto-populate based on data entered in the impact tables from sections 3.4, 3.5 and/or 3.6. It is suggested that you complete the rest of the workbook first and come back to this page to check fee calculations.

**1. Application Fee:** A \$200.00 application fee that must be paid **in full** for **ALL** 401 WQC applications at the time of submittal. A separate \$200.00 application fee must be paid **in full** for **ALL** IWP applications at the time of submittal. Both fees are required if you are applying for both permits. For example, if you are submitting both a 401 WQC and an IWP application, a (\$200.00 + \$200.00) \$400.00 application fee is required at the time of submittal. If you are only submitting a IWP level two review, a \$200.00 fee is due at the time of submittal.

**2. Water Quality Certification Impact Review Fees:** An application review fee amount is calculated based on the alternative that results in the greatest quantity of water resource impact. This is typically the **PREFERRED** Alternative. **One-half of all review fees** must be paid for **ALL** 401 WQC applications at the time of submittal. The remainder of the review fees will be due at the time of final disposition of the application.

- **Wetlands Impact Review Fee:** \$500.00 per acre, with impacts rounded to the nearest hundredth of an acre.
- **Streams Impact Review Fee:** calculated based on the hydrological flow regime of the stream. The hydrological flow regime of each stream on the project site will usually be indicated in the jurisdictional determination (referred to as the JD) letter issued by the USACE. If for some reason the USACE jurisdictional determination letter does not indicate the hydrological classification of an impacted stream, then Ohio EPA will make the final determination.
  - **Ephemeral:** \$5.00 per linear foot of impact;
  - **Intermittent:** \$10.00 per linear foot of impact;
  - **Perennial:** \$15.00 per linear foot of impact.
- **Lakes Impact Review Fee:** \$3.00 per cubic yard of dredged or fill material to be moved.

#### Exceptions to Fee Requirements:

- ORC Section 3745.114(B) places a fee cap of \$25,000.00 on **ALL** 401 WQC applications.
- If the applicant is a county, as governed by Title III of the Ohio Revised Code; a township, as governed by Title V of the Ohio Revised Code; or municipal corporation, as governed under Title VII of the Ohio Revised Code, the fee cap is \$5,000.00. Please submit documentation confirming that you meet the Title II, Title IV or Title V criteria.
- If the applicant is a state agency, fees are waived.
- Fees do not apply to projects that are authorized by Ohio EPA's certification of the nationwide permits. Nationwide permits are defined in ORC Chapter 6111.

**3. State IWP Impact Review Fees:** A fee amount that is calculated based on the quantity of water resource impact. **All review fees** must be paid in full for ALL IWP applications at the time of submittal.

- **Wetlands Impact Review Fee:** \$500.00 per acre, with impacts rounded to the nearest hundredth of an acre.

#### Exceptions to Fee Requirements:

- ORC Section 3745.113 places a fee cap of \$5,000.00 on **ALL** IWP applications.
- Fees do not apply to any agency or department of the state, Counties, as governed by Title III of the Ohio Revised Code; Townships, as governed by Title V of the Ohio Revised Code; and Municipalities, as governed under Title VII of the Ohio Revised Code. Please submit documentation confirming that you are an agency or department of the state or that you meet the Title II, Title IV or Title V criteria.
- If the applicant is a state agency or department of the state, fees are waived.

**4. Fee Submission:** A check for the applicable fees (for a 401 WQC, the full \$200.00 application fee and one-half of the applicable impact review fees. For an IWP, the full \$200.00 application fee and full impact review fees) must be submitted along with the application. The check must be made payable to "Treasurer, State of Ohio." Include the revenue ID number in the check's memo line and provide as Attachment 5.2 of the application.

## 1.5 Other Permit Information (Tab Name: Other Permit Info)

Check the appropriate boxes indicating whether or not other federal, state or local permits are necessary for this project. If a permit is required, select "yes" and indicate the regulatory agency from which the permit is required, the ID number, the date of application, the date the permit was received (if applicable) and the current status of the permit. If a permit is required, but an application has not been submitted, indicate why. If a permit is not applicable, select the "no". Below is a list of federal and state permits commonly associated with 401 WQCs and IWPs. This list is not all inclusive and does not preclude the applicant from providing a comprehensive list of all permits associated with his project.

### Federal Permits

1. **Section 10** – USACE issues Section 10 Permits. Section 10 of the Rivers and Harbors Act of 1899 requires that regulated activities conducted below the Ordinary High Water (OHW) elevation of traditionally navigable waters (TNW) of the United States be approved/permitted by the USACE. Regulated activities include the placement/removal of structures, work involving dredging, disposal of dredged material, filling, excavation or any other disturbance of soils/sediments or modification of a traditionally navigable waterway. Section 10 streams are streams specifically designated by Congress to be regulated under the Rivers and Harbors Act of 1899. All Section 10 streams are TNWs, but not all TNWs are Section 10 streams.

The USACE Huntington District Office provides a list of [Section 10 streams](#) located within Ohio. Please be aware that this list does not segregate streams according to each USACE District.

2. **Section 404** – USACE issues Section 404 Permits. Section 404 of the CWA (33 United States Code 1344) requires regulation of the discharge of dredged and fill material into all waters of the U.S., including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.
3. **Nationwide Permits** – USACE Nationwide Permits (NWP). NWPs are activity specific and are designed to relieve some of the administrative burdens associated with permit processing for both the applicant and the federal government. They provide a simplified, expeditious means of authorization under the various authorities of the USACE. (Current NWPs were published in the March 12, 2007 Federal Register, 72 FR 11092-11198 and are reissued every five years)
4. **Other Federal Permits** – If any other federal permit is required for this project, list it and explain the need/requirement.

### State Permits

DSW Permits – Ohio Environmental Protection Agency Division of Surface Water also issues general and individual National Pollutant Discharge Elimination System (NPDES) permits and permits to install (PTI). The following list is not complete. Refer to the division web page for additional permits.

5. **General NPDES** – A general NPDES permit is one permit that covers facilities that have similar operations and types of discharge. A general NPDES permit is a potential alternative to an individual NPDES permit and affords coverage to new and existing dischargers that meet the eligibility criteria given in the general permit. There are several types of NPDES general permits including the NPDES general permit for storm water discharges associated with construction activities (Construction General Permit or CGP), the general NPDES permit most often associated with 401 WQCs and IWPs. A complete list of NPDES general permits is available on Ohio EPA's website at: [www.epa.ohio.gov/dsw/permits/gpfact.aspx](http://www.epa.ohio.gov/dsw/permits/gpfact.aspx).
6. **Individual NPDES** – An individual NPDES permit is unique to each facility. The limitations and other conditions in an individual permit are based on the facility's operations, type and amount of discharge, and receiving stream, among other factors. For more information on individual NPDES permits, please visit Ohio EPA's website at [www.epa.ohio.gov/dsw/permits/individuals.aspx](http://www.epa.ohio.gov/dsw/permits/individuals.aspx).

7. **PTI** – A Permit To Install (PTI) is needed when a person wishes to construct any wastewater collection, storage or treatment system or wishes to modify any existing wastewater collection, storage or treatment system.

(<http://www.epa.ohio.gov/dsw/pti/index.aspx>)

**Lake Erie Coastal Permits** - Ohio Department of Natural Resources (ODNR) Office of Coastal Management (OCM) issues Shore Structure Permits, Submerged Lands Leases and Coastal Erosion Area Permits. For more information, see OCM's [Consistency Certification](#) and [Ohio Coastal Management Program Document](#).

8. **A Shore Structure Permit** must be obtained prior to the construction of an erosion, wave or flood control structure along the Ohio shore of Lake Erie. Shore structures commonly include nourished beaches, seawalls, stone revetments, bulkheads, breakwaters, groins, docks, piers and jetties.

([www.ohiodnr.com/Ohio\\_Coast/RegulatoryHome/ShoreStructureGuide2/tabid/9287/Default.aspx](http://www.ohiodnr.com/Ohio_Coast/RegulatoryHome/ShoreStructureGuide2/tabid/9287/Default.aspx))

9. **Submerged Lands Lease** – A Submerged Lands Lease is a contract between a shoreline property owner and the State of Ohio. The lease grants a private or public entity the special use of a portion of Public Trust (i.e. Lake Erie submerged lands) in exchange for a rental fee.

([www.ohiodnr.com/Ohio\\_Coast/RegulatoryHome/SubmergedLandsLeaseGuide3/tabid/9288/Default.aspx](http://www.ohiodnr.com/Ohio_Coast/RegulatoryHome/SubmergedLandsLeaseGuide3/tabid/9288/Default.aspx))

**DMRM Permits** – ODNR Division of Mineral Resources Management (DMRM) issues oil and gas well permits and coal and industrial minerals permits.

10. **Oil and gas well permits** are regulated under provisions of ORC [Chapter 1509](#) and OAC [Chapter 1501:9](#).

([www.ohiodnr.com/tabid/10371/default.aspx](http://www.ohiodnr.com/tabid/10371/default.aspx))

11. **Permitting of coal and industrial minerals mining** is conducted under provisions of ORC Chapters 1513 & 1514, respectively. Additional rules in ORC Chapters 1501:13 and 1501:14 also govern mining permit activities.

(<http://ohiodnr.com/mineral/permbond/tabid/17942/Default.aspx>)

12. **Other Permits (State of Ohio)** – If any other State of Ohio permit is required for this project, list the name of the permit and explain the need/requirement.

13. **Other Permits (local)** – If any other local permit is required for this project, list the name of the permit and explain the need/requirement.
-

## SECTION 2: Project Information

(Tab Name: Project Information)

Information asked for in this section applies to all 401 WQC and IWP applications (all levels of review) unless indicated otherwise.

### 2.1 Project Overview

**1. Project Name:** Title the project with an obvious project (site) name. The Project Name will be used when entering the project into the 401 database, as well as, in all correspondence referencing the project. Be sure this title is consistent with other agency applications for the same project.

**2. Project Purpose and Activity:** Provide a technically accurate narrative description of the proposed project purpose, entire activity and associated impacts, both permanent and temporary, including areas outside of jurisdictional and non-jurisdictional waters (use your preferred alternative to provide project details). Your description should include, but not be limited to the following points, as applicable:

- Numbers, locations and dimensions of existing and proposed buildings, structures and facilities to be built on the site;
- Numbers, locations and dimensions of proposed fill and structures to be placed below the ordinary high water mark within waters of the State, including waters of the U.S.;
- The location and dimension of all associated access roads, work staging areas and structures to be constructed on fill, piles or floating platforms in waterbodies. Indicate if the structures are permanent or temporary. If temporary, provide a schedule or otherwise describe how long they will be placed in waterbodies, and how the site will be revegetated, restored or otherwise reconditioned on their removal;
- Indicate where, for what purpose and for how long temporary or permanent dewatering or water diversions will occur;
- The number of streams that will be impacted (crossings, filling, rerouting, etc.) and the linear footage of each stream impact;
- The number of wetlands that will be impacted (crossing, filling, etc.) and the acreage of each wetland impact;
- The number of other water bodies that will be impacted and the total linear feet of shoreline, total square feet of lake bottom, cubic yards of fill to be placed below the ordinary high water mark, and average lakeward extent (in linear feet) of proposed project.;
- The acreage and location of tree and land clearing;
- The number, size, and location of storm water detention ponds; and
- The linear feet and width of proposed roadways, bridges, parking lots, etc.

If the minimal degradation alternative differs from the preferred alternative with regard to the project purpose and activity, describe those differences here.

**Example:** The applicant proposes to construct a commercial and residential development. The site comprises \_\_\_\_\_ square feet (ft<sup>2</sup>) of commercial space and \_\_\_\_\_ condominium and apartment residential units. The commercial space consists of \_\_\_\_\_ ft<sup>2</sup> of commercial retail space; \_\_\_\_\_ ft<sup>2</sup> of medial office space; \_\_\_\_\_ ft<sup>2</sup> of corporate office space; and \_\_\_\_\_ ft<sup>2</sup> of hotel space. The project also involves the construction of \_\_\_\_\_ ft of internal roadways; \_\_\_\_\_ parking lots totaling \_\_\_\_\_ square feet; and \_\_\_\_\_ storm water ponds totaling \_\_\_\_\_ square feet.

The project will impact \_\_\_\_\_ # wetlands, totaling \_\_\_\_\_ acres from the construction of buildings and parking lots and \_\_\_\_\_ linear feet of streams from the construction of \_\_\_\_\_ foot wide roadways. One acre of trees will be cleared on the site.

The minimal degradation alternative differs from the preferred alternative in the following details: The site will comprise \_\_\_\_\_ (less) ft<sup>2</sup> of commercial space and \_\_\_\_\_ (fewer) condominium and apartment units. The commercial space consists of \_\_\_\_\_ (less) ft<sup>2</sup> of commercial retail space; \_\_\_\_\_ (less) ft<sup>2</sup> of medial office space; \_\_\_\_\_ (less) ft<sup>2</sup> of corporate office space; and \_\_\_\_\_ (less) ft<sup>2</sup> of hotel space. The project also involves the

construction of \_\_\_\_ ft of internal roadways; \_(fewer)\_ parking lots totaling \_\_\_\_ square feet; and \_\_\_\_ storm water ponds totaling \_\_\_\_ square feet.

The project will impact \_(lesser #)\_ wetlands, totaling \_(less)\_ acres from the construction of buildings and parking lots and \_(less)\_ linear feet of streams from the construction of \_\_\_\_ foot wide roadways. One acre of trees will be cleared on the site.

**3. Site Description of Project Area:** Describe what the proposed project area looks like. Describe the predominant vegetation, the topography, if the site is located in a rural or urban setting, if the site was previously disturbed by past activities (such as grazing, farming or mining), and if the site is adjacent to a roadway, to industrial activity or to farming activities. Include the types of water bodies present on the site. Provide Existing Conditions Mapping as Attachment 5.7. For Existing Conditions Mapping information, see page 40 of these instructions.

