ODOT Highway Operations Environmental Checklist

Encouraging Environmental Regulatory Compliance for 100% State-Funded Highway Maintenance Projects

SUMMARY: The following document provides a user guide for the Highway Operations Environmental Checklist process. The intent of this process is to provide quick and simple review of 100% state-funded projects against major environmental regulations. The goal is simply to increase the regulatory compliance of common maintenance activities. Also provided in the document are background, the standard operating procedure, supporting guidance documents, and regulatory background of this process. This manual was developed in cooperation between ODOT's Office of Environmental Services and ODOT Central Office Highway Operations. For more information or to provide suggestions on improvements to this document please contact Amanda Foley at 614-644-0513 or at Amanda.Foley@dot.ohio.gov.

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B. **Background**

The work ODOT's Highway Operations staff completes is fundamental to providing Ohioans with a safe and efficient transportation system. This guide is designed to help Highway Operations staff complete this critical work in a manner that is compliant with the expansive and at times complex world of environmental regulations.

The Highway Operations Environmental Checklist process (HOEC) (*formerly known as the Highway Management Environmental Impact Assessment, HMEIA*) is the first step to developing compliance with environmental regulations for 100% state-funded maintenance projects. This guide also provides some points of reference for how to manage materials, wastes, and distribution of reusable materials.

C. **The Highway Operations Environmental Checklist**

Federally funded ODOT projects are developed to minimize impact to the environment and to comply with regulations through an extensive National Environmental Policy Act (NEPA)-focused project development and decision making process. Alternatively, 100% state-funded projects (the focus of this process) have not been consistently afforded review for compliance with applicable environmental regulations prior to commencing work. While not subject to NEPA, 100% state funded projects are still subject to a variety of environmental regulations. Non-compliance of these regulations can result in fines, extensive mitigation and restoration costs, a diminished environment, and the degradation of interagency relationships critical to the successful delivery of the federal-aid program.

To bridge the gap between 100% state-funded maintenance projects and compliance with relevant regulations, the Office of Environmental Services developed the HOEC. The HOEC process is meant to provide a simple beginning step towards the development of full compliance with environmental regulations.

> The HOEC triggers when the TM should consult with their DEC to determine any necessary environmental permissions, permits, or coordination prior to completing the work.

The HOEC guides the user through a simple four-step review that assists the Transportation Manager (TM) with determining if the proposed highway maintenance work will impact a regulated resource or exceed a threshold that requires agency coordination. The intention is for the highway management staff, most likely the TM or their designee, to review their work plans against the checklist and accompanying tools to determine if coordination with their District Environmental Coordinator (DEC) is needed prior to conducting the work. If none of the items require prior coordination, the work can begin as needed. However, if any of the items require prior coordination with the DEC, this coordination occurs to resolve any necessary compliance issues. In these situations, the work should be postponed until the appropriate coordination and clearance is received from the DEC, usually in the form of an email.

Highway management staff provided the following list of routine activities that are undertaken to provide for safe and efficient roadways. Not every activity that Highway Operations completes is likely to interact with an environmental regulation. However, the following common Highway Operations activities are those where environmental regulation compliance ***could*** arise if not addressed/performed in a specific way or completed without a permit:

- Cleaning and reshaping ditches
- Spoil placement/disposal
- Culvert replacement/repair within various situations
- Catch basin and tile repair/replacements
- Replacements/repair of outlet tiles into natural streams, creeks, ditches
- Placing coffer dams in streams, creeks, ditches to conduct culvert repair or replacement
- Guardrail repair
- Patching of bridge decks
- Preparation work (i.e. power-washing) of bridge decks for sealing
- Slide or slip repairs along roadways, streams, creeks

- Placement of dump rock and/or filter fabric for erosion control at structures and/or along streams
- Vegetation control
- Removal of debris jams at existing structures
- Removal of sediment build-up under and around existing structures
- Bridge washing for preventative maintenance

Highway Operations work actions can be condensed into the following categories of potentially "regulated activities" (relevant regulations are discussed on page 36):

1. Disturbing soil or the ground
    - Disturbing the land can impact a regulated resource. For example disturbance to the ground could impact (fill, destroy, degrade) a protected resources (surface waters, cultural resources). Land disturbance could trigger or exceed stormwater permit requirements, and/or it could generate contaminated spoil/waste.
2. Excavation and/or placing material or fill is a very common action that is highly regulated when the action is in a surface water (streams, wetlands, etc) or floodplain
3. Bridge maintenance activities (cleaning, painting, repairing, etc) that impact surface waters, are over scenic rivers, impact migratory birds or bats, activities that require Section 10 approval, and/or interfere with navigation clearances
4. Vegetation management including herbicide application, mowing, and tree clearing that impacts known or potential protected habitat, species, or sensitive areas (mitigation areas, preserves, pollinator habitat, etc)
5. Maintenance Activities Near Scenic Rivers: Highway management activities within 1000 feet of a scenic river and regulated by the Ohio Department of Natural Resources (ODNR)
6. Pile driving that disturbs bat hibernacula
7. Working outside the ODOT ROW: outside of the ODOT ROW, the probability of interacting with regulated resources can increase.

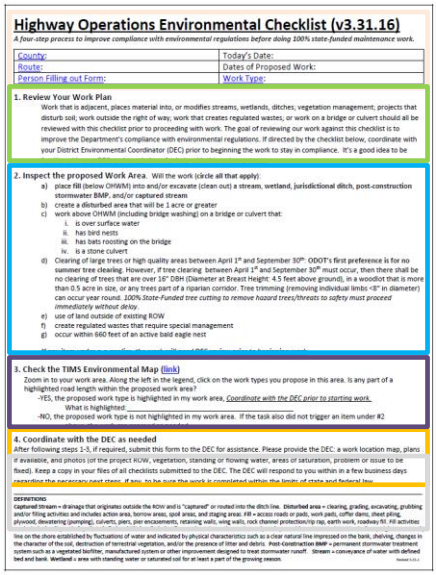
If a proposed action fits into one of the above categories, the TM will review the discrete work activity within the HOEC process and, using the supporting manual and the TIMS Environmental Map, determine if coordination with the DEC is needed prior to initiating work.

IF THE WORK HAS THE POTENTIAL TO BE FEDERALLY FUNDED OR IF IT COULD SEEK FEDERAL REIMBURSEMENT (for example UNDER THE FEDERAL EMERGENCY RELIEF (ER) PROGRAM), THE PROJECT/WORK SHOULD FOLLOW ALL APPLICABLE PROCESSES UNDER NEPA AND SHOULD *NOT* USE THIS HOEC GUIDANCE. IF IT IS AN EMERGENCY, CALL YOUR DEC FOR GUIDANCE.

PLEASE NOTE, IT IS UNLAWFUL TO KILL WILDLIFE WITHOUT PERMIT. NEVER KILL WILDLIFE OR DESTROY BIRD EGGS OR NESTS WITHOUT A PERMIT.

D. HOEC User Instructions

This section will describe each step of the HOEC (located in Appendix 1) and the processes required to make decisions regarding resources, impacts, and coordination with the DEC. It is recommended that the user open/print a copy of the HOEC, and review it while reading the guidelines below. The highlighted boxes on the document to the left correspond with the sections described below.



Highway Operations Environmental Checklist (v3.31.16)

A four-step process to improve compliance with environmental regulations before doing 100% state-funded maintenance work.

County:	Today's Date:
Route:	Dates of Proposed Work:
Person Filling out Form:	Work Type:

The table asks for the county and route(s) in which the work will occur, the name of the person filling out the form, the date the form is filled out, the date the work will occur, and nature of the work.

1. Review Your Work Plan

Work that is adjacent, places material into, or modifies streams, wetlands, ditches; vegetation management; projects that disturb soil; work outside the right of way; work that creates regulated wastes; or work on a bridge or culvert should all be reviewed with this checklist prior to proceeding with work. The goal of reviewing our work against this checklist is to improve the Department's compliance with environmental regulations. If directed by the checklist below, coordinate with your District Environmental Coordinator (DEC) prior to beginning the work to stay in compliance. It's a good idea to be familiar with your DEC, and to ask them for help with this review process.

The process begins with the review of the work type. The Transportation Manager (TM) reviews the proposed potentially regulated activity(ies) against the Highway Operations Environmental Checklist (HOEC). The following work actions would require the use of the HOEC because they have the potential to impact regulated resources. Completing the checklist creates an opportunity for ODOT to comply with federal and state regulations by coordinating with the District Environmental Coordination (DEC) if necessary.

2. Inspect the proposed Work Area. Will the work (circle all that apply):

a) place **fill** (below OHWM) into and/or excavate (clean out) a **stream, wetland, jurisdictional ditch, post-construction stormwater BMP,** and/or **captured stream**
b) create a **disturbed area** that will be 1 acre or greater
c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert
d) Clearing of large trees or high quality areas between April 1st and September 30th: **ODOT's first preference is for no summer tree clearing**. However, if tree clearing between April 1st and September 30th must occur, then there shall be no clearing of trees that are over 16" DBH (Diameter at Breast Height: 4.5 feet above ground), in a woodlot that is more than 0.5 acre in size, or any trees part of a riparian corridor. Tree trimming (removing individual limbs <8" in diameter) can occur year round. *100% State-Funded tree cutting to remove hazard trees/threats to safety must proceed immediately without delay.*
e) use of land outside of existing ROW
f) create regulated wastes that require special management
g) occur within 660 feet of an active bald eagle nest

If any item under a-g applies, the work will need DEC review prior to beginning work

This section defines resources and activities referenced in checklist items a-g. The descriptions and images should help the TM reach a decision regarding the nature of the work activity and the presence of regulated resources.

a) place **fill** (below OHWM) into and/or excavate (clean out) a **stream, wetland, jurisdictional ditch, post-construction stormwater BMP,** and/or **captured stream**

Fill activities consist of placing material in a surface water where the material either replaces any portion of water with dry land or changes the bottom elevation a water. **Examples of fill include:** rock, sand, soil, clay, plastics, construction material, wood chips, culverts, RCP, overburden from mining or other excavation activities, and materials used to create any structure of infrastructure.

Excavate includes the following activities: relocate, modify, straighten, channelize, realign, deepen, widen, and/or relocate.

Streams are any channel with a defined bed and bank which carries water for at least a minimal period of time and has an ordinary high water mark (**OHWM**). Fluctuations of water cause the OHWM, which can be categorized by a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and accumulation of litter and debris. Regulated streams can include streams with different flow types: **Ephemeral**: only flows during rain events (goes dry without recent rain), **intermittent**: flows seasonally, and **perennial**: flows year-round. **Streams can be impacted by:** placing fill (spoil, rock, soil, construction materials, etc.) below the OWHM, driving or operating heavy machinery in the stream, hanging the flow of water in the stream, adding pollutants to the stream (wash water, stormwater, spills, etc.)

Figure 1 Stream Characteristics

Figure 2 Streams can be small, ditch-like waterways, large rivers, or anything in between.

Petition "ditches" are historically channelized watercourses constructed or improved in accordance with Ohio's petition ditch laws. Petition ditches are often modified streams with clearly defined OHWMs. Petition ditch laws do not apply to impacts that are not implemented in accordance with the ditch laws (such as a roadway project). Petition ditches within an ODOT project area should be evaluated to determine if they meet the characteristics of a stream, wetland, or ditch regardless of the "petition ditch" designation. **In most circumstances, they will be regulated as streams**.

Captured streams originate outside of the roadway right-of-way and flow into the right-of-way becoming captured within the roadway ditch. These may not have an OHWM, or may become fully vegetated due to a wide configuration. **These waterways are regulated as streams**.

Figure 3 Example of a Captured Stream

All streams are protected by regulation. However, some streams have additional protections because of their use, sensitivity, or designation. Additional rules and limitations apply to the following streams:

Scenic Rivers: streams that are designated State or National (federal) Scenic Rivers. Certain types of work in or within 1,000 ft of a scenic river requires coordination with the Ohio Department of Natural Resources (ODNR). This can include work that is not over the river, but include work on a stretch of road where the river is parallel to the road. **The following are scenic rivers**: *Ashtabula River, Big and Little Darby Creek, Chagrin River, Clear Fork Mohican, Conneaut Creek, Grand River, Greenville Creek, Kokosing River, Little Beaver Creek, Little Miami River, Maumee River, Mohican River, Olentangy River, Sandusky River, Stillwater Creek, Upper Cuyahoga River*.

Mussel Streams: streams with known populations of mussels. Mussels are large invertebrate organisms that live in stream bed substrates and filter water to obtain food. As a result, they are often good indicators of good water quality and are very sensitive to water pollution. These are streams that are known or suspected of having sensitive mussel species living in them. Impacts to these streams could result in a violation of the Endangered Species Act and/or Ohio endangered species laws (discussed on page 36). **Impacts can include any activity that results in a discharge to these waters, including fills, excavation of the stream bed, driving in the stream bed, wash water, power-washing water, etc.**

Figure 4 Examples of Mussels

Section 9 Waters: streams regulated under Section 9 of the Rivers and Harbors Act of 1899. Section 9 states that construction of bridges or causeways performed in or over navigable waters of the U.S. must be authorized by the U.S. Coast Guard (USCG) through the issuance of bridge permits or permit amendments. Such bridges are **regulated to control horizontal and vertical clearances for commercial navigation**. A list of Section 9 streams is located in Appendix I of the Waterway Permits Manual. Section 9 waters are a GIS layer in the TIMS Environmental Map.

Section 10 Waters: streams regulated under Section 10 of the Rivers and Harbors Act of 1899. Section 10, administered by the U.S. Army Corps of Engineers (USACE), and requires a Section 10 permit for any fill activity (temporary or permanent) or dredging activity below the OHWM in a Section 10 Waterway. A Notice to Navigation

(NTN) is an application to the USACE that allows them to regulate the navigational integrity of waterways when an applicant seeks to conduct certain types of work on navigation channels and some segments of Section 10 waterways. A major concern for these waterways is to protect the navigation channel, or clearance (both vertical and horizontal) for passing vessels. A list of Section 10 streams is located here.

Some jurisdictional ditches may fall under Section 10 jurisdiction when they are in close proximity to Lake Erie and are at or below the mean elevation of Lake Erie (571 ft). Any work within these ditches may require a Letter of Permission or Section 10 Permit from the USACE, including ditch clean-out and excavation activities.

Wetlands are areas inundated or saturated by water long enough during the growing season to support plants adapted for life in wet soil conditions. Examples include swamps, wet meadows, marshes, bogs, and fens. From a regulatory perspective, a wetland must possess adequate hydrology (water), a prevalence of hydrophytic vegetation (plants that like water), and the presence of hydric soil (soil that has been under water for at least part of the season). **Wetlands can be impacted by:** placing fill (spoil, rock, soil, construction materials, etc.), operating machinery in the wetland, draining or changing the water flows into or out of the wetland, removing trees or vegetation from within the wetland, excavating material from the wetland, allowing wash material or other construction materials to fall or drain into the wetland.

Figure 5 Regulated wetlands can often be within stream channels, and immediately next to bridges. Wetlands (vegetated areas within the yellow lines) are along and within the stream channel.

Figure 6 Regulated wetlands can often be immediately at the toe of slope along roadways. The area at the end of the culvert and the

Figure 7 Regulated wetlands (indicated by yellow line) can often be immediately at the toe of slope along roadways.

Figure 8 illustrates how wetlands can appear on the landscape. The dramatic change in vegetation types and color are indicators of wetlands. The yellow line is the boundary of the regulated wetland. Activities that would impact the wetland require a permit. "Wetland delineation" is the process for identifying the jurisdictional boundary of a wetland and is performed by scientists trained in wetland plants, soils, and hydrology.

Figure 9 Wetlands can form in ditches due to lack of maintenance (aggraded ditch profiles or clogged culverts) or by their design (fade-away ditch line). The wetland boundary must extend a significant distance beyond the configuration of the ditch for it to be considered, and regulated as, a wetland. In the example to above, there is no clear indication of where the ditch ends and the wetland begins. Therefore, the ditch would be considered a wetland and regulated as such

Figure 10 is a wetland during late fall - no water is currently visible, yet it is a regulated wetland.

Jurisdictional ditches are ditches regulated by federal law. Non-jurisdictional ditches fall outside of federal regulations. **Most ditches are not regulated**. However, something that is referred to as a ditch could potentially also be a stream or wetland or stormwater BMP. **Jurisdictional ditches** are relatively permanent waters (RPW) (flows for at least 3 months each year) with an OHWM. A ditch *could* be jurisdictional and subject to regulations if it: starts outside of the ROW, flows outside of the ROW, has an OHWM, contains water for more than 3 months per year, or drains a wetland. A ditch is most likely *not* jurisdictional if it: does not contain water for more than 3 months per year, does not have an OHWM, is not a stream captured in the ditch line, or is not draining a wetland

Caution: regulated water resources can be found in ditches:

Figure 11 Example of a ditch that does not have a defined OHWM, is not an RPW, and therefore is not a jurisdictional resource.

Figure 12 Example of a roadside ditch entirely in the ROW that has an OHWM but is not a RPW, and is not a jurisdictional resource.

Figure 13 Example of a roadside ditch entirely in the ROW that has an OHWM, is a RPW, and is a jurisdictional resource.

Figure 14 Example of a ditch that may have an OHWM and could be a RPW, and therefore could be a jurisdictional resource. The cattails and other wetland vegetation is contained within the ditch line, so it is not considered a jurisdictional or isolated wetland.

Figure 15 Example of a ditch that has an OHWM, is a RPW (spring fed), and is a jurisdictional resource

Figure 16 Example of a petition ditch that has an OHWM, is a RPW, and is a jurisdictional resource. The resource would be regulated as a stream.

Post-construction stormwater BMPs are features installed to treat stormwater as part of stormwater permits. Vegetation must be re-established to designed specifications after ditch maintenance activities are performed. They are designed and installed at time of construction to filter stormwater from the roadway before it enters nearby streams. These features are a requirement of the Clean Water Act (discussed on page 36), and are implemented by state and federal permitting.

If your project impacts an existing BMP (ex: construct culvert in the BMP), the BMP must be extended to the original dimensions.

Figure 17 Stormwater BMPs such as vegetated bioswale/biofilters are designed to clean stormwater as it leaves the roadway. The design configuration must be maintained to meet this function.

Figure 18 and Figure 19 are examples of stormwater basins. These areas need to be maintained as stormwater controls.

Figure 20 Example of a stormwater basin. These areas need to be maintained as stormwater controls.

Figure 21 Example of manufactured water quality structure during installation.

Figure 22 Example of a vegetated bioswale. These need to be maintained as stormwater control features. These features can be difficult to identify in the field. Locations can be verified with your planning department prior to conducting ditch maintenance.

b) create a **disturbed area** that will be 1 acre or greater

This item is a trigger for water pollution control stormwater permits (which are discussed in detail on page 36).

Examples of creating a disturbed area include: clearing, grading, excavating, grubbing and/or filling activities and includes action area, borrow areas, spoil areas, and staging areas

c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert

Bridge washing to increase the longevity of ODOT's bridges is extremely beneficial to prolonging the lifespan of our infrastructure. **It is also a highly regulated activity**. Bridge washing can result in a discharge of "industrial wash water" to surface waters which is a regulated activity. Wash water that enters surface waters can negatively impact water quality and be detrimental to aquatic organisms such as mussels, hellbenders, and fish. The process of spraying water onto the bridge can harm animals that roost or nest on bridges such as protected bats or birds. All bridge washing should be coordinated with your DEC prior to being completed. The Office of Hydraulic Engineering developed a standalone National Pollutant Discharge Elimination System (NPDES) permit with OEPA for the management of bridge cleaning washwater.

i. is over surface water

See image below for types of surface waters. Types of surface waters are discussed in detail starting on Page 6.