## 2.2 Project Location

**Provide specific information relating to the location of your proposed project.**

**1. Project Location:** Indicate the location on land where activity is being proposed. Determine the project coordinates for the center point of your project in degrees, minutes, seconds using <http://findlatitudeandlongitude.com/> or <http://www.google.com/earth/index.html>.

Example: Degrees Minutes Seconds: Latitude: 395740N Longitude: 0825956W

For Latitude, "395740N" means 39 57 40, or "39 degrees, 57 minutes, 40 seconds N (north)"

For Longitude, "0825956W " means "082 59 56 W", or "82 deg, 599 min, 56 sec W (west)" - note that the first three digits go together.

This will be converted to decimal degrees automatically in the next cells.

Example: Degrees Minutes Seconds: Latitude: 39-57'40" N Longitude: 082-59'56" W will be automatically converted to Decimal Degrees: Latitude: 39.9611755 Longitude: -82.9987942.

**2. Total Project Acreage:** Provide the acreage of the entire project area.

**3-8. Location Information:** For every project provide a street address or closest point of reference including the nearest intersection referencing both street names; township; city; county; state and zip code.

**9. Directions to Project Site:** Provide directions to the site. Use a known location or landmark and include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site.

**10. Other Project Location Information:** Provide other project location descriptions. You may also provide a description of the proposed project location, such as lot number, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of the Muskingum River, one mile upstream from the mouth). If available, provide the Tax Parcel Identification number of the site, Section, Township and Range of the site (if known), and/or local Municipality that the site is located in.

**11-13. Hydrologic Unit Code (HUC):** Provide the Hydrologic Unit Code (HUC) 8/10/12 digit. If the project is on a stream for which there is a River Mile map or on Lake Erie, also provide a River Mile or Shoreline Mile using <http://www.epa.ohio.gov/dsw/gis/RiverMileSystem.aspx>.

To determine your 8-digit, 10-digit and 12-digit, HUC code:

- Ohio EPA's 2010 Integrated Report: [http://www.epa.ohio.gov/portals/35/tmdl/2010IntReport/Section%20K%20-%20HUC8\\_basemap.pdf](http://www.epa.ohio.gov/portals/35/tmdl/2010IntReport/Section%20K%20-%20HUC8_basemap.pdf) or
- Ohio EPA's Query Map by Location: <http://gis.epa.ohio.gov/map.php> or
- Ohio EPA's List of River Basins in Ohio: <http://wwwapp.epa.ohio.gov/dsw/ir2010/basin.php>.

**14. Watershed Name:** Project location must also include information about the watershed. The watershed name(s) will auto-populate based on the 8-10-12-digit HUC codes entered. To verify this information, if you know the stream name, the watershed name is referred to as “River Basin” on this webpage: <http://wwwapp.epa.ohio.gov/dsw/ir2010/search.html>. To use the project location zip code to identify the watershed, use U.S. EPA’s Surf Your Watershed webpage: <http://cfpub.epa.gov/surf/locate/index.cfm>. To use a map to identify the watershed, use the USGS Science in Your Watershed map: [http://water.usgs.gov/wsc/map\\_index.html](http://water.usgs.gov/wsc/map_index.html).

## 2.3 General Project Questions

**1. Total Maximum Daily Load (TMDL):** TMDLs are developed as a step towards achieving water quality standards in waters where the standards are not being met. The purpose of WQS is to protect public health and wellbeing and ensure that public water resources can be utilized to their full potential.

Select yes or no to indicate whether or not the project site is within a watershed that has a (TMDL) report issued for it. If you selected yes, list the name of the TMDL watershed. Use this map to determine if your project is located in a watershed in which a TMDL assessment was conducted: <http://wwwapp.epa.ohio.gov/dsw/gis/tmdl/>. Attachment 5.11 shall include copies of the applicable portions of the TMDL that identify pollutants of concern and recommended actions for the HUC that contains the project site.

**2. Placement of Dredged Material?** Select yes or no to indicate whether the project involves the placement of dredged material within the project site.

**2.1. Material will be dredged from what location?** Provide a narrative explanation describing the origin of the dredged material. Include information about the type, quantity and grain size of the dredged material, as well as an explanation of why material is being dredged.

**2.2. Where Will Dredged Material Be Placed?** Provide a narrative explanation describing where dredged material will be placed onsite. Provide the following: a materials management plan; a materials sampling plan (including sample locations; sample map; sample type, number and frequency requirements; sample timing and sample report timing and list of references); and, sample results report.

**3. Has Project Been Started or Completed?** Select yes or no to indicate whether or not any portion of the project has already been started or completed. This is not limited to activities within waters of the state. It includes tree cutting, clearing and grading in upland areas. Explain in detail the activities that have been started or completed.

**4. Unauthorized Impacts?** Select yes or no to indicate whether or not impacts to waters have already occurred on the site from construction or earth disturbance activities. If waters have been impacted prior to receiving a permit, provide details including the waterbody identification (name), the extent to which impacts have occurred (e.g., length (in linear feet) of stream impacted, the acreage of wetland impacted, etc.) and a description of the work that has been done. If you have indicated that this is an after-the-fact permit application (A.2.5), you must complete this section. Provide an as-built drawing. As-built drawings are the amended "as-designed" drawings revised to show the project as the contractor built and constructed it. The as-built drawings include modifications during construction, field requested changes, shop drawing modifications and contractor designs. Refer to page 40 in these instructions for general instructions for drawings.

**5. Is the Project Part of a Phased Development?** Select yes or no to indicate whether the project will be constructed in multiple phases. If so, provide details as indicated on the overall development plan for the entire project. Provide the anticipated water resource impacts associated with each phase. Provide the proposed or actual start date and the anticipated completion date for each phase. Provide the number of phases in the overall development, explain which phases have already been started or completed, and explain and provide details if phases have already been permitted.

**6. Has Information Changed from Pre-Application?** Select yes or no to indicate whether or not changes or revisions have been made to the information supplied to the agency during the pre-application meeting or site visit. If no pre-application meeting was held, select “NA”. If changes were made to the pre-application materials, provide a list of what has been changed. Make sure the updated information is included in the appropriate section of the application, such as updated maps, assessment forms, water resources/impact tables, etc.



## 2.4 Section 401 and State Isolated Wetland Level Three Project Questions

**Information asked for in this section applies to 401 WQC and IWP level three applications only. It will only be visible on the application form when “yes” is selected in Section A.2.1 or A.2.4.**

**1. Human Health Impacts:** Describe in detail how the project adversely impacts human health. The discussion should consider how the placement of dredge or fill material may impact human health. Typical considerations include, but are not limited to, whether the fill material is contaminated and could reach a human receptor and whether the placement of fill may result in contamination of a public water supply.

**2. Conservation Projects:** To the extent that information is available, list and describe any government and/or privately sponsored conservation projects that exist or may have been formed to specifically target improvement of water quality or enhancement of recreational opportunities on the affected water resource. Such projects may be found by searching for, but are not limited to, the following:

- WAP: Watershed Action Plan (WAP): Watershed coordinators across Ohio work with diverse partnerships of stakeholders to develop and implement watershed action plans (WAPs), which are reviewed and endorsed by Ohio Department of Natural Resources (ODNR) Division of Soil and Water Conservation, and Ohio EPA Division of Surface Water.

The goal of each plan is to restore and maintain the chemical, physical and biological integrity of water resources within the watershed. Implementation of these plans can include:

- targeting of “best management practices”;
  - installation of restoration projects such as dam removal and stream restoration;
  - upgrading local land use policies; and/or
  - protection of high quality resources through easement purchase and other voluntary set-aside programs.
- Ohio Department of Natural Resources, Ohio Watershed Program: <http://www.dnr.state.oh.us/tabid/9192/Default.aspx>
  - Watershed Action Plan Endorsement Status Map: [http://www.dnr.state.oh.us/portals/12/water/watershedprograms/Endorsement\\_Status\\_Map\\_8\\_2010.pdf](http://www.dnr.state.oh.us/portals/12/water/watershedprograms/Endorsement_Status_Map_8_2010.pdf)
  - Endorsed Watershed Action Plans: [ftp://ftp.dnr.state.oh.us/Soil & Water Conservation/WatershedActionPlans/EndorsedPlans/](ftp://ftp.dnr.state.oh.us/Soil%20&%20Water%20Conservation/WatershedActionPlans/EndorsedPlans/)
  - Conditionally Endorsed Watershed Action Plans: [ftp://ftp.dnr.state.oh.us/Soil & Water Conservation/WatershedActionPlans/Conditionally%20Endorsed%20WAP](ftp://ftp.dnr.state.oh.us/Soil%20&%20Water%20Conservation/WatershedActionPlans/Conditionally%20Endorsed%20WAPs/TMDL)
  - TMDL Program: <http://www.epa.ohio.gov/dsw/tmdl/index.aspx>
  - TMDL Project Status Map: <http://wwwapp.epa.ohio.gov/dsw/gis/tmdl/>
  - Surface Water Enhancement, Restoration and Protection (SWERP) Clearinghouse: The purpose of the SWERP Clearinghouse is to serve as a networking tool to facilitate the identification and implementation of potential surface water improvement and protection projects that include restoration, protection or enhancement projects. It is intended to facilitate the process of identifying potential projects that may be selected as compensation for environmental impacts to surface waters throughout Ohio. It includes options submitted by land owners, government agencies, watershed coordinators and others that may result in improvement and/or protection of streams, wetlands and lakes. <http://www.epa.ohio.gov/dsw/swerp/index.aspx>
  - Ohio Watersheds Online: Ohio Watershed Network’s link to Watershed Groups in Ohio. Through the link, find more than 100 Ohio watershed groups, who may have information about conservation projects occurring in the watershed. <http://ohiowatersheds.osu.edu/>

**3. Public Need** Select “applicable” if impacts are proposed to category 3 wetlands. Select “not applicable” and skip to question 2.4.4 if no impacts to category 3 wetlands are proposed. The wetland designated use shall be maintained and protected in wetlands assigned to category 3, and no lowering of water quality shall be allowed, unless it is demonstrated to the satisfaction of the director that the proposed activity is necessary to meet a demonstrated public need, as defined in OAC rule [3745-1-50](#) and the wetland is not scarce regionally and/or statewide, or if the wetland is scarce, the project will cause only a short-term disturbance of water quality that will not cause long-term detrimental effects.

In addition to and different from the demonstration of social and economic justification (SEJ), impacts to category 3 wetlands are not allowable unless the applicant demonstrates the proposed activity is necessary to meet a demonstrated public need, as defined in rule OAC 3745-1-50, which states "Public need means an activity or project that provides important tangible or intangible gains to society, that satisfies the expressed or observed needs of the public where accrued benefits significantly outweigh reasonably foreseeable detriments." Thus, public need is defined in terms of societal gains and losses, not the local gains and losses discussed in the SEJ demonstration in Section 3.7.

**4. Adverse Impacts:** When making determinations regarding proposed activities that lower water quality, the director shall consider the extent to which resources or characteristics are adversely impacted by the lowering of water quality are unique or rare within the locality or state. Therefore, the applicant should identify if any streams or wetlands within the project area are scarce regionally and/or statewide. Examples of scarce wetlands would include bogs, fens or other water bodies that support characteristics that make it unique or rare.

## **2.5 State Isolated Wetland Level One Project Questions**

**Information asked for in this section applies to IWP levels one and two review applications only. It will only be visible on the application form when "yes" is selected in Section A.2.2 and A.2.3.**

**1. Acreage Subject to Filling:** Describe in detail the impacts to isolated wetlands on the proposed project site. The discussion should include:

- The wetland ID, total wetland acreage, type (category, vegetation class, etc.) and acreage of each wetland that will be impacted (permanent and "temporary" impacts must be included);
- Loss of habitat within the affected portion of wetland;
- The potential impacts to wetland biota, including amphibians; and
- The overall quality of the aquatic community structure of the affected water body(ies) and if it will be adversely impacted.

**2. Project Map:** Provide the following as Attachment 5.9.1. Refer to the *Drawing and Map Guidance* on page 40 of these instructions for more detailed information about what to include on the map.

The Project Map must be super-imposed on a base map that includes a high resolution aerial photograph of the project site showing all water resource boundaries (streams, wetland and other water bodies) identified and labeled:

- a) A north arrow, legend and ruler-type scale bar
- b) The site boundaries
- c) The project (construction limits) boundaries
- d) The final constructed design for the project showing all buildings, structures, roads, parking lots, etc.
- e) All temporary sediment basins (including direction of storm water flow and discharge locations)
- f) All post-construction storm water management features such as detention/retention basins, etc (indicate the direction of flow and discharge points for storm sewers, detention basins, etc.)
- g) All existing and proposed post-development easements, covenant areas or land use restrictions
- h) All proposed impacts and
- i) Any upland buffer areas that will remain post-construction clearly identified.

**Topographic Map:** Provide the following as Attachment 5.9.2. If submitting additional maps, continue labeling them in chronological order.

## **2.6 State Isolated Wetland Level Two Project Questions**

**Information asked for in this section applies to IWP level two review applications only. It will only be visible on the application form when "yes" is selected in Section A.2.3.**

**Applicants must answer questions and provide maps as indicated in Section 2.5 above in addition to answering the following questions.**



**1. Analysis of Practicable On-Site Alternatives:** Describe in detail how impacts to wetlands have been avoided to the greatest extent practicable. This should include an examination of off-site locations and on-site design considerations that would allow you to reach your project goals with less impact to the wetland ecosystem.