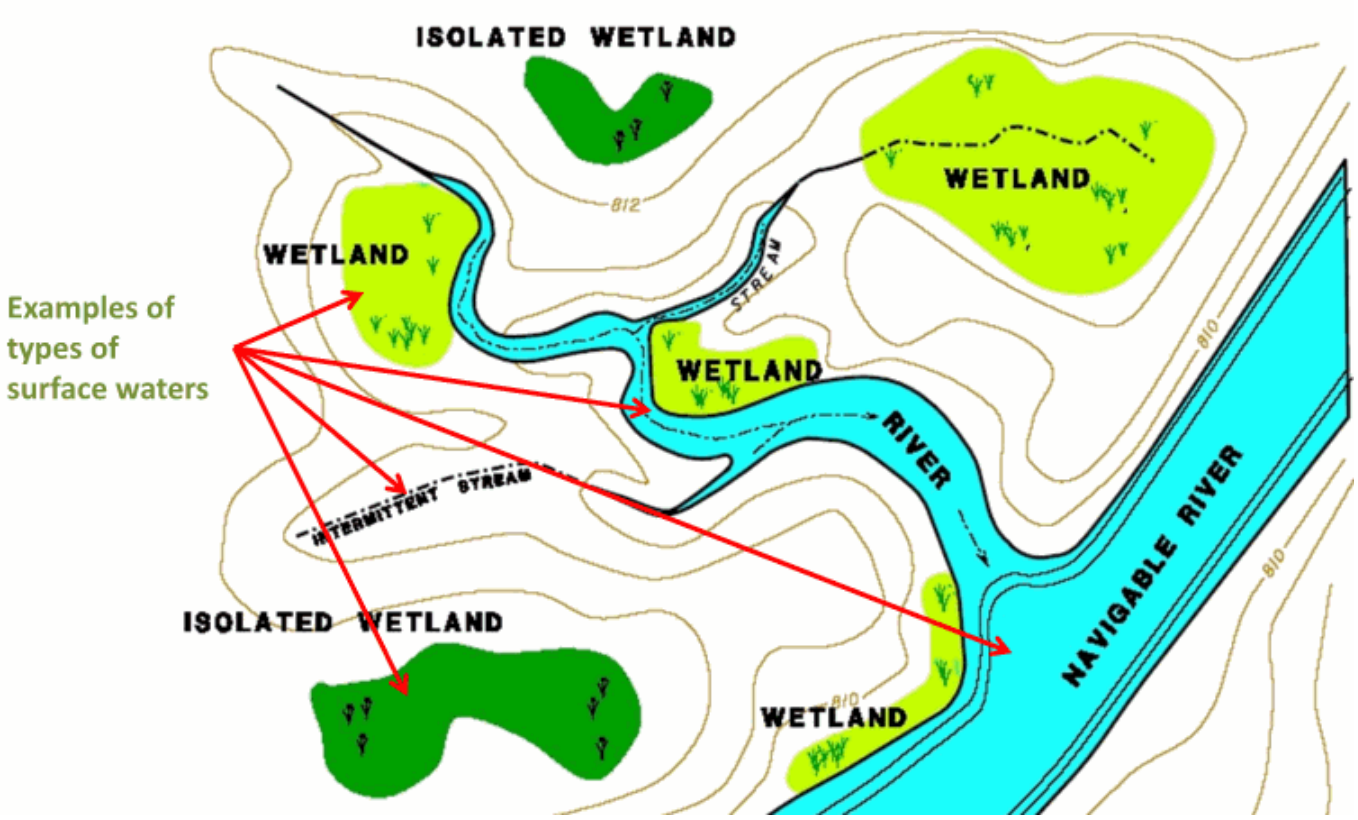


Figure 23 Surface waters include wetlands, streams, jurisdictional ditches, and captured streams.

ii. has bird nests

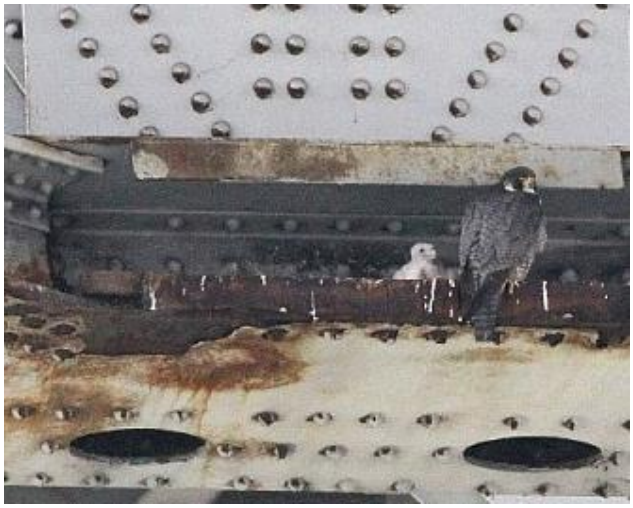


Figure 24 Peregrines nesting on bridge.

Figure 26 Cliff Swallows nests.

Figure 25 Juvenile Peregrine Falcons nesting in WV Bridge.

Figure 27 Phoebe Nests.

Figure 28 Organ Pipe Mud Dauber Nest (Wasp nest).
This is not a bird nest and is not protected by regulations.

iii. *has bats roosting on the bridge* (images from FHWA's Range-Wide Biological Assessment for Transportation Projects for Indiana Bat and Northern Long-Eared Bat).

Figure 29 Bats roosting and associated staining.

Figure 30 Visible bats within an expansion joint.

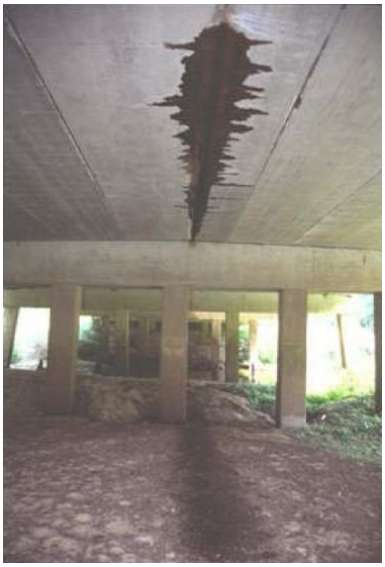


Figure 31 Staining along joint/guano deposits on ground.

Figure 32 Example of concrete joint used by bats.

iv. *is a stone culvert*

Figure 33 Example stone culvert in Delaware County.

Figure 34 Example stone culvert in Delaware County.

Figure 35 Example stone culvert in District 7.

d) Clearing of large trees or high quality areas between April 1st and September 30th: **ODOT's first preference is for no summer tree clearing**. However, if tree clearing between April 1st and September 30th must occur, then there shall be no clearing of trees that are over 16" DBH (Diameter at Breast Height: 4.5 feet above ground), in a woodlot that is more than 0.5 acre in size, or any trees part of a riparian corridor. Tree trimming (removing individual limbs <8" in diameter) can occur year round. *100% State-Funded tree cutting to remove hazard trees/threats to safety must proceed immediately without delay*.

These trees may harbor bats and could be potential roost trees for the endangered Northern Long-eared Bat and Indiana Bat. **However, if a tree is an immediate threat to safety, it should be removed immediately, regardless of the time of year**.

Figure 36 Example of potential high quality bat roost tree.

Figure 37 Example of potential high quality bat roost tree.

e) use of land outside of existing ROW

Land outside of existing ROW could have historic or archaeological resources, Section 6(f) resources, surface waters, sensitive species, contamination, etc. that need to be coordinated appropriately. Relevant laws are discussed on page 36. Ohio pollution laws prohibit causing pollution, or placing or causing to be placed any sewage, sludge, sludge materials, industrial waste, or other wastes in a location where they cause pollution of any waters of the state.

f) create regulated wastes that require special management

Regulations require proper management of wastes including solid and hazardous wastes. These regulations are discussed more on page 36. The management of fuel tanks, wastes, and materials accumulated, stored, or used at county maintenance facilities is highly regulated. Detailed guidance on how to comply with these regulations can be found at the OES ESA Tank, Product and Waste Management website and manual (see link below). Additionally compliance with stormwater regulations at facilities requires several plans be in plan place including a Spill Prevention, Control, and Countermeasures (SPCC) plan to manage response to spills, as well as a Storm Water Pollution Prevention Plan (SWPPP) which reduces the likelihood of contaminated stormwater flowing off ODOT facilities. For questions regarding the SWPPP, contact the Office of Facilities Management. For questions regarding the SPCC, contact Kevin Hodnett in the Office of Environmental Services at 614-466-7925.

Project Wastes and Washwater: Follow current CMS standard 107.19.

Solid Wastes: Click the following link for the OES Waste Management Manual, or go to the Central Office Intranet, click Environmental Services > Product and Waste Management Site > Products and Waste Management > Product and Waste Management Manual.

g) occur within 660 feet of an active bald eagle nest

If a bald eagle is sighted near the project area, there is likely a nest nearby and the DEC should be contacted.

Figure 38 A bald eagle nest looks similar to a very large flat squirrel nest, only **much** larger (5-6 feet in diameter) and made of sticks instead of leaves. If a nest or a bald eagle is observed, contact your DEC for instructions.

3. Check the TIMS Environmental Map (link)

Zoom in to your work area. Along the left in the legend, click on the work types you propose in this area. Is any part of a highlighted road length within the proposed work area?

-YES, the proposed work type is highlighted in my work area, *Coordinate with the DEC prior to starting work.*

What is highlighted:_____

-NO, the proposed work type is not highlighted in my work area. If the task also did not trigger an item under #2 above, the work can proceed as needed.

The Transportation Manager will then utilize the online map (https://gis.dot.state.oh.us/tims/Map/Environmental) to identify if their particular work type will impact a known regulated resource.

This section instructs the TM on how to use the TIMS Environmental Map. Screenshots with associated descriptions will guide the TM though the TIMS process. This section also describes Environmental Database layers and EC Restriction layers to illustrate which resources may be impacted based on work type.

The TIMS Environmental Map allows TMs to ID known regulated resources within their work areas based on the type of work proposed.

- To assist with the identification of important resources protected by environmental regulations, the Office of Technical Services and the Office of Environmental Services have partnered to develop an online mapping tool through TIMS. This tool features an easy-to-use interface that displays known resources on a map. The tool is meant to provide TMs with a way to determine if their work will impact known natural resources currently available in GIS databases. **The mapping tool only includes those resources that are currently available in existing databases and will not be able to identify all potential resources.** Site specific conditions can change over time creating new resources where there was not one before (for example, a clogged culvert backs up standing water and over time creates a new wetland). For this reason, on-site inspection is an important addition to the Web Map review.

  The background map of the state shows district boundaries, county lines, roads, cities, and townships. The mapping shows (by highlight) the roadway segment where one of these database resources is present near the road (it does not necessarily show the user is the exact resource location). The resource is not located on the roadway itself; rather the resource is known to be nearby (within the ROW), or in the case of a sensitive stream, possibly underneath the roadway.