**2. High Quality Waters Avoidance:** Determine if high quality waters (as defined in OAC rule [3745-1-05](#)) are located on the project site and if so, describe how they are to be avoided and impacts minimized by the proposed filling of the isolated wetland(s). Items to consider:

- The acreage and type of wetlands that will be impacted (permanent and temporary impacts must be included)
- Loss of habitat within the affected portion of wetland
- The potential impacts to wetland biota, including amphibians and macroinvertebrates
- Indicate the overall quality of the aquatic community structure of the affected wetland(s) and if it will be adversely impacted
- Discuss if the project will result in the elimination of aquatic life from the affected portion of the water body, or if the number of species will decline. (Ohio EPA may request biological monitoring on a case-by-case basis to evaluate this question.)

**3. Buffer Avoidance:** Describe the current wetland buffers on the project site and explain how they will be maintained on the project site. Wide buffers of 50 meters or more are preferred. Medium buffers average 25 meters to less than 50 meters. Narrow buffers average 10 meters to less than 25 meters. The key concept is whether the buffer area, whatever it is currently, functions and will continue to function post-impact to protect the wetland from degradation.

**4. Wetlands Are Not Locally and Regionally Scarce and Not Containing Threatened or Endangered Species:**

Provide documentation and a narrative explanation that the wetland(s) to be filled are not locally or regionally scarce and do not contain rare, threatened or endangered species. You may wish to refer to the National Heritage Database ([www.dnr.state.oh.us/tabid/2010/default.aspx](http://www.dnr.state.oh.us/tabid/2010/default.aspx)) which contains 19,000 records which represent known locations for Ohio's rare plants and animals, high quality plant communities and other natural features; U.S. Fish and Wildlife Service endangered species program homepage for summary lists of endangered and threatened species in Ohio and Region 3 at [www.fws.gov/endangered/](http://www.fws.gov/endangered/); and contact U.S. EPA Region 3 Headquarters [www.epa.gov/aboutepa/region3.html](http://www.epa.gov/aboutepa/region3.html).

**5. No Significant Degradation to Aquatic Ecosystem:** Explain how the project impacts would not result in significant degradation to the aquatic ecosystem.

**6. Post-Development Storm Water Plan:** Describe in detail the plans necessary to manage post-construction storm water runoff at the development site. Provide details on all best management practices that are anticipated to be used, all sediment/detention/retention basins to be used, all storm water quality improvement features to be incorporated into the storm water plans and all storm water discharge points.

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## **SECTION 3: Alternatives Analysis**

**(Tab Name: Alternatives Analysis)**

### **Alternatives Analysis**

**Information asked for in this section applies to 401 WQC and IWP level three applications only. It will only be visible on the application form when “yes” is selected in Section A.2.1 and A.2.4.**

The entire 401 WQC application review process is driven and organized by the relative impacts of project implementation options on Ohio's water quality. Specifically, per Ohio's antidegradation rule, OAC rule 3745-1-05, the three alternative project proposals required in an application are defined (and presented for public and inter-agency review) by their relative impacts to the quantity and quality of pre-construction water resources.

Sections 3.1 to 3.3 provide detailed project implementation information for each alternative.

Sections 3.4-3.6 are designed to provide Ohio EPA with detailed quantitative data regarding the existing and proposed quantity and quality of water resources on the project site for each alternative presented in Sections 3.1-3.3. For a permit review to be completed the quantity of water resources on the project site must be verified by the USACE and the quality of water resources must be verified by the Ohio EPA. Once these occur, the verified data will be used by Ohio EPA to compare the relative impacts of the three alternatives presented.

In Section 3.7, social and economic criteria are applied to each alternative by the applicant to evaluate and provide detailed justifications for the project.

Based on all of the above, Ohio EPA will evaluate whether the entire content of the alternatives analysis demonstrates that permitting the project will not violate Ohio's water quality standards. Please note that it is not uncommon for the permitted project to be a revised version of either the preferred or minimal degradation alternative based on the results of the technical review.

The following represents the sequence in which proposals shall be approached:

- (1) Avoid – avoid impacts to waters
- (2) Minimize – modify project to minimize impacts to waters
- (3) Alternatives Analysis – document avoidance and minimization
- (4) Mitigate – provide adequate mitigation for the loss of water resource size and function where impacts cannot be avoided

**Avoidance:** Determine if another project site location– that requires less of an impact to water resources, less of an impact to riparian and buffer vegetation, less river bank disturbance, etc. – is practicable. Discuss why an alternative site was not selected. In addition to looking at other project sites, on the chosen project site, describe, in detail, why avoidance of impacts to the stream(s), wetland(s), and/or other waterbody(ies) is not practicable.

**Minimization:** On the chosen project site, describe, in detail, how the project has been modified to minimize impacts to water resources on-site.

**Alternatives Analysis:** To address requirements of the antidegradation rule (OAC rule [3745-1-05](#)), you must submit three alternatives that were considered during the project planning process that would avoid impacts to the aquatic resource(s). The three alternatives shall be referred to as: Preferred Alternative, Minimal Degradation Alternative and Non-Degradation Alternative. Your alternatives must explain the rationale, methods and techniques used to avoid and minimize impacts to the aquatic resource(s) on-site. If it is not possible to avoid or minimize impacts to water resources, provide the reasoning and evidence for that conclusion.

Submission of the following three project alternatives is required:

(Section 3.1) Preferred Alternative – this is the project location and layout that would maximize the applicant's project objectives, but would result in the greatest amount of impacts to the quantity and quality of pre-construction water resources.

(Section 3.2) Minimal Degradation Alternative - this is the project location and layout that would meet the applicant's project objectives while simultaneously resulting in the least impacts to the quantity and quality of pre-construction water resources.

(Section 3.3) Non-Degradation Alternative – this is the project location and layout that would COMPLETELY AVOID impacts to existing water resources and therefore result in NO IMPACTS. Unless the project is water-dependent, the non-degradation alternative cannot be “no build.” For ATF projects, the non-degradation alternative must be the restoration of the impacted water to pre-impact conditions.

**Mitigation:** The purpose of compensatory mitigation is to replace those aquatic ecosystem functions that would be lost or impaired as a result of the project. Compensatory mitigation should be “in-kind” (meaning wetland for wetland, stream for stream) and occur as close to the site of the adverse impact as practicable. The goals of mitigation must be specific, measurable and attainable within a specified timeframe. Typically, the objective is to provide a minimum of functional replacement, i.e. no net loss of functions, with an adequate margin of safety to reflect anticipated success. When submitting the 401 WQC application, be prepared to provide rationale for mitigation site selection and goals. This is discussed further in Section 4 of these instructions.

**NOTE: Maps, Drawings and Plan Views associated with the Preferred, Minimal Degradation and Non-Degradation alternatives shall be submitted as Attachments. Refer to Section 5.8 in these instructions.**

### 3.1 Preferred Alternative

1. **Project Description for the Preferred Alternative:** Provide a narrative description of the proposed project for the preferred alternative. Your preferred alternative should reflect project details as you would prefer them to be. Answer the question: what additional project objectives would be met by implementing this alternative and why would meeting these objectives require more water resource impacts? Provide the proposed or actual start date and the anticipated completion date and the proposed schedule for implementing mitigation. Also provide a brief description of any related activities to be developed as the result of the proposed project.
2. **Avoidance:** Determine if another location– that requires less of an impact to water resources, less of an impact to riparian and buffer vegetation, less river bank disturbance, etc. – is practicable. If it is not possible to avoid impacts to water resources, describe, in detail, why avoidance of impacts to the potential wetland, shoreline and river bottom is not practicable.

Items to consider:

- How could you implement your project without affecting water resources?
- How could the project be re-designed to fit the site without affecting water resources?
- How could the project be made smaller and still meet your needs?
- What other sites were considered?
- What geographical area was searched for alternative sites?
- How did you determine whether other non-wetland sites are available for development in the area?
- What are the consequences of not building the project?
- Are there logistical (location, access, transportation, etc.) reasons that limit the alternatives considered?
- Are there technological limitations for the alternatives considered?
- Are there other reasons certain alternatives are not feasible?
- For Lake Erie projects, how can the project be made smaller? What are the consequences for not building the project?

Wetland Avoidance and Minimization: According to OAC rule [3745-1-54\(D\)\(1\)\(a\)](#), the applicant is required to demonstrate avoidance and minimization by maintaining and protecting the designated use and demonstrating that there is not practicable alternative which would have less adverse impact on the wetland ecosystem and that storm water and water quality controls have been installed to ensure that peak post-development rates of surface water runoff from the impacted wetland site do not exceed the peak pre-development rates of runoff from the on-site wetlands, **for all categories of wetlands**. Water quality improvement measures shall be incorporated into the design of the storm water control measures to the maximum extent practicable.

OAC rules [3745-1-54](#)(D)(1)(b) and (c) require the applicant to demonstrate avoidance and minimization of impacts to category 2 and category 3 wetlands through an evaluation of following criteria .

- The spatial requirements of the project;
- The location of existing structural or natural features that may dictate the placement or configuration of the proposed project;
- The overall and basic purpose of the project and how the purpose relates to the placement, configuration or density of the project;
- The sensitivity of the site design to the natural features of the site, including topography, hydrology and existing flora and fauna; and
- Direct and indirect impacts.

When evaluating these criteria, the applicant shall discuss the overall project design including, but not limited to, the square footage of building and structures, number of homes, number of parking spaces and other factors that would determine the project's overall footprint, how the project related to sensitive environmental features, and how the project footprint has, or may be altered to avoid and minimize impacts to category 2 and category 3 wetlands.

- 3. Minimization:** Describe, in detail, how the project has been modified to minimize impacts to water resources on-site. It is often the case that "minimization" means the reduction in the size or area of the impacts from what the applicant would prefer. However, "minimization" may also mean impacts to a lower quality resource when higher quality waters are located on-site; use of best available technologies and designs that are implemented specifically to address water quality on-site; use of native vegetation or bio-engineering techniques for stabilization; structural selections that are low impact (for instance, a three-sided boxed culvert for a road crossing is less damaging than a pipe); or, any measure taken to maintain and/or improve lost water functions on-site that goes above and beyond the post-construction best management practices required.

Items to consider:

- Determine how the footprint of the project site can be minimized so that there is less of an impact to water resources, less of an impact to riparian and buffer vegetation and less river bank disturbance.
- Explain how water quality will be maintained after the proposed project is complete in order to serve beneficial uses and pre-construction hydrologic functions of waters within the project area.
- Determine if road widths can be minimized.
- Determine if structure size can be reduced or location can be changed.

- 4. Magnitude of the Proposed Lowering of Water Quality:** Describe in detail the direct impacts to streams and wetlands on the project site.

The streams discussion should include:

- The linear footage and types of streams that will be impacted (permanent and temporary impacts must be included);
- The loss of habitat within the affected segment of stream;
- The potential impacts to stream biota, including fish and benthic macroinvertebrates;
- Indicate the overall quality of the aquatic community structure of the affected water bodies and if it will be adversely impacted; and
- Discuss if the project will result in the elimination of aquatic life from the affected portion of the water body, or if the number of species will decline or composition of aquatic species will switch from pollution intolerant to pollution tolerant species. Ohio EPA may request biological monitoring on a case-by-case basis to evaluate this question.

The wetlands discussion should include:

- The acreage and type of wetlands that will be impacted (permanent and temporary impacts must be included);
- Loss of habitat within the affected portion of wetland;
- The potential impacts to wetland biota, including amphibians and macroinvertebrates;
- Indicate the overall quality of the aquatic community structure of the affected water body(ies) and if it will be adversely impacted; and

- Discuss if the project will result in the elimination of aquatic life from the affected portion of the water body, or if the number of species will decline. Ohio EPA may request biological monitoring on a case-by-case basis to evaluate this question.

- 5. Technical Feasibility and Cost Effectiveness:** Discuss in detail the technical feasibility of the preferred alternative including any required technology to implement the preferred alternative, the resources necessary to implement the preferred alternative, and the availability of the required technology and resources. Then discuss the economic and operational feasibility of the preferred alternative, i.e. the cost effectiveness of implementing the preferred alternative. Discussion points should be the one-time costs, such as the construction costs (such as wages, equipment, etc.), but not the recurring costs, such as operation and maintenance costs (wages, supplies, etc.), of the preferred alternative.
- 6. Cumulative Impact:** Describe the impacts proposed in context with other past, present and reasonably foreseeable future development in the watershed. Discuss the spatial and temporal aspects of both direct and indirect impacts to water resources within the watershed. Any project where mitigation is physically occurring outside the watershed will have a negative cumulative impact on the project's watershed.
- 7. Indirect Impacts:** Describe indirect impacts associated with activities proposed on the project site. When considering indirect impacts to streams, consider impacts outside of the area of direct impacts. For streams, this includes examining potential adverse impacts to physical habitat and aquatic species both upstream and downstream from the footprint of the project. Types of indirect impacts include but are not limited to, creating a barrier to the movement of aquatic organisms, elimination or reduction of riparian buffers or creating instability resulting in aggradation or degradation to the stream bed.

Items to consider:

- Indirect changes in streambed slope, cross sectional dimension or area, vegetation and/or surfacing;
- Changes in the drainage patterns and potential impacts to onsite and downstream waterbodies, including groundwater; and
- Temporary or permanent dewatering or water diversions.

Indirect impacts to wetlands include loss of buffer, elimination of wetlands functions and values described in OAC 3745-1-51 through the loss of buffers, changes in wetland hydrology, etc.

- 8. Construction Storm Water Management Plans:** Describe in detail the plans necessary to manage storm water runoff during construction of the development. Provide details on all best management practices that are anticipated to be used, all sediment/detention/retention basins to be used during construction of the project and all storm water discharge points. Include the applicable sections or pages from the Storm Water Pollution Prevention Plan (SWP3)<sup>1</sup> (but don't submit the entire SWP3).
- 9. Post-Construction Storm Water Management Plans:** Describe in detail the plans necessary to manage storm water runoff post-construction of the development. Provide details on all best management practices that are anticipated to be used, all sediment/detention/retention basins, all storm water quality improvement features to be incorporated into the storm water plans, and all storm water discharge points. This description should be consistent with the scaled drawing. Submit conceptual plans if engineered drawings are not available.