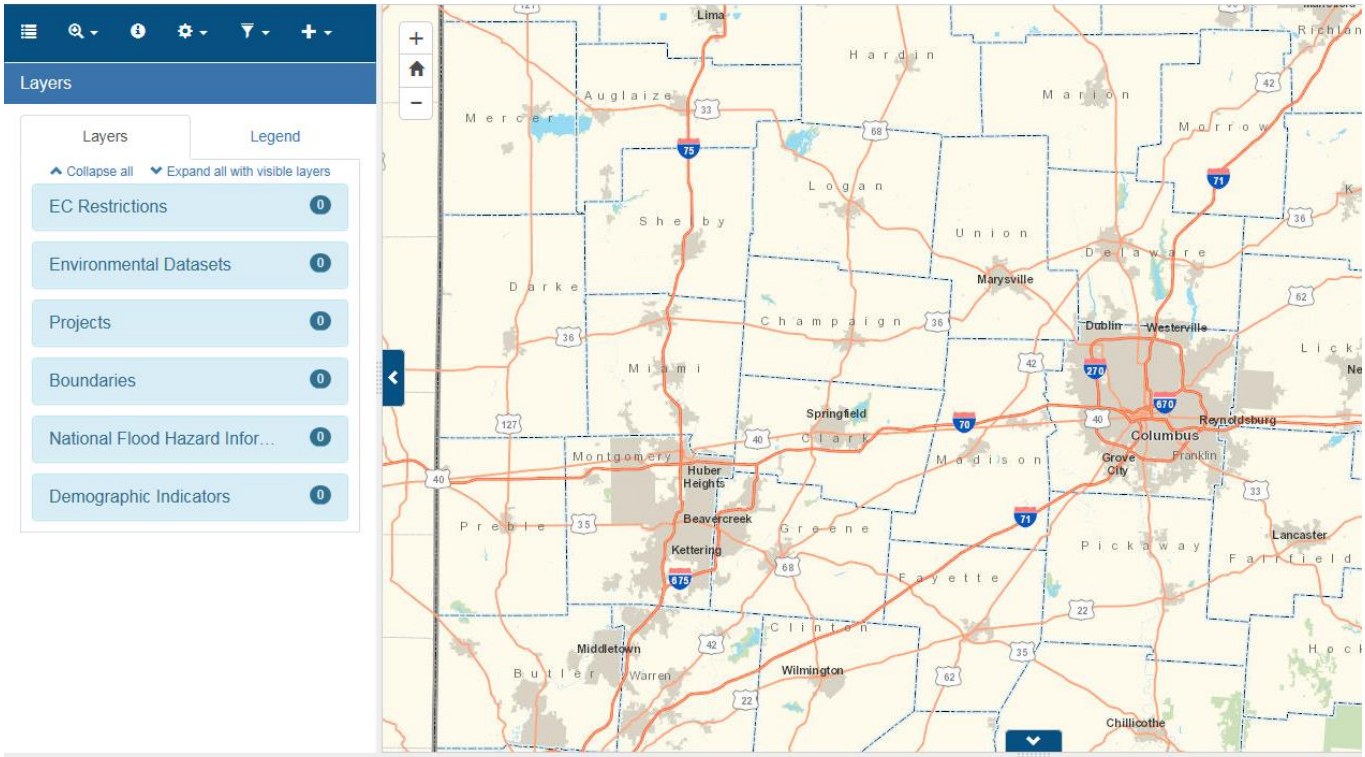
- The TIMS Environmental mapping provides information on the following work types and regulated resources:

Environmental Datasets (Resources Potentially Impacted by the Work Type)	**Description and Intent of Dataset. (The state and federal regulations referenced are discussed in detail on page 36).**	**EC Restrictions (Work Type Shown in TIMS Environmental Map)**
Coastal Zone Management Area	Limits the potential risk for violating the Coastal Management Law of 1988. Also shows area with potential Section 10 jurisdiction over ditches and streams.	Fill & Excavation Restriction
FEMA Floodplains	Limits the potential risk for violating federally regulated floodplain laws. Regulated fill in floodplains can include the placement of silt and debris from the floodplain (for example placing spoil from a ditch clean out) back into the floodplain. Certain impact types within a FEMA designated 100 year floodplains require management and permitting under the National Flood Insurance Reform Act. ODNR, Division of Water, Floodplain Management Program oversees floodplain management and regulations. However, according to FEMA, local communities are ultimately responsible for prohibiting encroachments in the regulated floodplain. Each local community has a Local Floodplain Administrator (LFA), who has been charged with overseeing their respective community's program.	Fill & Excavation Restriction

Historic Bridge Inventory	The intent of this map layer is to limit the potential risk violating the Ohio Revised Code 149.53.	Bridge Maintenance Restriction
Known Indiana bat and Northern Long-eared Bat capture areas	Limits the potential risk of violating the Endangered Species Act and state species laws.	Tree Clearing Restriction
Known Indiana bat and Northern Long-eared Bat hibernacula	Limits the potential risk of violating the Endangered Species Act and state species laws.	Pile Driving Restriction
Known Section 10 Waters and Known Section 9 Waters	Limits the potential risk for violating the Rivers and Harbors Act of 1899.	Bridge Maintenance Restriction Fill & Excavation Restriction
Mussel Streams	Limits the potential risk of violating the Endangered Species Act (ESA) and state species rules. These streams may contain common mussel species protected by state laws, and rare mussels protected by the ESA. Impacts to these streams could potentially cause "take" of common mussels or a state or federally listed mussel species. The Mussel streams layer is also a visible Environmental Dataset layer.	Bridge Maintenance Restriction Fill & Excavation Restriction
National Wetland Inventory	Limits the potential risk of impacting known federally and state regulated wetlands or state regulated isolated wetlands by showing potential wetland areas.	Fill & Excavation Restriction
NHD Streams	Limits the potential for violating surface water rules.	Fill & Excavation Restriction
ODOT Mitigation Areas	Limits the potential risk of impacting ODOT owned/purchased/created natural resource mitigation areas. These areas are created and protected in accordance with various laws and regulations and must be maintained in a natural undisturbed state.	Fill & Excavation Restriction Herbicide Restriction Tree Clearing Restriction
Scenic Rivers 1,000' Buffer	Limits the potential risk for violating the National Wild and Scenic Rivers Act and the Ohio Wild, Scenic and Recreational River Act.	Maintenance Restriction
Sensitive Species	Limits the potential risk of violating state endangered species laws and the Migratory Bird Treaty Act, and to limit the destruction or damage to known sensitive natural resources.	Fill & Excavation Restriction Herbicide Restriction Mowing Restriction
Within 500 yards of a Surface Water Intakes	Limits the potential risk of violating drinking water and NPDES rules.	Herbicide Restriction
Scenic Byways	Limits the potential of cutting non-hazard trees that are significant for the scenic character of the byway.	Tree Clearing Restriction

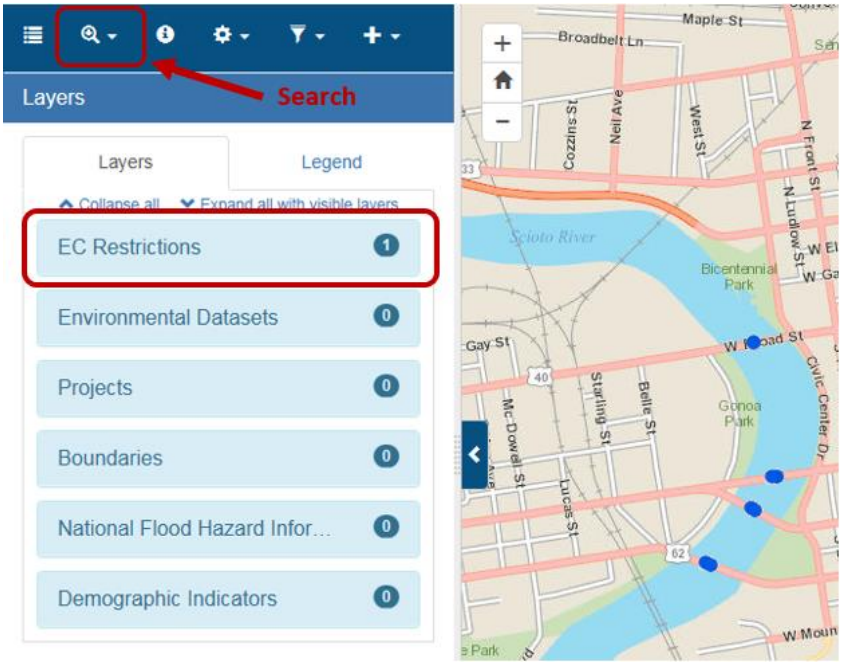
Figure 39 and Figure 40 are examples of historic bridges which are regulated resources under ORC 149.53. Historic Bridges are a database layer on the TIMS Environmental Map and, if present, a trigger to contact your DEC.

- TIMS Environmental Map instructions and images:
  - The user sees the following screen upon opening the TIMS Environmental Map:



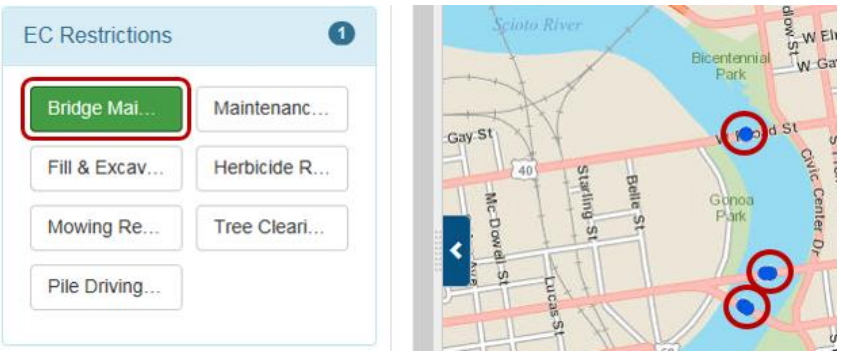
Results

- Zoom to the location of the proposed work (zoom can be completed by clicking on the map and using the center scroll wheel) OR click the *Search* button and utilize the *Find address or intersection* function.

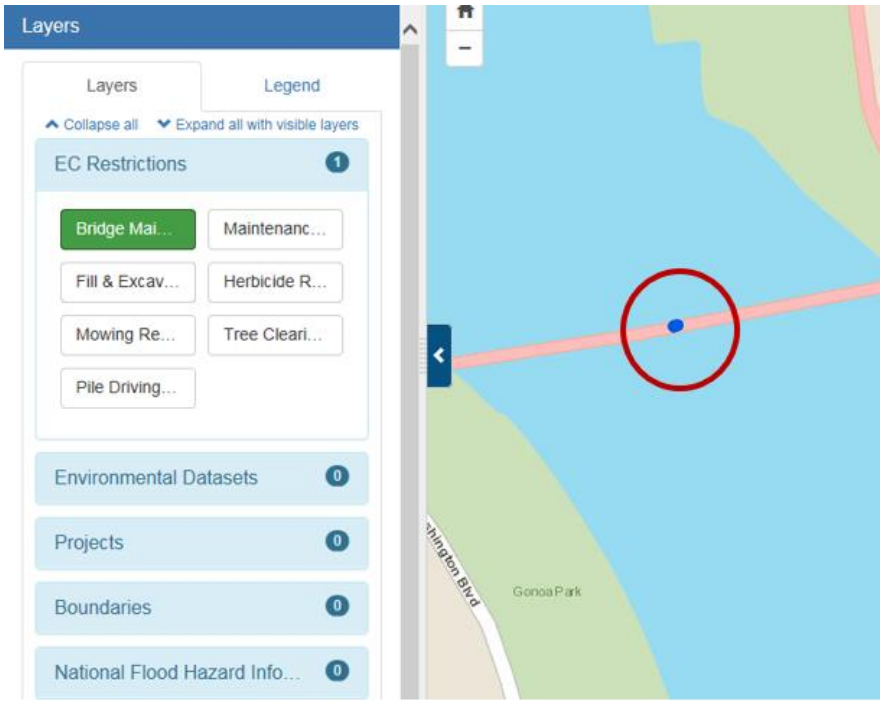


- Ensure the *Layers* button is selected. Click the *EC Restrictions* button. This will open up the list of EC Restrictions. *Environmental Datasets* can also be selected, which will identify the reasons for any restrictions.

- Click the EC Restriction(s) that fits your work type(s). The map will highlight areas where that work type is restricted.