### 3.2 Minimal degradation Alternative

Refer to the more detailed instructions provided in the Preferred Alternative when responding to the minimal degradation alternative questions.

<sup>1</sup> For more information on storm water pollution prevention practices, refer to *Protecting Natural Wetlands: A Guide to Storm Water Best Management Practices*: [www.epa.gov/owow/wetlands/pdf/protecti.pdf](http://www.epa.gov/owow/wetlands/pdf/protecti.pdf), *Rainwater and Land Development Manual: Ohio's Standards for Storm Water Management Land Development and Urban Stream Protection*: [www.dnr.state.oh.us/tabid/9186/default.aspx](http://www.dnr.state.oh.us/tabid/9186/default.aspx), and Ohio EPA, Division of Surface Water's Construction Storm Water Program: [www.epa.ohio.gov/dsw/storm/construction\\_index.aspx#Construction%20General%20Permit](http://www.epa.ohio.gov/dsw/storm/construction_index.aspx#Construction%20General%20Permit)

1. **Provide a project description for the minimal degradation alternative.** Your minimal degradation alternative should represent a less environmentally-damaging or scaled-down version of the project that would result in less damage to surface water quality and still meet your project goals. Answer the question: What are the minimum project objectives that must be met and why can't they be met without water resource impacts?
2. **Minimization:** Describe, in detail, how the project has been modified to minimize impacts to water resources on-site. See Section 3.1.3 of these instructions.
3. **Magnitude of the Proposed Lowering of Water Quality:** Describe in detail the direct impacts to streams and wetlands on the project site. See Section 3.1.4 of these instructions.
4. **Technical Feasibility and Cost Effectiveness:** See the instructions in Section 3.1.5 of these instructions.
5. **Cumulative Impact:** See Section 3.1.6 of these instructions.
6. **Indirect Impacts:** See Section 3.1.7 of these instructions.
7. **Construction Storm Water Management Plans:** Provide as Attachment 5.16 if they are different from the Preferred Alternative Designs. See Section 3.1.8 of these instructions.
8. **Post-Construction Storm Water Management Plans:** Provide as Attachment 5.16 if they are different from the Preferred Alternative Designs. See Section 3.1.9 of these instructions.

### ***3.3 Non-Degradation Alternative***

1. **Is the project water dependent?** Only if the project must be located entirely within water to fulfill the basic project purpose, meaning that it is a water-dependent activity, may this alternative be proposed as a no-build alternative. However, if the final project purpose requires a land-base, this is not a water-dependent project and a no-build alternative cannot be proposed. Select yes to indicate that the project is water-dependent or no to indicate that the project is not water dependent. If the project is not water-dependent, complete information requested below. If project is water-dependent, do not complete the information requested below. Instead, explain how the project meets the definition of water dependent.
2. **Provide a project description for the non-degradation alternative.** Your non-degradation alternative should represent a further scaled-down version of the project that would result in NO damage to surface water quality and still meet your project goals. Answer the question: Why is complete avoidance of water resource impacts not practicable?
3. **Minimization:** Describe, in detail, how the project has been modified to minimize impacts to water resources on-site. See Section 3.1.3 of these instructions.
4. **Technical Feasibility and Cost Effectiveness:** See Section 3.1.5 of these instructions.
5. **Construction Storm Water Management Plans:** See Section 3.1.8 of these instructions.
6. **Post-Construction Storm Water Management Plans:** See Section 3.1.9 of these instructions.

### ***Section 3.4 – 3.6 Impact Tables***

***Information asked for in these sections applies to all 401 WQC and IWP applications (all levels of review) unless indicated otherwise.***



Fill out the Resources and Impact Comparison Tables as they apply to the project. If there is a stream(s) or wetland(s) on the project site, even if there are no impacts proposed for that water resource, you must complete and submit the applicable table(s).

### **3.4 Stream Impact and Comparison Table(s)**

**(Tab Name: Stream Impact Table)**

**Information asked for in this section applies to 401 WQC applications only. A majority of this information will be automatically populated based on data entered in previous sections of the application form.**

1. **Applicant Name:** This information will be auto-populated based on the data entered in Section 1.1.2 of the application.
2. **Project Name:** This information will be auto-populated based on the data entered in Section 2 of the application.
3. **Jurisdictional Determination Letter Dated:** Provide the date of the USACE Jurisdictional Determination Letter.
4. **12-Digit Hydrologic Unit Code:** This information will be auto-populated based on the data entered in Section 2 of the application.
5. **Date:** Enter the date you completed the form.
6. **Ohio EPA ID#:** This information will be auto-populated based on the data entered on the cover page of the application.
7. **Total Project Acreage:** This information will be auto-populated based on the data entered in Section 2 of the application.
8. **Watershed Name:** This information will be auto-populated based on the data entered in Section 2 of the application.
9. **Revision Number:** This information will be auto-populated based on the data entered on the cover page of the application.
10. **Revision Date:** This information will be auto-populated based on the data entered on the cover page of the application.

#### **Table Data**

**Stream ID:** Each stream on-site shall be identified and listed individually in the table – whether it is proposed to be impacted or not.

**Jurisdictional Determination:** Indicate whether the stream is jurisdictional by selecting “yes” for jurisdictional and “no” for not jurisdictional. A jurisdictional determination (JD) is the process of identifying and locating jurisdictional Waters of the United States (including wetlands) regulated by the USACE under Section 404 of the CWA. An approved JD will be documented in a letter from the USACE and/or on a plat that clearly identifies the jurisdictional area and contains a verification statement dated and signed by a USACE Regulatory Official.

- USACE Regulatory Guidance Letter regarding JDs:  
<http://www.usace.army.mil/CECW/Documents/cecwo/reg/rgls/rgl08-02.pdf>
- To determine which USACE office you should contact: [http://www.usace.army.mil/cecw/pages/cecwo\\_reg.aspx](http://www.usace.army.mil/cecw/pages/cecwo_reg.aspx)

To obtain a JD from the USACE, contact your local USACE regulatory district office:

- Buffalo District: <http://www.lrb.usace.army.mil/regulatory/wetlands/JDchecklist.doc>
- Huntington District: <http://www.lrh.usace.army.mil/>
- Pittsburgh District: <http://www.lrp.usace.army.mil/or/or-f/PGH%20JDRequest.pdf>

- Louisville District: <http://www.lrl.usace.army.mil/>

**Stream Flow Type:** Select the appropriate type of stream flow: ephemeral (E), intermittent (I) or perennial (P).

**Use Designations:** Select the stream's use designation when the stream has been assigned that use. If a stream has not been assigned a use, then select "UD" (undesignated) and describe the existing use(s) of the stream in section 5.6.1.

**Water Quality Use Designations** describe existing or potential uses of water bodies. Ohio EPA assigns beneficial use designations to water bodies in the state. There may be more than one use designation assigned to a water body. Examples of beneficial use designations include: public water supply, primary contact recreation and aquatic life uses (warmwater habitat, exceptional warmwater habitat, etc.).

Use designations are defined in paragraph (B) of OAC rule 3745-1-07: <http://www.epa.ohio.gov/portals/35/rules/01-07.pdf>

Each of the rules in OAC rules 3745-1-08 to 3745-1-32 covers a major drainage basin. Use designations are assigned in OAC rules 3745-1-08 to 3745-1-32. Use the Water Body Use Designation Index on that page to find the rule number and page number of your water body of interest: [http://www.epa.ohio.gov/dsw/rules/3745\\_1.aspx#use%20designations](http://www.epa.ohio.gov/dsw/rules/3745_1.aspx#use%20designations)

#### **Aquatic Life Habitat designations**

- Warmwater habitat (WWH)
- Exceptional warmwater habitat (EWH)
- Modified warmwater habitat (MWH)
- Seasonal salmonid habitat (SSH)
- Coldwater habitat (CWH)
- Limited resource water (LWR)

#### **Water Supply**

- Public water supply (PWS)
- Agriculture water supply (AWS)
- Industrial water supply (IWS)

#### **Recreation**

- Bathing waters (BATH)
- Primary contact (PCR)
- Secondary contact (SCR)

**Antidegradation Designation:** Select the stream's antidegradation category.

Provisions addressing antidegradation are in [OAC Chapter 3745-1](#). Within that chapter, rule [3745-1-54](#) addresses antidegradation provisions for wetlands and rule [3745-1-05](#) addresses antidegradation provisions for other surface waters of the state.



**Table 1.** The following is a list of Ohio's antidegradation categories, key attributes of that category and the associated practical impacts regarding activities involving that water resource.

<i>Category</i>	<i>Key Attributes or Why a Water Would be Designated in the Category</i>	<i>Practical Impacts Bold=Stream Segments/Miles Classified in Rule</i>
Outstanding national resource water	Water has unique attributes and has national significance; may not be adequately protected by beneficial use classification system	Very restrictive, no lowering of water quality permitted (exceptions allowed for short term disturbances) <b>Zero Miles</b>
Outstanding state waters (exceptional ecological value (Tier 2+))	Water is among the very best within Ohio; supports very diverse aquatic life and endangered or threatened species	70% set aside implemented to preserve water quality near existing condition; more stringent pollution controls for new sources; social/economic justification (SEJ) needed to lower water quality <b>36 stream segments, 1,113 miles</b>
Outstanding state waters (exceptional recreational value) (Tier 2+)	Water body supports highly valued or unique recreational usage	Set asides are not in effect; all activities covered by the rule must comply with special provisions to ensure there is no increase in bacteriological pollution and to minimize floating debris and other aesthetic problems (OAC 3745-1-05(C)(6)(e)) <b>2 stream segments, 119 miles</b>
Superior high quality waters (Tier 2+)	Supports diverse aquatic life and endangered or threatened species	35% set aside implemented to preserve water quality above the minimum standards required under beneficial use; more stringent pollution controls for new sources; SEJ needed to lower water quality <b>121 stream segments, 1,320 miles</b>
State resource waters – general high quality waters (Tier 2)	Diversity of aquatic life unknown or typical of a warmwater community; water body listed in 1978 (or later) as SRW based on adjacent park or preserve	Must meet applicable standards, required an SEJ and determination of need before water quality is lowered; special attention to review criteria in OAC 3745-1-05(C)(5)(d) is provided <b>487 stream segments from prior rule making designations</b>
General high quality waters (Tier 2)	Supports typical aquatic life community	Must meet applicable standards, requires an SEJ and determination of need before water quality is lowered <b>57,970 miles</b>
Limited quality waters	Waters with use attainability analysis completed with beneficial use designation assigned as limited resource water, limited warmwater or modified warmwater habitat; category one wetlands	Must meet applicable standards, but no SEJ review needed to lower water quality.

**Stream Assessment(s):** Provide the available data for all of the streams on-site, including streams proposed to be impacted. Select the type of assessment that was conducted and provide the score. If an additional assessment was conducted, select “yes”, indicate the type of assessment and provide the score.

To determine stream watershed acreage, use the interactive map of Ohio on the United States Geological Survey’s (USGS) [StreamStats webpage](#). StreamStats allows users to easily obtain stream flow statistics, basin characteristics such as drainage area, and descriptive information. The basin functions allow users to determine drainage area and watershed size, which will determine what type of habitat assessment will be necessary (e.g., HHEI or QHEI).

- Stream Stats Instructions: <http://water.usgs.gov/osw/streamstats/instructions1.html>
- Stream Stats Interactive Map: <http://water.usgs.gov/osw/streamstats/ohio.html>

If the stream’s watershed is greater than one square mile and if the stream has maximum pool depth of greater than 40 centimeters, it should be evaluated using QHEI. If the stream’s watershed is less than one square mile and its maximum pool depth is less than 40 centimeters, it should be evaluated using HHEI. If there is reason to question the HHEI survey results, an HMFEL must be performed.

#### **QHEI: Qualitative Habitat Evaluation Index –**

Provide the QHEI score, as determined by the applicant, in the space provided. If the QHEI has been reviewed by Ohio EPA, provide the score agreed upon by Ohio EPA.

Streams with a watershed greater than 1 square mile should be evaluated using the *Qualitative Habitat Evaluation Index* (QHEI). The QHEI is a composite of six habitat variables: substrate, in stream cover, riparian characteristics, channel characteristics, pool and riffle quality and gradient and drainage area. It helps to distinguish the influence of habitat effects on fish communities in Ohio streams.

- Ohio EPA’s Biological Criteria webpage (including QHEI): <http://www.epa.ohio.gov/dsw/bioassess/BioCriteriaProtAqLife.aspx#qhei>
- *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index Manual*: <http://www.epa.ohio.gov/portals/35/documents/QHEIManualJune2006.pdf>

#### **Ohio’s Biocriteria: Index of Biotic Integrity (IBI), Modified Index of Well-Being (MIwb) and Invertebrate Community Index (ICI) –**

If an IBI, MIwb or ICI has been completed for the stream, provide that information here.

Ohio has pioneered the use of numerical biocriteria to judge the attainment or impairment of CWA goals. Numerical biological criteria in Ohio are based on multimetric biological indices including the IBI and MIwb, indices measuring the response of the fish community, and the ICI, which measures the response of the macroinvertebrate community. The IBI and ICI are multimetric indices patterned after an original IBI. The MIwb is a measure of fish community abundance and diversity using numbers and weight information and is a modification of the original Index of Well-Being originally applied to fish community information from the Wabash River.

- *Tiered Aquatic Life Uses and Comparison of Biological-based Attainment/Impairment Measures One vs. Two Organism Groups*: <http://www.epa.gov/bioiweb1/pdf/CABBFactSheet2-OnevsTwoGroups.pdf>

#### **HHEI: Headwater Habitat Evaluation Index –**

Provide the HHEI score, as determined by the applicant, in the space provided. If the HHEI has been reviewed by Ohio EPA, provide the score agreed upon by Ohio EPA.

Many streams and drainage ways have a watershed of less than one square mile and pools less than 40-cm deep. We refer to these as “primary headwater” streams. Ohio EPA has developed a manual to promote the

standardized assessment of primary headwater habitat streams in Ohio. It contains the Headwater Habitat Evaluation Index (HHEI) form, which should be used in conjunction with its evaluation manual.

- Division of Surface Water's Primary Headwater Habitat Streams webpage:  
<http://www.epa.ohio.gov/dsw/wqs/headwaters/index.aspx>
- *Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams - October 2009*:  
[http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual\\_2009.pdf](http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual_2009.pdf)

**HMFEI: Headwater Macroinvertebrate Field Evaluation Index (HMFEI) – A rapid bio-assessment field method using benthic macroinvertebrates. It is a method to predict the number of cool water taxa present.**

- Starting on Page 66 of *the Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams - October 2009*: [http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual\\_2009.pdf](http://www.epa.ohio.gov/portals/35/wqs/headwaters/PHWHManual_2009.pdf)

**Total Length Delineated:** Provide the total length of each stream on-site. Provide the length in linear feet (lf).

**Proposed Impacts:** In the Proposed Impacts Section, for the preferred and minimal degradation alternatives provide the linear feet of impacts associated with jurisdictional and non-jurisdictional waters on the project site, as well as the impact type (bank stabilization, stream crossing, culvert, culvert extension, etc.) and area of stream impacts.

**Adding Additional Lines:** If additional lines are needed to present all of the stream data, use the “add new row” button to add more lines to the table.

**Adding Additional Tables:** If the project spans across more than one HUC 12 boundary, use the “add new table” button to add additional tables. Be sure to enter the appropriate 12-digit HUC code at the top of the subsequent table(s).

### **3.5 Wetland Impact and Comparison Table(s)**

**(Tab Name: Wetland Impact Table)**

**Information asked for in this section applies to 401 WQC and IWP applications (all levels of review), unless indicated otherwise.**

1. **Applicant Name:** This information will be auto-populated based on the data entered in Section 1.1.2 of the application.
2. **Project Name:** This information will be auto-populated based on the data entered in Section 2 of the application.
3. **Jurisdictional Determination Letter Dated:** Provide the date of the USACE Jurisdictional Determination Letter.
4. **12-Digit Hydrologic Unit Code:** This information will be auto-populated based on the data entered in Section 2 of the application.
5. **Date:** Enter the date you completed the form.
6. **Ohio EPA ID#:** This information will be auto-populated based on the data entered on the cover page of the application.
7. **Total Project Acreage:** This information will be auto-populated based on the data entered in Section 2 of the application.
8. **Watershed Name:** This information will be auto-populated based on the data entered in Section 2 of the application.
9. **Revision Number:** This information will be auto-populated based on the data entered on the cover page of the application.

**10. Revision Date:** This information will be auto-populated based on the data entered on the cover page of the application.

### **Table Data**

**Wetland ID:** Each wetland on-site shall be identified and listed individually regardless of whether the wetland is proposed to be impacted. All wetlands on-site shall be listed in the table.

**Jurisdictional Determination:** Indicate whether the wetland is jurisdictional by entering yes or no. See the *Stream Impact and Comparison Tables instruction #2 above for more information about jurisdictional determinations.*

**Forested:** Indicate if the wetland is forested or non-forested.

- “Forested Wetland” means wetland class characterized by woody vegetation that is twenty feet tall or taller.
- “Non-forested Wetland” means that the wetland class is NOT characterized by woody vegetation that is twenty feet tall or taller.

**Wetland Assessment(s):** Provide the available data for all of the wetlands on-site, including wetlands proposed to be impacted. At the very least, provide the ORAM scores for all wetlands on-site including wetlands proposed to be impacted by the project. The wetland category will auto-populate based on the ORAM score entered. If an additional assessment was conducted, select “yes”, indicate the type of assessment and provide the score AND the category.

#### **ORAM: Ohio Rapid Assessment Method –**

Provide the ORAM score in the space provided. If the ORAM has been reviewed by Ohio EPA, provide the score agreed upon by Ohio EPA.

OAC rule 3745-1-54(B)(2)(a)(ii) states that “In assigning a wetland category, the director will consider the results of an appropriate wetland evaluation method(s) acceptable to the director, and other information necessary in order to fully assess the wetland’s functions and values.” The Ohio Rapid Assessment Method for Wetlands, version 5.0 (ORAM) is an acceptable wetland assessment method to the director and is the Agency’s preferred method of wetland evaluation for wetland category assignment. ORAM includes the 10-page forms for Background Information, Scoring Boundary Worksheet, Narrative Rating, Field Form, Qualitative Rating, ORAM Summary Worksheet and Wetland Category Worksheet. All of this information constitutes an ORAM characterization and must be completed for each wetland.

- Ohio EPA’s Wetland Ecology Group: <http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx>
- ORAM Documents: <http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx#ORAM>

#### **VIBI: Vegetative Index of Biotic Integrity –**

Provide the VIBI score in the space provided.

The VIBI is a multimetric index comprised of 10 metrics with a maximum score of 100 and a minimum score of 0. The VIBI is calculated by summing the 10 metric scores. Metrics can receive a score of 0, 3, 7 or 10 based on the value of the metric (Table 2). The VIBI is actually three IBIs: the VIBI-EMERGENT (VIBI-E, including substitute metrics for Lake Erie coastal marshes and mitigation wetlands), the VIBI-Forest (VIBI-F), and VIBI-SHRUB (VIBI-SH). Each VIBI is designed to be used for wetlands dominated by emergent, forest or shrub vegetation, respectively. There are 19 metrics in all and each VIBI has its own set of ten metrics. Detailed data collection, reduction and analysis procedures for calculating the VIBI are discussed in the links provided below:

- *INTEGRATED WETLAND ASSESSMENT PROGRAM Part 9: Field Manual for the Vegetation Index of Biotic Integrity for Wetlands v. 1.4. Ohio EPA Technical Report WET/2007-6*  
[http://www.epa.ohio.gov/portals/35/wetlands/Part9\\_field\\_manual\\_v1\\_4rev4sept07.pdf](http://www.epa.ohio.gov/portals/35/wetlands/Part9_field_manual_v1_4rev4sept07.pdf)

Other related VIBI documents:

- *Integrated Wetland Assessment Program. Part 4: A Vegetation Index of Biotic Integrity (VIBI) and Tiered Aquatic Life uses (TALUs) for Ohio Wetlands:*  
[http://www.epa.ohio.gov/portals/35/wetlands/PART4\\_VIBI\\_OH\\_WTLDs.pdf](http://www.epa.ohio.gov/portals/35/wetlands/PART4_VIBI_OH_WTLDs.pdf)
- *Addendum to: INTEGRATED WETLAND ASSESSMENT PROGRAM. Part 4: Vegetation Index of Biotic Integrity for Ohio Wetlands and Part 7: Amphibian Index of Biotic Integrity for Ohio Wetlands:*  
[http://www.epa.ohio.gov/portals/35/wetlands/Part4&7\\_Addendum.pdf](http://www.epa.ohio.gov/portals/35/wetlands/Part4&7_Addendum.pdf)

### **AmphIBI Amphibian Index of Biotic Integrity –**

Provide the AmphIBI score in the space provided.

The Amphibian Index of Biotic Integrity (AmphIBI) is used to evaluate the ecological integrity of wetlands using amphibians as indicator taxa using an ecoregional approach.

To a larger degree than other taxa groups, monitoring amphibians in wetlands provides an indication of the integrity of the wetland but also gives direct measures of the condition of the adjacent uplands. Without appropriate upland areas to support many amphibian species there can be no possibility of their occurrence in wetlands (Semlitsch 1998). The amphibians reflect more what is going on from an ecological wetland boundary rather than the more limited “jurisdictional” boundary. Yet, there is no chance of survival of these species without the presence of the jurisdictional wetland. The inundated wetland is essential to their breeding efforts and some amphibian species (i.e. newts) utilize them for much longer periods.

- *Integrated Wetland Assessment Program. Part 7: Amphibian Index of Biotic Integrity (AmphIBI) for Ohio Wetlands. 2004:*  
[http://www.epa.ohio.gov/portals/35/wetlands/Integrated\\_Wetland\\_Assessment\\_Program\\_Part7\\_AmphIBI\\_for\\_matted.pdf](http://www.epa.ohio.gov/portals/35/wetlands/Integrated_Wetland_Assessment_Program_Part7_AmphIBI_for_matted.pdf)

Other related AmphIBI documents:

- *Addendum to: INTEGRATED WETLAND ASSESSMENT PROGRAM. Part 4: Vegetation Index of Biotic Integrity for Ohio Wetlands and Part 7: Amphibian Index of Biotic Integrity for Ohio Wetlands:*  
[http://www.epa.ohio.gov/portals/35/wetlands/Part4&7\\_Addendum.pdf](http://www.epa.ohio.gov/portals/35/wetlands/Part4&7_Addendum.pdf)

**Total Acreage Delineated:** Provide the total acreage of each wetland on-site.

**Proposed Impacts:** For 401 WQC and IWP level three applications, enter the total amount of impacts (in acres and to the hundredth decimal place) and impact type (fill, trench, etc.) associated with the preferred and minimal degradation alternatives. For IWP applications subject to level one level two review, enter total amount of impacts (in acres and to the hundredth decimal place) and impact type (fill, trench, etc.) under the preferred alternative only.

**Adding Additional Lines:** If additional lines are needed to present all of the stream data, use the “add new row” button to add more lines to the table.

**Adding Additional Tables:** If the project spans across more than one HUC 12 boundary, use the “add new table” button to add additional tables. Be sure to enter the appropriate 12-digit HUC code at the top of the subsequent table(s).

### **3.6. Other Water Body Impact and Comparison Table(s)**

**(Tab Name: OWB Impact Table)**

#### **UNDER CONSTRUCTION**

This section is currently under construction and will be available in Version 2.0 of the application. Until that time, the APPLICATION FOR OHIO EPA SECTION 401 WATER QUALITY CERTIFICATION EFFECTIVE OCTOBER 1, 1996, REVISED AUGUST 1998, should be used. This application is available at [http://www.epa.ohio.gov/portals/35/401/401appl\\_fis.pdf](http://www.epa.ohio.gov/portals/35/401/401appl_fis.pdf).

### 3.7. Social and Economic Justification (Tab Name: Social and Eco Justification)

**This section applies to Section 401 WQC and State IWP level three applications only.**

It is a mandatory element of state water quality standards that the antidegradation demonstration of a project, which seeks authority to lower water quality, provides effective demonstration that the lowering of water quality is necessary to accommodate important social and/or economic development in the area in which the water body is located. This requirement is included in OAC rules [3745-1-54\(D\)\(1\)\(b\)\(iii\)](#) and (D)(2)(c)(iv) for category 2 and category 3 wetlands. Since category 1 wetlands are by definition “limited quality waters,” the SEJ is not required.<sup>2</sup>

Explain the differences between the three alternatives being proposed regarding the important social and economic benefits to be gained and lost.

#### Economic factors [OAC rule 3745-1-05(C)(5)(e) and (l)]

- Recreational value (fishing, boating, bird watching, etc.);
- Tourism and other commercial activities (what is the local worth of the public attraction to the water body? Tourism is usually intertwined with recreational value);
- Aesthetics;
- Other use and enjoyment by humans;
- Condition of the local economy;
- The number and types of new direct and indirect jobs to be created;
- State and local tax revenue to be generated; and
- Other factors as the director deems appropriate.

#### Social Factors [OAC rule 3745-1-05(C)(5)(b),(c),(d), and(f)]

- aquatic life and wildlife:
  - o Threatened and endangered species
  - o Important commercial or recreational sport fish species
  - o Other individual species
  - o Overall aquatic community structure and function
- human health and overall quality and value of the water resource;
- National, state and local parks;
- Preserves and wildlife areas;
- Waters listed as state resource waters;
- Waters categorized outstanding national resource waters, outstanding state waters or superior high quality waters;
- The extent to which the resources or characteristics adversely impacted by the lowered water quality are unique or rare within the locality or state.

A detailed discussion of the SEJ portion of an antidegradation review is beyond the scope of this document. Please refer to Table 2 and the following U.S. EPA guidance documents for additional information as to when and how this demonstration can be satisfied:

- *Water Quality Standards for Wetlands, National Guidance:*  
<http://www.epa.gov/waterscience/standards/library/wetlandsguidance.pdf>;  
[http://water.epa.gov/lawsregs/guidance/wetlands/quality.cfm#1.0\\_Introduction](http://water.epa.gov/lawsregs/guidance/wetlands/quality.cfm#1.0_Introduction)
- *Questions and Answers on Antidegradation:*<http://www.epa.gov/waterscience/standards/library/antidegqa.pdf>

<sup>2</sup> See OAC 3745-1-05(A)(12) and 3745-1-54(D)(1).