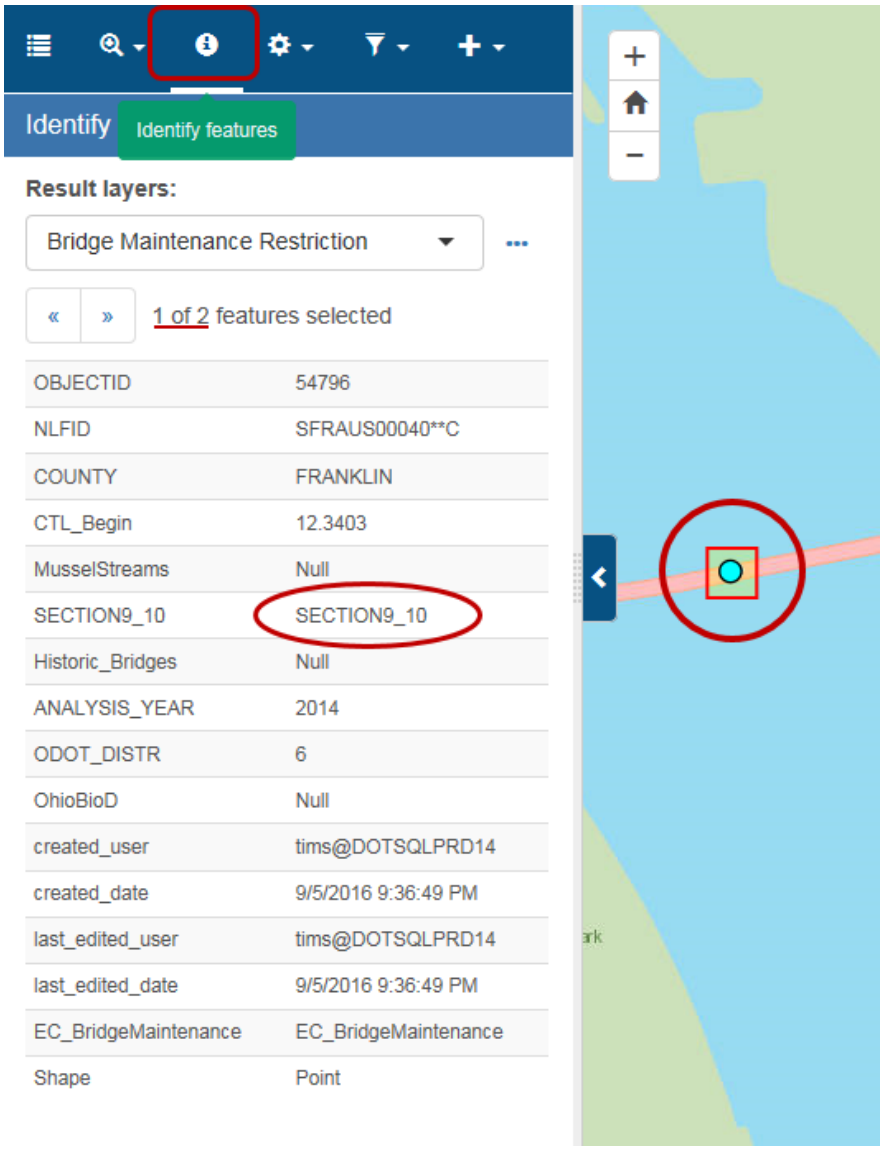


- If your work area is highlighted, **contact the DEC before beginning work**. These highlighted areas indicate there are or may be resources within or immediately adjacent to the ODOT ROW that could be negatively affected by this work type. In the example to the right, Bridge Maintenance Restrictions is selected, and the blue dots indicate bridges with potential protected resources.



- If the project area is not highlighted, there are no known resources that could be impacted by that proposed work. If the user already conducted a field review and found no environmental resources in the project area, **the work may continue**. If not, the user should conduct a field review at this point to determine if there are resources present at the project location not represented in the TIMS environmental databases (follow Step 2 of the HOEC Guidelines outlined above).

- To determine the Environmental Dataset that triggered the highlight, click on the *Identify Features* button, and then click on the highlighted area. At the bottom of the page, an *Identify Results* section will appear. This section lists the identified resources (in this case, two bridges in the project area), and the environmental resources which caused the restriction. One single bridge has a restriction for being over a mussel stream and another restriction for being over a Section 9 or Section 10 Waterway. Narrowing down the potential impacted resources will help the DEC provide guidance on how to proceed with the work.



- There is also a *Base Map* feature at the top right of the screen (below), which allows the user to adjust the base map to Streets, Hybrid, Topo, Gray, Dark Gray, National Geographic, and Open street maps.

4. Coordinate with the DEC as needed

After following steps 1-3, if required, submit this form to the DEC for assistance. Please provide the DEC: a work location map, plans if available, and photos (of the project ROW, vegetation, standing or flowing water, areas of saturation, problem or issue to be fixed). Keep a copy in your files of all checklists submitted to the DEC. The DEC will respond to you within in a few business days regarding the necessary next steps, if any, to be sure the work is completed within the limits of state and federal law.

Checklist Item(s) not triggered: If no conflict was identified after reviewing the work type against the HOEC, conducting a field review, and reviewing the TIMS Environmental Map tool, then the work can occur as needed.

Checklist Item(s) triggered: If the work triggers one or more of the items on the checklist, the TM submits the project type and supporting information (listed on the checklist) to the DEC.

DEC Review: The DEC reviews the project against the "DEC Guidance for Reviewing and Managing Environmental Impacts of 100% State Funded Highway Management Projects" and appropriate manuals using best professional judgment with the support of the Office of Environmental Services (OES) as needed.

- Clean out activities in jurisdictional ditches and streams will follow the Guidance for In-Water Work with No Temporary Fill (Including Stream and Jurisdictional Ditch Clean-out) included in this manual.

DEC Response: In a **reasonable number** of business days of being notified of a potential conflict with Highway Maintenance work and an environmental regulation, the DEC will respond to the TM with one of three responses:

- The work is clear and can proceed
- The work can proceed but with conditions (those conditions should be attached to the reply and followed when completing the work)
- The work requires environmental coordination and cannot proceed until that coordination is complete

Expedited Response: If the TM needs a more immediate response, discuss the details of the issue with the DEC directly by phone.

Coordination with OES/Resource Agencies: If the DEC determines that the project will require coordination with OES and the resource agencies, they will notify the TM and submit the project to OES via the appropriate established processes. It should be noted on the submittal to OES that the project is 100% state funded. The DEC may contact OES for guidance on what coordination may be required for a 100% state funded highway management activity. See the OES Guidance on Environmental Requirements for 100% State Funded Projects.

Ecological Survey Report (ESR): If the project is coordinated with OES as an ESR, it is anticipated that the ESR will be coordinated with the resource agencies under the Eco MOA as needed.

Waterway Permit Required: If the project requires a waterway permit, environmental coordination (endangered species, cultural, etc.) may be needed to satisfy the U.S. Army Corps of Engineers (USACE) and potentially the Ohio Environmental Protection Agency (OEPA).

Work Conditions: Any conditions placed on the work by the DEC should be printed and kept at the work site. All conditions must be followed to avoid potential violations.

Documentation: It is recommended that the user saves a copy of the checklist, screen print of the web map, any photos or mapping referenced during their assessment, and correspondence with the DEC for future reference.

E. DEC Guidance for Reviewing and Managing Environmental Impacts of 100% State-Funded Highway Management Projects

This guidance is intended for the District Environmental Coordinators in how to use the Highway Operations Environmental Checklist (HOEC). The DEC should use this guidance once contacted by the Transportation Manager (TM) to determine compliance issues and if coordination with the OES and resource agencies will be needed.

When the TM contacts the DEC for assistance, what does the DEC do? This section provides a short outline of how the DEC should consider and process various work types to achieve compliance. Some work types or resources will require coordination with resource agencies such as the U.S. Army Corps of Engineers, Ohio Environmental Protection Agency, Ohio Department of Natural Resources, and U.S. Fish and Wildlife Service among others. The DEC should work with OES staff as needed for assistance in determining how to assess a work task, and for all coordination with the resource agencies. For the level of documentation required, please refer to the Guidance for Environmental Requirements for 100% State-Funded Projects to determine the level of documentation required.

1. Review Your Work Plan

Work that is adjacent, places material into, or modifies streams, wetlands, ditches; vegetation management; projects that disturb soil; work outside the right of way; work that creates regulated wastes; or work on a bridge or culvert should all be reviewed with this checklist prior to proceeding with work. The goal of reviewing our work against this checklist is to improve the Department's compliance with environmental regulations. If directed by the checklist below, coordinate with your District Environmental Coordinator (DEC) prior to beginning the work to stay in compliance. It's a good idea to be familiar with your DEC, and to ask them for help with this review process.

DEC Guidance:

The TM reviews their work plan against those activities listed that have the greatest potential to come in conflict with environmental regulations. The TM should be able to assess this part on their own. However, the DEC should be available as needed. The DEC, or their designee, should create a clear line of communication with all the TM in their district. The TM should know the DEC by first name and be able to call on them as needed. The TM will need to contact the DEC less when reviewing work in their particular counties as experience and understanding develops throughout the process.

2. Inspect the proposed Work Area. Will the work (**circle all that apply**):

a) place **fill** (below OHWM) into and/or excavate (clean out) a **stream**, **wetland**, **jurisdictional ditch**, **post-construction stormwater BMP,** and/or **captured stream**
b) create a **disturbed area** that will be 1 acre or greater
c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert
d) Clearing of large trees or high quality areas between April 1st and September 30th: **ODOT's first preference is for no summer tree clearing**. However, if tree clearing between April 1st and September 30th must occur, then there shall be no clearing of trees that are over 16" DBH (Diameter at Breast Height: 4.5 feet above ground), in a woodlot that is more than 0.5 acre in size, or any trees part of a riparian corridor. Tree trimming (removing individual limbs <8" in diameter) can occur year round. *100% State-Funded tree cutting to remove hazard trees/threats to safety must proceed immediately without delay*.
e) use of land outside of existing ROW
f) create regulated wastes that require special management
g) occur within 660 feet of an active bald eagle nest

If any item under a-g applies, the work will need DEC review prior to beginning work

a) place **fill** (below OHWM) into and/or excavate (clean out) a **stream, wetland, jurisdictional ditch, post-construction stormwater BMP,** and/or **captured stream**

DEC Guidance:

- Work actions in non-jurisdictional ditches can proceed as needed. However due diligence and management of the ditch spoil is required. See section on Ditch Spoil Management (page 34).
- For work that could impact a post-construction stormwater BMP (basin, manufactured water quality structure, vegetated bioswale/biofilter, etc.) coordinate with CO Office of Hydraulic Engineering.
- For clean out activities of known or potentially regulated resources, follow the latest version of the Guidance for In-Water Work with No Temporary Fill (Including Stream and Jurisdictional Ditch Clean-out) and proceed appropriately. If the project is located within the Coastal Zone Management Area, and it has an elevation at or below 571 feet and/or is influenced by backwater of Lake Erie, coordinate this activity with OES-WPU.
- The DEC can make use of RGP B to authorize fills in waters of the U.S., assuming the work meets all the conditions of the RGP as a non-federal permittee and does not trigger any of the items listed in #5 below. If the project requires a Pre-construction Notification (PCN) and/or the DEC wants further insight on how to utilize RGP B, contact the OES WPU.
- Coordinate an ESR (non-notifying) and PDR with OES for:
  - Work in streams with known populations of freshwater mussels (see List of Sensitive Mussel Streams in Appendix of ODNR Ohio Mussel Survey Protocol) or other State or Federally Listed T&E species (using the ODNR Biodiversity Database)
  - Work that requires an Isolated Wetland Permit, 404 Pre-Construction Notification (as a non-federal permittee), or Individual 404 or 401 Permit
  - Clean out activities that do not follow the OES Stream & Jurisdictional Ditch Clean-Out Guidance.
  - Work that proposes to modify, dredge or drain a wetland
  - Work over or near any stream that will not follow CMS 107.19 requirements for the control of waste water other than that allowed under existing stormwater permits
  - Work in National or State Wild and Scenic Rivers
  - Work over, above, under, or in a Section 9 Waterway
  - Work in a Section 10 waterway, and/or work near or over a Section 10 waterway that requires a Notice to Navigation (see the Waterway Permits Manual, Appendix I) or a Letter of Permission for cleanout activities in Section 10 jurisdictional ditches.
  - Natural Channel Design/research projects. These projects must be submitted to OES-WPU even if they have the potential to be permitted under an RGP B.
- For work within a FEMA floodplain, follow the latest standards for floodplain permitting as detailed in the L&D Manual volume 2. Please see the Ohio Department of Transportation Floodplain Management Guidelines for details.
- No coordination is needed if removing flood debris from bridge deck unless it is over a Section 9 or Section 10 waterway. Work over a Section 9 water may need to be coordinated with the USCG and work over a Section 10 waterway may need to be coordinated with the USACE. Contact the OES WPU to determine if coordination is required.

b) create a **disturbed area** that will be 1 acre or greater

DEC Guidance:

- If the disturbed area will be ≥ 1 acre and the work is routine maintenance as defined in ODOT L&D Manual - Vol. 2, Section 1112.2, neither a NOI nor BMPs are required.
- Two watersheds in Ohio have specific stormwater permits (Olentangy River and Big Darby Creek). Projects in these watersheds (as defined in ODOT L&D Manual – Vol. 2, Section 1112.3 have additional requirements. If the work occurs in one of these watersheds, coordinate with CO Office of Hydraulic Engineering.
- If the disturbed area will be ≥ 1 acre but the work is not routine maintenance (as defined in ODOT L&D Manual - Vol. 2, Section 1112.2) the work requires an NOI and post-construction BMPs. Coordinate with CO Office of Hydraulic Engineering.
- Any project with a disturbed area ≥ 5 acres (even if it is a routine maintenance project), requires an NOI and post-construction BMPs. Coordinate with CO Office of Hydraulic Engineering.

c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert

DEC Guidance for Bridge Work (Including Cleaning/Washing):

- For potentially historic bridges/culverts, follow the "State Funded and State/Local Funded Project Agreement" (Revised August 2012) found here: http://www.dot.state.oh.us/Divisions/Planning/Environment/Cultural_Resources/Documents/2552_001.pdf
- All bridge washing over a surface water must be completed in accordance with the OEPA NPDES general permit issued to ODOT. Contact Becky Humphries in the Office of Hydraulic Engineering for more information.
- The project must attempt to avoid impacts to nesting migratory birds. Nesting birds should be identified though a visual site inspection. If birds are identified nesting at the work location, and will likely be impacted by work activities, bridge work shall occur when birds are no longer nesting on the structure. Most migratory birds can be avoided by completing the bridge work between **August 31st and April 1st**. Cleaning the roadway surface of the bridge deck and joints can occur any time of year regardless of evidence of birds nesting or bats roosting beneath the bridge, as this activity should have no impacts on the nesting or roosting activities.
  - Peregrine falcons have been known to stay on nests all year long; however, they only occur on a handful of larger bridges. Peregrine falcons can be avoided by completing bridge work between **August 31st and February 1st**, or by limiting all work activities to a distance greater than 300 feet from the nest.
  - Cliff swallows are the most common species to nest on our bridges, typically on piers and beams beneath the bridge deck. Disturbance to this species could be in violation of the Migratory Bird Treaty Act. In Ohio, cliff swallows typically use bridges for nesting between April 1st and August 31st. Cleaning the underside of bridges between **August 31st and April 1st** would minimize disturbance to all birds that may be nesting under bridges except for the peregrine falcon.

  If impacts to nesting migratory birds cannot be avoided, ODOT may need to obtain a take permit under the Migratory Bird Treaty Act from the USFWS prior to the conducting any activities that could harm nesting birds.

- Between April 1st and September 30th, bridges located over water and that span greater than 20 feet should be inspected for the presence of bats. Bridges that show signs of frequent flooding (flood debris trapped under the deck in the substructure, or if the underside of the bridge does not contain any areas that could be used for roosting, the results of the inspection will be "bridge does not provide roosting habitat", and no further active season (April 1 to September 30) inspection will be required. If signs of bats are discovered, and the bats will likely be impacted by the work activities, work on the bridge should only occur between **October 1st and March 31st**. If bats are identified at the work location during the cleaning activity, bridge work will stop and ODOT-OES shall be contacted (614-466-7100). If OES determines bats will be impacted by bridge cleaning activities, they will coordinate with ODNR and/or USFWS as appropriate.
- Projects that only involve cleaning the roadway surface of the bridge deck and joints can occur any time of year, regardless of evidence of birds nesting or bats roosting beneath the bridge, as this activity should have no impacts on the nesting or roosting activities, beneath the bridge.
- Management and worker safety related to clearing large quantities of bird or bat droppings can be found here.
- Additional investigation, reporting, and coordination with OES and relevant resource agencies may be required for any work that involves;
  - permanent or temporary fills to waters of the U.S. or isolated wetlands,
  - any in-water work activities that would impact suitable habitat for Unionid mussels,
  - impacts to any federally listed or state listed species within the range of the project,
  - activities in, over, or under a Section 9 or Section 10 waterway,
  - work within 1,000 feet of any state designated wild, scenic or recreational river, and
  - encroachment within flood plains,
  - Applicable agreements or guidance should be referenced to determine when and what additional efforts may be necessary. OES can be contacted at any time to assist in this determination.

d) Clearing of large trees or high quality areas between April 1st and September 30th: **ODOT's first preference is for no summer tree clearing**. However, if tree clearing between April 1st and September 30th must occur, then there shall be no clearing of trees that are over 16" DBH (Diameter at Breast Height: 4.5 feet above ground), in a woodlot that is more than 0.5 acre in size, or any trees part of a riparian corridor. Tree trimming (removing individual limbs <8" in diameter) can occur year round. *100% State-Funded tree cutting to remove hazard trees/threats to safety must proceed immediately without delay*.

DEC Guidance:

Ideally all tree clearing should occur between October 1st and March 31st. As noted above, **tree clearing to remove hazard trees that threaten safety must proceed immediately, regardless of time of year.** Tree clearing that occurs between April 1 and September 30th can have negative impacts to endangered bat species protected by Section 9 of the Endangered Species Act.

e) use of land outside of existing ROW

DEC Guidance:

Review the area for potential ecological resources, cultural resources, Section 6(f) resources, Environmental Site Assessment concerns, etc., and coordinate with OES as appropriate. This should also be done for temporary work agreement areas outside ODOT ROW.

f) create regulated wastes that require special management

DEC Guidance:

Refer to the Product and Waste Management Manual and if needed contact Kevin Hodnett of the OES ESA Unit for further information.

g) occur within 660 feet of an active bald eagle nest

DEC Guidance:

If the project is within 660 feet of an eagles nest, please contact the OES ecological unit. The below hotlink will help you determine what restrictions or mitigation measure you may need on your project. Under no circumstance should the DEC, County or District Office directly contact the USFWS.

Fish and Wildlife Service guidance provided at
http://www.fws.gov/midwest/MidwestBird/EaglePermits/baeatake/index.html

If any item under a-g applies, the work will need DEC review prior to beginning work

DEC Guidance:

Review the submitted work actions against existing resources. Develop a standard approach with all of your TMs on how you communicate new projects, and any conditions, permits, etc. that may needed for the work. At a minimum the DEC should articulate in an email back to the TM any limitations or conditions that must be followed in order for the work to occur. If more detailed study or permitting is required, the DEC should work with the TM and OES to determine the best path forward. Sometimes it may be wiser to move this activity into the federal program. It is highly recommended DECs keep a record of all of these communications.

3. Check the TIMS Environmental Map (link)

Zoom in to your work area. Along the left in the legend, click on the work types you propose in this area. Is any part of a highlighted road length within the proposed work area?

-YES, the proposed work type is highlighted in my work area, *Coordinate with the DEC prior to starting work.*

What is highlighted:_____

-NO, the proposed work type is not highlighted in my work area. If the task also did not trigger an item under #2 above, the work can proceed as needed.

DEC Guidance:

If the following restrictions are triggered, the DEC must determine why the restriction exists and if further coordination is necessary. The DEC can utilize the TIMS Environmental Map to help narrow down the reasons for work restrictions. By clicking on the highlighted EC Restriction at the work area, the *Identify Results* section at the bottom of the page will list which Environmental Dataset(s) caused the restriction. Below is a list of the possible resources, and how to proceed if they will be impacted by the work type.

- Maintenance Restrictions
  - Work within 1000' of a Scenic River
    - Follow the latest Scenic River MOA and coordinate as appropriate.
- Bridge Maintenance Restrictions
  - Historic Bridges
    - Follow the "State Funded and State/Local Funded Project Agreement" (Revised August 2012) http://www.dot.state.oh.us/Divisions/Planning/Environment/Cultural_Resources/Documents/2552_001.pdf
  - Known Section 9 Waters or Section 10 Waters
    - Coordinate PDR with OES-WPU
  - Mussel Streams
    - If there will be work below the OHWM, contact the OES Eco Unit
    - If there will not work below the OHWM on Group 2 or 4 streams, but work will occur over or directly adjacent, or you are unsure about the impacts on any mussel stream, contact OES Eco Unit for further guidance
- Fill and Excavation Restrictions
  - ODOT Mitigation Areas
    - In general no impact to mitigation areas should occur. If the location and or restrictions of a particular mitigation area is needed, please contact with OES Eco Unit.
  - FEMA Floodplains
    - Follow ODOT L&D Manual - Vol. 2, Section 1005
  - National Wetland Inventory
    - Verify if wetland does exist and will be impacted
    - If applicable, provide a RGP B and the conditions to the TM; OR
    - Coordinate PDR with OES-WPU
  - Mussel Streams
    - If there will be work below the OHWM, contact the OES Eco Unit
    - If you are unsure about the impacts to any mussel stream, contact OES Eco Unit for further guidance
  - NHD Streams
    - Verify if stream does exist and will be impacted
    - For fill activities, provide a RGP B and comply with conditions as appropriate; OR
      - RGP B is only required for fill activities. However, excavation activities in Section 10 waters or backwaters may require further coordination.
    - Coordinate PDR with OES-WPU
  - Known Section 9 Waters or Section 10 Waters
    - Coordinate PDR with OES-WPU
  - Sensitive Species
    - Contact OES Eco Unit
  - ODNR Coastal Zone Management Area
    - See the RGP conditions as appropriate

        - Comply with the limitations of the Coastal MOA and coordinate as appropriate.
        - Coordinate any ditch cleanout activities in this area with OES-WPU; a Section 10 Letter of Permission from the USACE may be required.
- Herbicide Restriction
    - Within 500 yards of a Surface Water Intakes
        - Coordinate with operator of the surface water intake prior to completing the work.
    - ODOT Mitigation Areas
        - In general no impact to mitigation areas should occur. If the exact location and or restrictions of a particular mitigation area are not know, please contact with OES Eco Unit. Click for the link to OES Mitigation Website.
    - Sensitive Species
        - Contact OES Eco Unit
- Mowing Restriction
    - Sensitive Species
        - Contact OES Eco Unit
            - In many cases, the timing of mowing can reduce the impact to potential sensitive species in these areas.
            - If mowing is not required in an area, consider not mowing. This method could result in cost-savings for the department
    - ODOT Mitigation Areas
        - In general no impact to mitigation areas should occur. If the location and or restrictions of a particular mitigation area is needed, please contact the OES Eco Unit
- Tree Clearing **(Note: 100% state-funded tree cutting to remove safety threats must proceed immediately without delay)**
    - Known Indiana bat and Northern Long-eared Bat detection areas
        - If possible remove trees only during appropriate tree removal timeframes outlined in the latest Indiana bat and northern long-eared bat programmatic agreement.
        - If needed, contact OES Eco Unit for more guidance
    - ODOT Mitigation Area
        - In general no impact to mitigation areas should occur. If the location and or restrictions of a particular mitigation area is needed, please contact OES Eco Unit
    - Scenic Byways
        - If possible, avoid cutting trees that add to the scenic character of the byway. If needed, contact the Scenic Byways Coordinator to discuss the project and reason for tree clearing.
- Pile Driving
    - Known Indiana bat and Northern Long-eared Bat hibernacula
        - Coordinate appropriate ESR with OES Eco Unit

F. Guidance for Environmental Requirements for 100% State-Funded Projects (v.4.1.18)

Type 1: Non-PID Projects without Waterway Permits

No NEPA documentation is required.

- Follow the Highway Operations Environmental Checklist process. *(NOTE- Projects seeking or that will seek reimbursement from FHWA as an Emergency Project will still require full NEPA (see below)).*

Type 2: Non-PID Projects with Waterway Permits

No NEPA documentation is required.

- Follow the Highway Operations Environmental Checklist process
  - If non-notifying RGP B, DEC determines permit need and coordinates with OES on waterway permit requirements as needed.
  - If the waterway permit requires notification (PCN or IP), then the following studies are necessary to support this action: Ecological Survey Report, Section 106 clearance, permit determination, waterway permit application(s).
    - OES Eco will review and make T&E species effect call "recommendations" but will not coordinate with ODNR or USFWS.
    - The ESR will be supplied to the USACE with the PCN or IP application. The USACE will coordinate with ODNR and USFWS.
    - Store all relevant documentation in the District specific O Drive folder. (Eventually there will be folders in EnviroNet for this purpose).
  - If the project requires **only** an OEPA Isolated Wetland Permit, then the following studies are necessary to support this action: Ecological Survey Report, Jurisdictional Determination, ORC.143 compliance, permit determination, and the isolated wetland permit application.
    - In order to provide a permit determination, OES-WPU will require ORC 149.53 compliance and a jurisdictional determination
      - If the project meets the criteria under Appendix A of the state-funded letter agreement, District may clear it.
      - If the project exceeds the criteria under Appendix A of the state-funded letter agreement, District must submit Scoping Request Form to OES for coordination. OES cultural staff will either clear the project under Appendix B of the state-funded project letter agreement or coordinate with SHPO under ORC 149.53.
      - A jurisdictional determination is required to ensure the wetland is isolated.
    - Store all relevant documentation in the District specific O Drive folder. (Eventually there will be folders in EnviroNet for this purpose).

Type 3: PID Projects without Waterway Permits*

In the EnviroNet system, assess and document the project as a C1- Item #31.

Studies necessary to support a C1 action:

- ORC 149.53 compliance:
  - If the project meets the criteria under Appendix A of the state-funded letter agreement, District may clear it.
  - If the project exceeds the criteria under Appendix A of the state-funded letter agreement, District must submit Scoping Request Form to OES for coordination. OES cultural staff will either clear the project under Appendix B of the state-funded project letter agreement or coordinate with SHPO under ORC 149.53. Once coordination is complete, the C1 can be approved.
- DEC follows HOEC and coordinates with OES as needed.
- No additional environmental studies are required.

Type 4: PID Projects with Waterway Permits

In the EnviroNet system, assess and document the project as you would a federally funded project. *(Full NEPA process is required.)*

*100% state funded projects that require an Isolated Wetland permit from OEPA but no 401/404 waterway permit from the OEPA/USACE may be processed as a Type 3 project.

G. Guidance for In-Water Work with No Temporary Fill (Including Stream and Jurisdictional Ditch Clean-out) (v.3.9.17)

The following summarizes the limitations for 100% state-funded in-water work without temporary fill, including ditch clean out activities in streams and jurisdictional ditches, as ODOT's Office of Environmental Services (OES) currently understands through consultation with the United States Army Corps of Engineers (USACE) and Ohio Environmental Protection Agency (OEPA). Most simple debris removal projects should not require coordination with the resource agencies, and therefore a permit is not required for excavation activities when no fill is proposed. <u>However, before any clean out activity occurs, the District Environmental Coordinator should compare the proposed work to the limitations set out in this guidance and against any restrictions placed on the project. If work is occurring within the Coastal Zone Management Area, and the elevation is at or below the mean elevation of Lake Erie (571 feet) and/or is influenced by the backwater of Lake Erie, coordinate the project with OES-WPU as a Section 10 Letter of Permission or Permit from the USACE may be required.</u>

When work is to remove debris (including sediment) from a waterway, the following conditions must be met for the work to proceed without coordination with OES and the resource agencies:

1. Work Processes
   a. Heavy equipment should not be operated below the ordinary high water mark of the stream except when no other alternative is practicable.
   b. No causeways, dewatering, or access fills are allowed in surface waters to conduct the work;
   c. No equipment or materials should be stored or stockpiled below the OHWM or the floodplain. Doing so will result in an illegal fill;
   d. All staging of equipment and materials should occur in an upland area;
   e. For any work stoppage longer than 2 hours, equipment should not be left/parked/stored/staged below the OHWM or floodplain;
   f. Work should be conducted when the steam is in a low flow condition (typically August to October);
   g. Work of this type should produce no more than incidental fall back of material from excavating equipment is allowed. This includes material that may fall from the tracks/wheels/or bucket of the machinery back into the stream during the work.
   h. Pushing or moving stream sediments with bulldozer blades or the movement of excavated material from one location to another in waters/wetlands, is prohibited;
   i. Areas along the banks and riparian, above the OHWM, disturbed by the work must be re-graded to original contours and seeded with a seed mix of native Ohio species appropriate for that location.
   j. Disturbed areas along the banks should be reseeded to prevent erosion. The seed mix should be of native Ohio species appropriate for that location. No movement of soil should occur.
   k. If equipment must be driven/operated below the ordinary high water mark of a stream or jurisdictional ditch, the following precautions must be taken to avoid creating an unauthorized (illegal) fill activity and to minimize unnecessary disturbance to the aquatic environment:
      i. Entry and exit to and from the stream should be from a single access point along the bank and within ROW;
      ii. Care should be taken to limit the movement of the equipment in the stream to the absolute minimum necessary to access the work area, complete the work, and exit the site. Excessive driving around of equipment within the stream is not allowed. Fording, driving equipment across a stream from one bank to the other, is prohibited. Please note ODOT Supplemental Specification 832.06 restricts fording of rivers and streams;
      iii. No more than incidental fall back of material from excavating equipment is allowed. This includes material that may fall from the tracks/wheels/or bucket of the machinery back into the stream during the work.
      iv. Equipment should be moved extremely slowly (< 3 mph) to minimize the potential for material to be picked up or pushed by the equipment resulting in an illegal fill activity
2. Material Handling and Disposal
   a. Material removed from a stream or jurisdictional ditch must be hauled to an upland disposal site and must not be placed into another stream, ditch, or wetland (temporarily or permanently). If possible, dispose at an upland location 200 meters from any streams or potential wetlands. Avoid placing material on a slope, as the material can move and fall into waters of the US;

   b. No more than incidental fall back of material from excavating equipment is allowed;
   c. Removed materials must be stabilized to prevent erosion;
   d. Soil is not regulated as a waste unless there is knowledge of a spill or release of some type or is comingles with other solid wastes (i.e. litter). If any of those conditions apply, the material needs to be disposed of as the appropriate waste type (hazardous, solid, etc).
3. If any of the following sensitive areas are present or will be impacted by the work, the work must be coordinated before being undertaken:
   a. ODNR Biodiversity Database contains records of T&E species or other unique ecological features in the impact area or they may be impacted by the project.
   b. Any proposed work location on a stream where the drainage area for the stream is 10 square miles or greater and/or the stream is listed in Appendix A of the most recent version of the "US Fish and Wildlife Service/Ohio Department of Natural Resources Mussel Protocols" as potentially harboring mussels
   c. Work will occur during Ohio Department of Natural Resources in-stream work restriction dates as described in the ODOT Ecological Memorandum of Agreement
   d. Work is in, over, or under a Section 9 or 10 waterway.
   e. Work is in or within 1,000 feet of a National or State Wild and Scenic River.

H. Guidance for Surface Water Clean-out using a Tunnel Mucker (v.3-28-17)

The following summarizes the guidance for excavation maintenance work with a Tunnel Mucker (ex. MicroTraxx), a remote controlled culvert excavator, is used to remove debris and sediment from a jurisdictional surface water or isolated wetland as ODOT's Office of Environmental Services (OES) currently understands through consultation with the United States Army Corps of Engineers (USACE) and Ohio Environmental Protection Agency (OEPA). Before any clean out activity occurs with a tunnel mucker, the District Environmental Coordinator should compare the proposed work to the limitations set out in this guidance. This guidance assumes all work will follow the Construction Manual and Specifications.