- *Water Quality Standards Handbook, Second Edition:*  
<http://water.epa.gov/scitech/swguidance/waterquality/standards/handbook/index.cfm>
- *Interim Economic Guidance for Water Quality Standards Workbook:*  
[http://water.epa.gov/scitech/swguidance/waterquality/standards/economics/econworkbook\\_index.cfm](http://water.epa.gov/scitech/swguidance/waterquality/standards/economics/econworkbook_index.cfm)
- *Water Quality Guidance for the Great Lakes System: Supplementary Information Document:*  
[http://www.epa.gov/r5water/wqs5/pdf/supp\\_inf\\_doc.pdf](http://www.epa.gov/r5water/wqs5/pdf/supp_inf_doc.pdf)

**Table 2. Decision Matrix for SEJ demonstration. Matrix elements are nonbinding characterizations that an impact may be authorized given its size and the relative importance of development.**

Importance of social or economic development	Degree of lowering of water quality/degree of wetland impact		
	Minor	Moderate	Major
Not important	Not allowable	Not allowable	Not allowable
Important	Probably allowable	May be allowable or may not be allowable	May not be allowable
Very important	Probably allowable	May be allowable	May be allowable or may not be allowable

## **SECTION 4: Mitigation Information**

**(Tab Name: Proposed Mitigation)**

**Information asked for in this section applies to all 401 WQC and IWP applications unless indicated otherwise.**

Compensatory mitigation should be considered a last resort and a final step in project planning after it has been determined that impacts are unavoidable and cannot be minimized. For wetlands, the requirements of compensatory mitigation are outlined in OAC rule [3745-1-54](#). Requirements for stream mitigation are currently under development, but are not effective at this time. The purpose of compensatory mitigation is to replace those aquatic ecosystem functions that would be lost or impaired as a result of an approved activity. Compensatory mitigation should be “in-kind,” occur as close to the site of the impact(s) as practicable and, in most instances, provide an ecological lift.

As per Ohio State rules and laws, compensatory mitigation for wetland impacts authorized under a 401 WQC and/or level two IWP (category 2 wetlands only) and/or level three IWP must be considered in the following order:

- On-site (permittee-responsible) mitigation; then
- Off-site (permittee-responsible) mitigation within the same watershed; then
- An approved wetland mitigation bank; then
- Off-site, out of watershed, but only if there is a significant ecological reason why the mitigation location should not be limited to the watershed in which the impacted wetland is located and if the proposed mitigation will result in a substantially greater ecological benefit.

**Failure to adhere to this order will require adequate justification as to why a previous option was rejected. Furthermore, failure to effectively demonstrate why a previous option was reject may result in a delay in an action of the 401 WQC and/or IWP; or, and action to propose denial of the 401 WQC and/or IWP.**

### **4.1 Mitigation Overview**

**1. Where is Mitigation Being Proposed?** Select **all** of the applicable locations where mitigation is being proposed.

**2. Briefly Describe Mitigation for the Preferred Alternative:** Describe the mitigation proposal for the preferred alternative. Provide a clear discussion of how the amount of required mitigation was determined, indicating the amount of wetland and stream impacts and the mitigation ratio applied to each of those water resources. The mitigation ratios for wetland impacts must comply with the ratios listed in OAC rule [3745-1-54\(F\)\(1\)](#).

**3. Briefly Describe Mitigation for the Minimal Degradation Alternative:** Describe the mitigation proposal for the minimal degradation alternative. Provide a clear discussion of how the amount of required mitigation was determined, indicating the amount of wetland and stream impacts and the mitigation ratio applied to each of those water resources. The mitigation ratios for wetland impacts must comply with the ratios listed in OAC rule [3745-1-54\(F\)\(1\)](#).

### **4.2 Stream Mitigation Calculations**

Enter the existing baseline habitat type of the mitigation stream. This could be one or a combination of the following: riparian habitat, ephemeral, intermittent, perennial, Class I PHWH, Class II PHWH, Class III PHWH, LRW, MWH, WWH, CWH, SSH, EWH, etc. Enter the amount of required mitigation, in linear feet, as determined by impacts associated with the preferred alternative for ephemeral, intermittent and perennial streams. Enter the linear feet of stream being proposed for on-site or off-site and indicate whether the proposal includes restoration, relocation, enhancement and/or preservation. Be sure to include all types if more than one type is being proposed. Keep in mind that when enhancement and preservation are proposed, the mitigation calculation should be at a higher ratio.

Repeat the above for the minimal degradation alternative.

**If there is an inadequate amount of space to provide complete details on the mitigation proposal, additional information may be included in the appropriate area under section 5.12.**



### 4.3 Wetland Mitigation Calculations

Enter the amount of required mitigation, in acres, as determined by impacts associated with the preferred alternative for each wetland habitat type. Enter the acres of wetland being proposed for on or off-site and indicate whether the proposal includes restoration, creation, enhancement and/or preservation. Be sure to include all types if more than one type is being proposed. Please refer to Table 3., taken from the *Wetland Mitigation Table* in OAC rule 3745-1-54, to determine the correct ratios. Keep in mind that when enhancement and preservation are proposed, the mitigation calculation will be at a higher ratio. Refer to OAC rules [3745-1-54\(E\)\(4\)](#) and (E)(5) respectively.

**Table 3.**

Wetland Category	On-site Mitigation Ratio	Off-site Mitigation Ratio	Replacement Category	Compensatory Mitigation location (off-site)
1	1.5:1 Non-Forested and Forested	1.5:1 Non-Forested and Forested	2 and 3	Within the U.S. Army Corps of Engineers District
2	1.5:1 Non Forested 2.0:1 Forested	2.0:1 Non Forested 2.5:1 Forested	2 and 3	Within the Watershed
3	2.0:1 Non-Forested 2.5:1 Forested	2.5:1 Non-Forested 3.0:1 Forested	3	Within the Watershed

Repeat the above for the minimal degradation alternative.

#### Mitigation Provisions for Isolated Wetlands

As required by ORC 6111.027, mitigation for impacts to isolated wetlands shall be conducted in accordance with the following ratios when mitigation is proposed at an approved wetland mitigation bank:

For category 1 and category 2 isolated wetlands, other than forested category 2 isolated wetlands, mitigation located at an approved wetland mitigation bank shall be conducted at a rate of two times the size of the area of the isolated wetland (2.0:1).

For forested category 2 isolated wetlands, mitigation located at an approved wetland mitigation bank shall be conducted at a rate of two and one-half times the size of the area of isolated wetland that is being impacted (2.5:1).

All other mitigation shall be subject to mitigation ratios established in above table.

### 4.4 Other Water Body Mitigation Calculations

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### 4.5 On-Site Permittee-responsible Mitigation Project

If your stream and/or wetland mitigation project involves an on-site permittee-responsible mitigation project to satisfy some or all of your mitigation requirements, complete this section. On-site mitigation means any mitigation project located within one-mile and same 8-digit HUC of the impact site.

1. **Does the applicant currently own the proposed mitigation site property:** Select yes or no. If yes, provide as Attachment 5.30 any information on purchase agreements, options, etc. that verify the applicant's right to construct on the mitigation property.
2. **Explain the on-site mitigation site setting:** This may be similar to the description provided in Section 2.1.3. Describe in detail, the location and size of the mitigation area(s), the predominant vegetation in the area, existing functions and values of water resources, existing soil, surface water and ground water conditions, discuss if the mitigation site is located in a rural or urban setting, present and proposed land use and zoning restrictions, if the site was previously disturbed by past activities, if it is adjacent to a roadway, industry, farming, housing development, etc. Include type(s) of receiving waters.
3. **Explain the on-site mitigation site activities:** Explain the overall mitigation proposal for on-site mitigation. Then, in detail, explain what is proposed on-site for wetland and stream mitigation. Include the types of habitat, functions and values.

Wetland mitigation - For both the preferred alternative and the minimal degradation alternative, provide a summary of the proposed on-site wetland mitigation project. Be sure to indicate the type of wetland mitigation project this is, i.e. restoration, creation, preservation or enhancement. Discuss the watershed setting, wetland hydrology, vegetation, soils, buffers, etc. Discuss how this on-site project satisfies all or part of the wetland mitigation requirements.

Stream mitigation - For both the preferred alternative and the minimal degradation alternative, provide a summary of the proposed on-site stream mitigation project. Be sure to indicate the type of stream mitigation project this is, i.e. restoration, relocation, preservation, daylighting, etc. Discuss the watershed setting, the stream hydrology, the vegetation, the soils, the buffers, etc. Discuss how this on-site project satisfies all or part of the stream mitigation requirements.

Other water body mitigation – UNDER CONSTRUCTION

#### **4.6 Off-Site Permittee-responsible Mitigation Project**

If your stream and/or wetland mitigation project involves an off-site permittee-responsible mitigation project to satisfy some or all of your mitigation requirements, complete this section. Off-site mitigation means any mitigation project located greater than one-mile from the impact, but within the same 8-digit HUC of the impact site. Ohio EPA only considers mitigation outside of the 8-digit HUC, if the applicant can effectively demonstrate that there is a significant ecological reason that the mitigation location should not be limited to the mitigation location specified in table provided in section 4.3. The applicant must also effectively demonstrate that the proposed mitigation will result in a substantially greater ecological benefit.

4. **Does the applicant currently own the proposed mitigation site property?** Select yes or no. If yes, provide as Attachment 5.12.2 any information on purchase agreements, options, etc. that verify the applicants right to construct on the mitigation property.
5. **Explain the off-site mitigation site setting:** Describe in detail, the location and size of the mitigation area(s), the predominant vegetation in the area, existing functions and values of water resources, existing soil, surface water and ground water conditions, discuss if the mitigation site is located in a rural or urban setting, present and proposed land use and zoning restrictions, if the site was previously disturbed by past activities, if it is adjacent to a roadway, industry, farming, housing development, etc. Include type(s) of receiving waters.
6. **Explain the off-site mitigation site activities:** Explain the overall mitigation proposal for off-site mitigation. Then, in detail, explain what is proposed off-site for wetland and stream mitigation. Include the types of habitat, functions and values.

Wetland mitigation - For both the preferred alternative and the minimal degradation alternative, provide a summary of the proposed off-site wetland mitigation project. Be sure to indicate the type of wetland mitigation project this is, i.e. restoration, creation, preservation or enhancement. Discuss the watershed setting, wetland hydrology,

vegetation, soils, buffers, etc. Discuss how this on-site project satisfies all or part of the wetland mitigation requirements.

Stream mitigation - For both the preferred alternative and the minimal degradation alternative, provide a summary of the proposed off-site stream mitigation project. Be sure to indicate the type of stream mitigation project this is, i.e. restoration, relocation, preservation, daylighting, etc. Discuss the watershed setting, the stream hydrology, the vegetation, the soils, the buffers, etc. Discuss how this on-site project satisfies all or part of the stream mitigation requirements.

Other water body mitigation – UNDER CONSTRUCTION

**4. Photographs:** Ohio EPA uses photographs of the mitigation site in a variety of ways. Include a clear and in-focus color photograph for each stream and wetland to be addressed by the mitigation project. See Section 5.12.2 for additional instructions.

**5. Photo Location Map:** Provide a topographic map or aerial photograph marking the location where each photo was taken and an arrow depicting the direction toward which each photo was taken. See Section 5.12.2 for additional instructions.

#### ***4.7 Protection in Perpetuity***

Select the appropriate box to indicate how each of the mitigation parcels will be protected in perpetuity. If more than one mitigation site and/or more than one type of protection is being proposed, explain the details in the cell next to the appropriate type. If an environmental covenant with a holder is proposed, provide the name of the covenant holder. If a conservation easement is proposed, provide the name of the easement holder. Please be aware that conservation easement holders must meet the requirements of [ORC 5301.68](#). Do not select deed restrictions with management plan unless you have had prior discussions with Ohio EPA regarding this option.

#### ***4.8 Proposed Project Site Constraints***

If you are proposing to use a conservation easement or environmental covenant as your document for protecting the mitigation area(s) in perpetuity, please also include the following in Attachment 5.12:

- a draft copy of the proposed easement/covenant language; and
- a topographic map or aerial photograph clearly showing the boundaries of the proposed mitigation area(s).

Complete the table for all proposed and existing easements, deed restrictions and/or lease agreements within the entire property boundaries (not just the project limits). Easements may include: utility easements, drainage easements, conservation easements, railroad easements, etc. Sample entries are provided on the application form to guide you in completing the table.

#### ***4.9. Mitigation Bank Information***

If you propose to use an approved mitigation bank to satisfy some or all of your mitigation requirements, complete this section. An approved mitigation bank is a bank that has been authorized by the interagency review team (IRT) to release credits for compensatory mitigation. The USACE has developed an on-line database that can be used to search for approved mitigation banks in the United States. [RIBITS](#) (Regulatory In lieu fee and Bank Information Tracking System) was developed by the USACE with support from the Environmental Protection Agency (EPA) to provide better information on mitigation banking and in-lieu fee programs across the country. RIBITS allows users to access information on the types and numbers of mitigation bank and in-lieu fee program sites, associated documents, mitigation credit availability, service areas, as well information on national and local policies and procedures that affect mitigation bank and in-lieu fee program development and operation.

Compensatory mitigation for impacts to category 2 wetlands must be provided by an approved mitigation bank whose service area includes the project site. For impacts to category 1 wetlands, you may use any approved mitigation bank that is located within the USACE district in which the project is located. There are currently no approved mitigation banks that provide compensatory mitigation for impacts to category 3 wetlands. Also, there are currently no rules regarding the use of stream mitigation banks in Ohio. Proposals for such situations will be examined on a case-by-case basis.

1. Have you contacted mitigation banks to identify whether the required type and amount of mitigation credit is available? If yes, provide the names of mitigation banks along with information on their service areas that you have contacted concerning the availability of wetland credits. If no, explain why you have not contacted a bank.
2. For the chosen mitigation bank, provide the bank name and answer the following questions:
  1. Is the required type and amount of mitigation credit available? If yes, attach documentation as Attachment 5.12.3.
  2. If only a portion of the required type and amount of mitigation credit is available, specify the amount available.
  3. Has the required type and amount of mitigation been reserved? If yes, attach documentation as Attachment 5.12.3.
  4. If only a portion of the required type and amount of mitigation credit has been reserved, specify the amount reserved.
  5. What is the number of forested credits to be purchased?
  6. What is the type of wetland mitigation credit (created, enhanced, preserved or restored)?
  7. Is the mitigated wetland isolated or non-isolated?
  8. What is the number of non-forested credits to be purchased?
  9. What is the type of wetland mitigation credit (created, enhanced, preserved or restored)?
  10. Is the mitigated wetland isolated or non-isolated?
  11. What is the bank's 8-digit HUC?
  12. Is your watershed within the service area of the mitigation bank?

If more than one mitigation bank is being proposed, fill in the second bank's information in the second set of entries on the form.

#### **4.10. Final Mitigation Plan Format**

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## **SECTION 5: Attachments**

**(Tab Name: Attachments)**

**Information asked for in this Section applies to ALL 401 WQC/IWP applications unless otherwise indicated or exempted. Submit each attachment, as applicable to the project, as a separate file. Only .pdf, .bmp, and .jpg files will be accepted.**

This portion of the application is CRITICAL, as the detailed information provided serves as the environmental back-drop for the proposed project.

### **5.1 Cover Letter**

Provide a cover letter when submitted and resubmitting subsequent 401 WQC/IWP applications. The cover letter shall include the applicant name, consultant name (if applicable), project name, EPA identification number (if known), USACE Public Notice number (if known), and date of version submitted.

For the initial submittal of a 401 WQC/IWP application, provide an explanation of any details within the application that require further clarification.

For subsequent submittals, including submittals resulting from technical review comments, provide an summary explanation of what has changed within the application and indicate where changes are located (call out the section name and number) and why changes were necessary.

### **5.2 Permit Fees**

Include a check for the applicable fees (for a 401 WQC, the full \$200.00 application fee and one-half of the applicable impact review fees. For an IWP, the full \$200.00 application fee and full impact review fees) must be submitted along with the application. The check must be made payable to "Treasurer, State of Ohio." Include the revenue ID number in the check's memo line.

### **5.3 USACE Public Notice**

**Information asked for in this Section applies to 401 WQC applications.**

Include a copy of the USACE Public Notice regarding the Section 404 permit application concerning the proposed project. Include the completed two-page USACE Section 404 Application form (ENG FORM 4345) for the project and explain any differences between the Section 404 application and the 401 WQC/IWP application.

### **5.4 USACE Jurisdictional Determination (JD) Letter**

Include a copy of the letter from USACE documenting its jurisdiction over the wetlands, streams or other waters of the state that are the subject of the 401 WQC application. This letter is referred to as the jurisdictional determination letter or JD. Be sure that this letter has not expired. For more information, see Section 3.4 of these instructions.

It is not uncommon for Ohio EPA to receive a copy of the unrevised delineation information that was generated PRIOR to the JD letter. If there are changes to the delineation information as a result of the JD, provide this information to Ohio EPA. Indicate whether the JD is approved or preliminary and provide an explanation and supporting documentation if changes have been made to the original delineation.

### **5.5 Delineation Report (of Water Resources) Updated per Pre-Application Coordination**

Include a copy of the investigation/delineation report of the waters of the United States in support of the 404 permit application. This report includes a wetland delineation on the site consistent with the protocols established in the USACE 1987 Wetland Delineation Manual, or appropriate regional supplement. The delineation should also identify streams and other water resources on the site.

- U.S. Army Corps of Engineers 1987 edition of the Corps of Engineers Wetlands Delineation Manual: <http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf>
- U.S. Army Corps of Engineers Regional Supplements to Corps Delineation Manual Web page: [http://www.usace.army.mil/cecw/pages/reg\\_supp.aspx](http://www.usace.army.mil/cecw/pages/reg_supp.aspx)

**At a minimum, the delineation report must include:**

**Wetland Delineation Map:** Include either a topographic map or aerial photo with the locations, boundaries and wetlands identification numbers super-imposed. NOTE: If the project site is included in more than one delineation OR the delineation boundaries are larger than the project site, please clearly mark the portion of the delineation map that applies to this project.

**National Wetland Inventory (NWI) Map:** Include a copy of the applicable portion(s) of the NWI map(s) with the property boundaries for the proposed project identified. Also include a key identifying each potential wetland type, narrative description for any abbreviations used and, where potential wetlands on the NWI map overlap with wetlands mapped in the delineation report, label with the same wetland identification used in the delineation report.

NWI maps provide information on wetland location and type. NWI Maps were compiled by the U.S. Fish and Wildlife Service in the 1980s using high-altitude aerial photography. They were not field-verified. Many wetlands exist that do not show up on the NWI Maps. Another source available to view NWI data is on Ducks Unlimited's Web site. Ducks Unlimited, in consultation with the U.S. Fish and Wildlife Service and state governments, is working to update the NWI maps for the states in its Great Lakes/Atlantic Region. The update utilizes recent imagery to revise the original NWI to represent the region's current inventory of wetlands more accurately.

- U.S. Fish and Wildlife Service National Wetland inventory (NWI): <http://www.fws.gov/wetlands/>
- Ducks Unlimited: <http://www.ducks.org/Conservation/GLARO/3752/GISNWIUpdate.html>

**NRCS County Soil Survey Map:** Include a copy of the NRCS County Soils Map(s) identifying hydric soils within the property boundaries of the proposed project. These maps establish soil characteristics that may assist in the identification of potential wetland areas.

- NRCS Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- NRCS list of hydric soils: <http://soils.usda.gov/use/hydric/>

**Individual Wetland Delineation Sampling Points, Data Sheets and Summary Table:** Include a topographic map or aerial photo showing the locations and sample point identification numbers for all sampling sites used as a basis for the wetland delineation findings and completed wetland delineation data sheets with sample point identification numbers for all wetland sampling points. The presence/absence of the three wetland indicators (soils, hydrology and hydrophytic vegetation) are documented at specific locations known as wetland delineation sampling points. It may be helpful to complete a Delineation Sample Findings Summary Table similar to Table 4 below. Sample entries are provided to guide you in completing the table.

**Table 4. Summary Table, Delineation Sample Findings**

Sample Number	Hydric Soil	Wetlands Hydrology	Percent Wetlands Vegetation	Wetlands Present	Comments
1	Yes	Yes	67	Yes	Lowland Woods (Wetland J)
2	Yes	Yes	50	No	Successional Woods
3	Yes	No	50	No	Successional Woods

**Historical Wetland Delineations:** If USACE was contacted to obtain historical delineation information, include a copy of this documentation from USACE. The documentation may include a copy of the historical JD for the delineation, with all attachments; a topographic map or aerial photograph showing the property boundaries of the historical delineation and the property boundaries of the current proposed project; and, the permit number for the project associated with the JD.

It is not uncommon for previous wetland delineations to have been completed on, or immediately adjacent to, the proposed project property. This information can be used to track hydrological changes in and around the proposed project site and to identify wetland boundaries that cross property lines, they can serve as a baseline for the updated wetland boundaries in the delineation for the current project, and they provide information related to cumulative impacts.

## 5.6 Water Resource Documentation

1. **Stream Assessments:** Include stream assessment sheets for all streams identified on the project site and noted in the stream impact table. All forms must be filled out completely using the format provided by Ohio EPA. Failure to do so could result in a determination that the habitat assessment is incomplete and no further review will be conducted by Ohio EPA until the correct/complete information is provided. For more information, see Section 3.4 of these instructions.
2. **Wetland Assessments:** Include a completed 10-page ORAM form for EACH wetland for which a separate scoring boundary has been established on the project site and noted in the wetland impact table. All forms must be filled out completely using the format provided by Ohio EPA. Failure to do so could result in a determination that the habitat assessment is incomplete and no further review will be conducted by Ohio EPA until the correct/complete information is provided. For more information, see Section 3.5 of these instructions.

ORAM assessments are used to document the quality of each wetland on the project site, regardless of whether impacts to a given wetland are anticipated. Complete ORAM assessment instructions and the ORAM form that is to be used are available at <http://www.epa.state.oh.us/dsw/wetlands/WetlandEcologySection.aspx#ORAM>.

An ORAM Assessment Checklist has been provided to assist you in providing the necessary documentation. The checklist captures those ORAM Assessment items most commonly missing, incomplete or inaccurate when applications are submitted. The ORAM User's Manual should still be used for comprehensive instructions on completing ORAM forms appropriately.

### ORAM Assessment Checklist

#### Background Information

- The full name of the person completing the ORAM assessment.
- The phone number and email address of the person completing the ORAM assessment.
- The vegetation communit(ies) and HGM class(es) for each wetland for which an ORAM scoring sheet is completed.
- The latitude and longitude for each wetland for which an ORAM scoring sheet is completed.
- The USGS Quad Name, county, township, section and subsection.
- A sketch for each wetland for which an ORAM scoring sheet is completed. NOTE: this sketch is separate and distinct from the wetland boundaries shown on the delineation map. It is intended to provide data that is not included on a delineation map such as major vegetation classes and relationship to applicable nearby features (not always shown on pre-existing maps) such as trails, areas of disturbance, surface waters, swales, culverts, etc.

#### Determining the ORAM Scoring Boundaries

The ORAM scoring boundaries do not always match the wetland delineation boundaries. To avoid confusion and unnecessary delays in Ohio EPA's confirmation of ORAM scores, use the checklist below and note any differences between the ORAM scoring boundary and the wetland delineation boundary.

- There are two or more wetlands of less than one acre that are less than 100 feet apart on average (refer to Section 5.2 of the ORAM User's Manual).
- The forested portions of a wetland have been delineated separately from the emergent or scrub shrub portions of the same wetland (refer to Section 5.1 of the ORAM User's Manual).



- The portions of a wetland have been delineated separately on either side of a road, trail, culvert or similar man-made boundary (refer to Section 5.3 of the ORAM User's Manual).
- The wetland has been delineated exclusive of adjoining open water (see Section 5.4 of the ORAM User's Manual).
- Two or more wetlands that are contiguous to a stream, river or ditch AND that are separated from each other by non-wetland corridors less than 200 feet long have been delineated separately (see Section 5.5 of the ORAM User's Manual).
- Wetlands located on opposite sides of a stream, river or ditch that is less than 200 feet wide on average, are delineated separately (see Section 5.5. of the ORAM User's Manual).
- Portions of a wetland with category 3 characteristics are delineated separately from portions with category 2 characteristics (see Section 5.7 of the ORAM User's Manual).

**3. Water Resource Photographs:** Include a clear and in-focus COLOR photograph for EACH stream and/or wetland identified in the jurisdictional determination.

As the old saying goes, *"a picture is worth a thousand words"*. Ohio EPA uses pictures of the project site in a multitude of ways. Key uses include verifying ORAM, HHEI and QHEI assessment scores; preparation for project field visits; identifying general information about the streams and wetlands; and identifying general information about past disturbances.

**4. Water Resource Photo Location Map:** Include a topographic map or aerial photograph marking the location where each stream and/or wetland photo was taken, using the same photo identification or stream identification that is used elsewhere in this application.

## 5.7 Existing Conditions Map(s)

**Topographic Map:** Submit a scaled topographic map containing only the following information:

- Provide the name of the type of map used.
- Super-impose the property boundaries for the proposed project.
- Be certain that all mapped water features, particularly streams, on the project site can be seen and are labeled with the same IDs used in the impacts tables in Section 3. If the streams are named, make sure the name is shown on the map.
- Clearly show and label all post-construction contours and contour intervals.
- Label the beginning and ending river or shoreline mile for the segments of the river(s) or shoreline within the property boundaries.

**Aerial Photograph:** Submit a scaled aerial photograph containing only the following information:

- Identify the year (and month, if available) that the aerial photo was taken.
- If the site is has wooded areas, provide an aerial with leaf on and one with leaf off, if available. (Note: these photos do not have to be taken during the same calendar year.)
- Include property and project boundaries, road names, municipal boundaries, any easement or right-of-way boundaries, direction of flow for water resources and enough of adjacent properties to see water resources that span **property boundaries**.

**Vicinity Map:** Submit a vicinity map that is separate and distinct from the topographic map. The purpose of the vicinity map is to identify and provide general boundaries for the major land uses within one mile of the project site. An appropriate base for a vicinity map is either an aerial photograph or a topographic map; a local street map is **not** considered a

### Drawing and Map Guidance:

For all SCALED Drawings and Maps, be sure you can affirmatively answer the following questions:

- Is the drawing/map and all text within the drawing or map legible?
- Did you provide the source (e.g. county highway map, USGS quadrangle map, Google Maps)?
- Has the drawing/map been provided in color, if originally produced that way?
- Does it have an accurate north arrow?
- Does it have an accurate scale (e.g. has been converted, if the original map has been reduced or enlarged)?
- Have you provided a key, with clear and appropriate descriptions provided for anything abbreviated, shaded, marked or similarly illustrated?
- Can the symbols or markings used to designate features be distinguished from one another? For example: a black line is not used to label two separate features, leaving the reviewer wondering which one is which.
- Has it been produced at the highest resolution possible, while still showing the entire project site?

vicinity map. Identify all land use locations and boundaries that apply to the areas located in and within one mile of the project site.

**Floodplain/Flood Control Map:** During the Ohio EPA 401 WQC/ IWP level three public notice and/or public hearing process, one of the most common issues raised is the potential for flooding to occur and/or increase as a result of implementing the proposed project. In addition, floodplain/flood control maps can be used to:

- Verify ORAM Assessment scoring;
- Identify the potential for local, state or federal restrictions on placement of fill or structures within the floodplain;
- Identify areas where the designated floodplain boundaries and locations of wetlands overlap; and
- Identify where flood control fill/structures have been located within or adjacent to the floodplain in or near the project site.

Submit the most recent:

- Copy of the Federal Emergency Management Agency (FEMA) map showing the 100-year floodplain boundary (FIRM) with the project site boundaries identified.
- If applicable, submit a copy of an aerial photograph showing local flood control structures such as dams, levees, floodwalls, etc., with the project site boundaries identified. Note: county soils maps often show levees. This map is not required, but is useful for projects involving dams, levees, floodwalls, etc.

**Other Maps:** Depending on the scope and size of the proposed project, additional maps and/or other technical drawings may be needed for Ohio EPA to adequately and efficiently review the application. Examples of other maps that have been submitted in the past as part of the review process includes (but should not be limited to):

- Enlarged site layout to better define specific details
- Monitoring well locations (usually as part of a demonstration of protection of avoided groundwater fed wetlands and streams)
- Soil Boring locations
- Foundation details
- Building Location Profiles
- Site Utilities
- Drainage plans
- Detention basin details – sections, plantings
- Tree surveys
- Cut and fill exhibits

Because each site is reviewed based on the existing resources and the specific details of your project, it is not practical to specify exactly what additional maps and drawings may be necessary in the review of your project. Obviously, the more detail you provide up front, the more efficient our review will be. It is incumbent upon you to determine what additional maps, drawings and details should be provide to provide as clear a description of your project as practicable. This is especially true when trying to best explain why some impacts are necessary.

## 5.8 Alternatives Analysis

**Information asked for in this Section applies to 401 WQC and IWP level three applications only.**

### 1. Preferred Alternative

**Drawing:** Provide a drawing and/or map of the preferred alternative. Refer to the *Drawing and Map Guidance* located on page 40 of these instructions. Drawings must be super-imposed on a base map that includes a high resolution aerial photograph of the project site showing all water resource boundaries (streams, wetland and other water bodies) identified and labeled. The base map must show the following:

- a) A north arrow, legend and an accurate ruler-type scale bar
- b) The site boundaries
- c) The project (construction limits) boundaries (must be the same as in the SWPP ([www.epa.state.oh.us/dsw/storm/const\\_SWP3\\_check.aspx](http://www.epa.state.oh.us/dsw/storm/const_SWP3_check.aspx)), if applicable)

- d) The final constructed design for the preferred alternative design showing all buildings, structures, roads, parking lots, etc.
- e) All temporary sediment basins (including direction of storm water flow and discharge locations)
- f) All post-construction storm water management features such as detention/retention basins, etc (indicate the direction of flow and discharge points for storm sewers, detention basins, etc.)
- g) All existing and proposed post-development easements, covenant areas or land use restrictions
- h) All proposed impacts and
- i) Any upland buffer areas that will remain post-construction clearly identified.

**Cross Sections of Structures, Features and/or Details of the Project:** Provide scaled cross-sectional drawings of structures, features and/or details of the project. Refer to the *General Project Drawings and Maps Guidance* on page 38 of these instructions when submitting a scaled drawing(s) of the preferred alternative cross-sectional views. Be sure to describe in narrative form any features that are shown on the cross-sections.

Cross-sectional views of the proposed project should include:

- An accurate ruler-type scale bar for horizontal and vertical dimensions;
- Location of existing shoreline, wetland boundary or stream and water elevation;
- Dimensions of the activity or structure, and the distance it extends into the waterbody;
- Dredge and/or fill grades as appropriate;
- Existing and proposed (separately) contours and elevations;
- Types and location of wetland and riparian vegetation present on the site; and
- Types and location of material used.

## 2. Minimal Degradation Alternative

Include a minimal degradation alternative drawing(s) and cross section(s) of structures, features and/or details of the project. See Section 5.8.1 of these instructions for more detail.

## 3. Non-Degradation Alternative

Include a non-degradation degradation alternative drawing(s) and cross section(s) of structures, features and/or details of the project. See Section 5.8.1 of these instructions for more detail.

## 5.9 State Isolated Wetland Documentation

**Information asked for in this section applies to IWP level one and two review applications as indicated.**

1. **State Isolated Wetland Level One and Two Project Drawing:** Include a drawing showing the project footprint and wetlands. Refer to the *Drawing and Map Guidance* located on page 40 of these instructions. Drawings must be super-imposed on a base map that includes a high resolution aerial photograph of the project site showing all water resource boundaries (streams and wetlands) identified and labeled. The base map must show the following:
  - a. A north arrow, legend and an accurate ruler-type scale bar
  - b. The site boundaries
  - c. The project (construction limits) boundaries (must be the same as in the SWPP ([www.epa.state.oh.us/dsw/storm/const\\_SWP3\\_check.aspx](http://www.epa.state.oh.us/dsw/storm/const_SWP3_check.aspx)), if applicable)
  - d. The final constructed design for the project showing all buildings, structures, roads, parking lots, etc.
  - e. All temporary sediment basins (including direction of storm water flow and discharge locations)
  - f. All post-construction storm water management features such as detention/retention basins, etc (indicate the direction of flow and discharge points for storm sewers, detention basins, etc.)
  - g. All existing and proposed post-development easements, covenant areas or land use restrictions
  - h. All proposed impacts and
  - i. Any upland buffer areas that will remain post-construction clearly identified.

2. **State Isolated Wetland Level Two Documentation: Wetland Scarcity and Threatened and Endangered Species:** Provide documentation demonstrating that the wetland(s) to be filled are not locally or regionally scarce and do not contain rare, threatened or endangered species. See Section 2.6.4 of these instructions for more detail.
3. **State Isolated Wetland Level Two Documentation: Project Impacts Regarding Degradation of Aquatic Resources:** Provide documentation demonstrating that the project impacts will not result in significant degradation to the aquatic ecosystem.

### 5.10 Documentation Requesting Comments from ODNR and USFWS

*Information asked for in this section applies to 401 WQC and IWP level three review applications.*

This portion of application is intended to capture key requirements, concerns and/or recommendations from other agencies that must be considered during the application review. At a minimum, the information provided will be used to ensure that the project proposed to other agencies is consistent with details provided in the application; to develop and include any necessary special conditions in the 401 WQC/IWP when issued; and to identify water resources that are critical because they contain or provide habitat for rare, threatened or endangered species.

Ohio Revised Code Section 6111.30(A)(7) requires that a 401 WQC application include “adequate documentation confirming that the applicant has requested comments from the Department of Natural Resources and the United States Fish and Wildlife Service regarding threatened and endangered species, including the presence or absence of critical habitat.”

#### U.S. Fish and Wildlife Service Letter

Contact information is as follows:

USFWS, Ohio Ecological Services Field Office  
4625 Morse Road, Suite 104  
Columbus, OH 43230  
Phone: (614) 416-8993

Provide at least ONE of the following for the application to be considered administratively complete.

- A letter with an accompanying map showing the boundaries of the project property and requesting available rare, threatened and endangered species and critical habitat data for this area has been submitted to the U.S. Fish and Wildlife.
- Correspondence documenting review of the project site information and responses to the request for available rare, threatened and endangered species and critical habitat data for this area has been received from the USFWS. If a response has been received, provide a copy and indicate if:
  - The potential for rare, threatened and endangered species and/or critical habitat to occurs in or near the proposed project property has been confirmed.
  - A habitat survey has been requested by the USFWS.
  - If yes, has the habitat survey been completed?
  - A mist net survey has been requested by the USFWS.
  - If yes, has the mist net survey been complete?

#### Ohio Department of Natural Resources Letter

There are two ODNR Divisions with rare and endangered species/critical habitat authority. The applicant must send letters requesting a review of the proposed project site to both divisions. The contact information is shown below:

ODNR, Division of Wildlife  
Attn: Ohio Biodiversity Database Program  
2045 Morse Road, Building G-3  
Columbus, OH 43229-6693  
Phone: (614) 265-6452

ODNR, Division of Wildlife  
 2045 Morse Rd., Bldg. G-3  
 Columbus, Ohio 43229-6693  
 Phone: (614) 265-6452

Provide at least ONE of the following for the application to be considered administratively complete.

- Provide copies of the letters with accompanying map(s) showing the boundaries of the project property and requesting available rare, threatened and endangered species and critical habitat data for this area that were submitted to ODNR, Ohio Biodiversity Database Program and ODNR, Division of Wildlife
- If responses have been received, provide correspondence documenting review of the project site information and responses to the request for available rare, threatened and endangered species and critical habitat data for this area have been received from ODNR, Ohio Biodiversity Database Program and ODNR, Division of Wildlife

### **5.11 Appropriate Sections of TMDL**

Provide copies of the applicable portions of the TMDL that identify pollutants of concern and recommended actions for the HUC (HUC12, if possible) that contains the project site. See Section 2.3.1 of these instructions for more detail.

### **5.12 Mitigation Documentation**

#### **1. On-site Permittee-responsible Mitigation Project Documentation**

**Purchase Agreement/Options:** In section 4.5, if it was indicated that the applicant does not own all the mitigation properties, provide information on any purchase agreements/options that verify the applicant's right to construct on the mitigation property.

**Photographs:** Ohio EPA uses photographs of the mitigation site in a variety of ways. Include a clear and in-focus color photograph for each stream and wetland to be addressed by the mitigation project.

##### Stream and Wetland Photo Checklist

- A clear and in-focus color photograph has been provided for EACH stream and/or wetland identified on the project site.
- All photos were taken without snow cover.
- A photo caption has been included below each picture identifying the date (month and year) when the picture was taken.
- Indicate if the photos were taken on the same/different date as the HHEI/QHEI/ORAM or other Assessment.
- A photo caption has been included below each picture identifying the photo number and stream or wetland ID.
- A photo caption identifying the direction (north, south, east or west) the photo was taken.

##### **Photograph Location Map(s):**

##### Stream and Wetland Photo Location Map Checklist

- The location of each photo taken has been clearly marked on a topographic map or aerial photograph.
- A north arrow and legend is provided

#### **2. Off-site Permittee-responsible Mitigation Project Documentation**

Provide documentation for off-site permittee-responsible mitigation purchase agreement/options, photographs and a photo location map(s). See Section 5.12.1 of these instructions for more detail.

#### **3. Mitigation Bank Documentation**

Include copy(ies) of mitigation bank documentation demonstrating that required mitigation is available and reserved for any mitigation bank(s) to be used. See Section 4.9 of these instructions for more detail.

#### 4. Final Mitigation Plan

A final mitigation plan is not required until the project and impacts have been reviewed by Ohio EPA.

This Section is UNDER CONSTRUCTION.

#### 5.13 After-the-fact Impacts Documentation

**Information asked for in this section is applies to ATF reviews and is required when ATF Review is selected in Section A.2.5 of the application.**

1. **As-built Drawing:** Provide a drawing which shows the locations and acreage/feet of wetlands/streams where fill was placed.
2. **Project Footprint Comparison from Pre-application Submittal:** Provide a drawing which depicts any changes from previously submitted project information.

#### 5.14 Other

Include information in this section when it is necessary to provide supporting documentation not addressed by any other required attachment. Explain the purpose of any documents submitted.

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If you need assistance completing the application workbook, Ohio EPA recommends that you contact program staff to discuss your project. You may also wish to contact Ohio EPA, Section 401 staff if you have never applied for a 401 WQC or IWP before or to simply gather information on needed permits. Ohio EPA Section 401/wetlands coordinators each cover a specific territory, so please contact the specific [Ohio EPA Section 401/wetlands coordinator](#) for the watershed in which the project is located.

The printed copy of your completed application workbook, attachments and fees shall be submitted to:  
Ohio EPA, Attn: Supervisor DSW/401 Unit, P.O. Box 1049, Columbus, OH 43216-1049

## Acronyms

401 WQC	Clean Water Act Section 401 Water Quality Certification
404 Permit	Clean Water Act Section 404 Permit
AmphIBI	Amphibian Index of Biotic Integrity
ATF	After the Fact
AWS	Agricultural Water Supply
BATH	Bathing Waters
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CWA	Clean Water Act (Public Law 92-500, October 18, 1972)
CWH	Cold Water Habitat (OAC Chapter 3745-1)
DDAGW	Division of Drinking and Ground Waters (Ohio EPA)
DMRM	Division of Mineral Resource Management (ODNR)
DSW	Division of Surface Water (Ohio EPA)
E	Ephemeral
EWH	Exceptional Warmwater Habitat (OAC Chapter 3745-1)
HHEI	Headwater Habitat Evaluation Index
HMFEI	Headwater Macroinvertebrate Field Evaluation Index
HUC	Hydrologic Unit Code
I	Intermittent
IBI	Index of Biotic Integrity (fish)
ICI	Invertebrate Community Index
IRT	Interagency Review Team
IWP	Isolated Wetlands Permit
IWS	Industrial Water Supply
JD	Jurisdictional Determination
LRW	Limited Resource Water (OAC Chapter 3745-1)
Miwb	Modified Index of Well Being
MWH	Modified Warmwater Habitat (OAC Chapter 3745-1)
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service (USDA)
NS	None Specified
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OAC	Ohio Administrative Code
OCMP	Ohio Coastal Management Program (ODNR)
ODNR	Ohio Department of Natural Resources
Ohio EPA	Ohio Environmental Protection Agency
OHWM	Ordinary High Water Mark
ORAM	Ohio Rapid Assessment Method for Wetlands
ORC	Ohio Revised Code
OWB	Other Water Body
P	Perennial

PAN	Pre-Activity Notification
PCR	Primary Contact (Recreation)
PHWH	Primary Headwater Habitat
PN	Public Notice
PTI	Permit to Install
PWS	Public Water Supply
QHEI	Qualitative Habitat Evaluation Index
RIBITS	Regional In-lieu Fee and Bank Information Tracking System
SCR	Secondary Contact (Recreation)
Section 10	Section 10 of the Rivers and Harbors Appropriation Act of 1899
SEJ	Social and Economic Justification
SSH	Seasonal Salmonid Habitat
SWERP	Surface Water Enhancement, Restoration and Protection
SWP3	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TNW	Traditionally Navigable Water
UD	Undesignated
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VIBI	Vegetation Index of Biotic Integrity
WAP	Watershed Action Plan
WQC	Water Quality Certification
WQS	Water Quality Standards
WWH	Warmwater Habitat (OAC Chapter 3745-1)

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