When using a Tunnel Mucker to remove debris/sediments from a stream or jurisdictional ditch, movement of the machine's tracks can displace and deposit material into a new location within the surface water which constitutes a fill activity. This fill activity can typically be covered by the ODOT Clean Water Act Regional General Permit (RGP) B. The District Environmental Coordinator (DEC) can determine eligibility of RGP B for this work when it is 100% state funded.

1. Process
   a. When the Transportation Manager (TM) completes the Highway Operations Environmental Checklist (HOEC) Tunnel Mucker activities are a trigger for Step 2 *item a*, excavation.
   b. TM will provide to the DEC: project description, approximate impact amounts, and any other HOEC triggers.
      i. The project description and impacts should be detailed enough that the DEC can decide if:
         1. the project fits a non-notifying RGP B, or
         2. if they need to submit a Permit Determination Request (PDR) to OES-WPU
   c. DEC should compare the project description to the RGP B conditions. Please note:
      i. Permanent impacts will always occur when using a Tunnel Mucker.
      ii. Impacts solely from tunnel mucker work will typically fall within the non-notifying RGP B permit. Please note: be sure to review the RGP General, Regional Conditions, and 401 conditions.
      iii. When determining if the project meets an RGP B, the DEC should know the details of impacted and adjacent resources in case a PCN trigger is present in the project area (ex: Category 3 wetland).
      iv. If the project will trigger a PCN, see the HOEC guidance for additional guidance.
   d. If any of the following sensitive areas will be involved, the work must be coordinated with OES before being undertaken:
      i. ODNR Biodiversity Database contains records of T&E species or other unique ecological features in the impact area or they may be impacted by the project.
      ii. Any proposed work in stream that potentially harbors mussel per the "US Fish and Wildlife Service/Ohio Department of Natural Resources Mussel Protocols"
      iii. Work will occur during ODNR in-stream work restriction dates as described in the ODOT Ecological MOA
      iv. Work in, over, or under a Section 9 or Section 10 waterway
      v. Work in or within 1,000 feet of a National or State Wild and Scenic River
      vi. Work in the Coastal Zone Management Area, and the elevation is at or below the mean elevation of Lake Erie (571 feet) and/or is influenced by the backwater of Lake Erie
      vii. DECs can contact OES at any time for assistance with determining level of permitting, coordination requirements, and any other HOEC trigger items.
   e. If project fits a non-notifying RGP B, the DEC shall provide the permit conditions via email, which the TM must follow while utilizing the Tunnel Mucker.
2. Conditions
   a. Relevant conditions are found within the RGP B Permit Conditions/PCN triggers, RGP General Conditions, RGP Regional Conditions, in-water work restrictions, and OEPA 401 Conditions for the RGP.
   b. Other conditions to consider (if applicable):
      i. If wetlands are in the area, avoid removing the wetlands and/or driving over the wetlands with the tunnel mucker or other equipment.
      ii. No equipment or materials should be stored or stockpiled below the OHWM or the floodplain.
      iii. All staging of equipment and materials should occur in an upland area.

iv. For any work stoppage longer than 2 hours, equipment should not be left/parked/stored/staged below the OHWM or floodplain.
v. Work of this type should produce no more than incidental fall back of material from excavating equipment. This includes material that may fall from the tracks/wheels/bucket of the machinery back into the stream/wetland during the work.
vi. Areas along the banks and riparian disturbed by the work must be re-graded to original contours and seeded to prevent erosion. Use seed mixes of native Ohio species as appropriate for that location.
vii. The following precautions must be taken to avoid creating an unauthorized (illegal) fill activity and to minimize unnecessary disturbance to the aquatic environment:
    1. Entry and exit to and from the stream should be from a single access point along the bank and within ROW;
    2. Equipment should be moved extremely slowly (< 3 mph) to minimize the potential for material to be picked up or pushed by the equipment resulting in an illegal fill activity

3. Disposal
    a. Material removed from a stream or jurisdictional ditch must be hauled to an upland disposal site and must not be placed into another stream, ditch, or wetland (temporarily or permanently). Dispose at an upland location 200 feet from any streams or potential wetlands. Avoid placing material on a slope, as the material can move and fall into waters of the US;
    b. Soil is not regulated as a waste unless there is knowledge of a spill or release of some type or is comingled with other solid wastes (i.e. litter). If any of those conditions apply, the material needs to be disposed of as the appropriate waste type (hazardous, solid, etc).
    c. Refer to the Ditch Spoil Management guidance (pg. 31 of the HOEC Guidance) for a detailed explanation of material disposal processes.

I. Ditch Spoil Management (v.7.25.16)

Through routine ditching activities, ODOT creates a large quantity of ditch spoil, or the material pulled out of ditches. Typically this is composed of inert sediment, gravel, sand, and silt. However actions outside our ROW (such as industry, manufacturing, commercial activities, gas stations, etc) and actions inside our ROW (spills, littering) can cause simple ditch spoil to be contaminated. Determining if the ditch spoil is or could be contaminated is critical to determining how it should be managed: either as a reusable material, or as a waste. Below is a two-step process to assess the ditch area **before creating the spoil** to ensure ODOT can properly manage this material.

1. Perform due diligence (records search and on-site inspection) of the area to determine if it is reasonably likely that a release has occurred.
   a. Review the history of the site: was there a release or the potential of a release (for example a spill, industrial activity, etc) in this area?
      i. Is the area the spoil is coming from part of a Hazardous Waste Closure Plan, Contingency Plan, Remediation Order, Waste or Landfill Permit, Administrative Action, Plan Note, or Special Provisions?
         1. If yes, follow those related documents on how to properly manage that material as a regulated waste. Coordination with the DEC is advised.
   b. Visually inspect the area where the soil will originate and identify areas of concern (for example look for stained soils, stressed vegetation, presence of wastes, presence of drums or barrels, presence of solid wastes (garbage), sheen on standing water, etc).
      i. Based on this review, determine if the soil should be tested. Testing should coincide with the constituents (chemicals) of the suspected release. Depending on the outcome of the sampling, the material may need special handling as a waste and require following the appropriate guidelines for that material (radioactive, petroleum, hazardous, etc). If further guidance is needed, the TM should contact the Hazardous Waste Coordinator or their DEC to determine if the material is contaminated. For assistance with sampling, contact Kevin Hodnett of OES.
   c. If it is reasonably determined that current or historic activities have not caused a release, the material is not a waste and does not require testing. However the management of this material is still regulated, go to Step 2
2. Manage the spoil, an earthen material, to avoid violating other laws. If ODOT has a project within a temporary easement and material is generated, that material is ODOT property. Below is a descending list of preferred location options for disposing of ditch spoil:
   a. Option 1. Give material to a public agency/entity (example: public landfills, municipalities, other state-owned land, etc.).
   b. Option 2. Obtain quotes from 3 legitimate sources (includes private citizens). Telephone quotes are acceptable with documentation of the call. If only 1 quote is returned, it is acceptable to use that entity. Quotes can remain valid for up to one year. Revenues can be received or cost incurred with these sources.
      i. The goal is to dispose of the material at the lowest responsible cost which may including labor, equipment usage, fuel and any other costs. The manager will need to use common sense in selecting the winning site and document why the vendor was chosen.
      ii. For the time being, each County can develop their own agreement as long as it is clear ODOT is no longer responsible for the materials. A statewide agreement is forthcoming.
      iii. ODOT crew members cannot deliver ditch spoil to the source. Materials must either be left onsite for pick up or brought back to an ODOT storage location where the source can acquire the materials.
      iv. ODOT employees or family/friends of ODOT employees cannot bid or receive the ditch spoil.
   c. Option 3. Dispose of on ODOT/state-owned property (example: ODOT ROW, e-parcels, interchange infields, etc.).
      i. The material can be placed in an upland area for temporary storage and reuse or for permanent placement.
         1. Before you place the material outside or inside ODOT ROW, discuss and review the location with your DEC per the Highway Operations Environmental Checklist.
         2. If possible, place materials at least 200 meters from any stream or potential wetland.
         3. Material should immediately be stabilized, bermed, seeded, and mulched.
         4. Dust and runoff from the soil pile must be controlled. Seeding with mulch along with berming should keep this objective.
         5. Do **not** place material in or near surface waters, drinking water wells and well fields, sinkholes, sand or gravel quarries, or floodplains.
         6. Do not place material on a slope where the material could slide into a place that was not intended.

J. Section 404 Regulation: Natural Channel Design Criteria for Regional General Permit B (Maintenance)

Natural Channel Design is becoming a more common method for maintaining structures where streams deposit a high amount of sediment, causing maintenance crews to clean out the streams more frequently. This guidance is meant to help DECs determine which types of natural channel design projects will meet a non-notifying RGP B. **DECs must submit a PDR to OES-WPU for <u>all</u> natural channel design projects.**

General Section 404 Principles:

1. Removing fill is not regulated under Section 404.
2. Placing any amount of fill into streams and wetlands is regulated under Section 404 and requires a permit.
3. Removing fill, but replacing fill back into the same water, or any other waters, is a regulated activity under Section 404 and requires a permit.
   a. This includes removing and replacing fill with a net amount of zero.
4. Dewatering a stream does not count as fill within the dewatered area (unless other impacts will occur). However, the device used to dewater (cofferdam, pump, etc.) does count as fill and is considered an impact requiring a permit.
5. Regional General Permit (RGP) B (Maintenance) is authorized for projects associated with the repair, rehabilitation, or replacement of an existing and currently serviceable structure.
   a. Stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill.
      i. Modifications, like removing material from the stream channel, must be immediately adjacent to the project or within project boundaries of the structure or fill.
   b. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows.
   c. Following completion, temporary fills must be removed in their entirety and affected areas must be revegetated, as appropriate.

Activities permitted under RGP B:

1. Debris removal
2. Cross vanes, rock vanes, j-hook vanes, etc. shall be directly adjacent to the structure with the purpose of protecting the structure
   a. Ex: directing flow to the center of the structure, away from abutments, piers, etc. and reducing stream bank erosion that directly affects the structure
3. Channel stability when the instability is directly affecting the structure
   a. Ex: bank erosion threatens an abutment or pier
   b. Ex: stream migration due to sediment deposition is undermining a wing wall, pier, abutments
   c. Ex: material deposition is creating a floodplain bench that is stressing the bank, and impacting hydraulic capacity and flow the stream, leading to the stream no longer flowing under the bridge as designed
4. Rock channel protection to protect the structure (not solely to protect a bank)
   a. Must be the minimum necessary to protect the structure, and cannot exceed 300 feet from the structure in either direction
5. Temporary activities
   a. Maximum of 2 year duration per single and complete project

Activities *not* permitted under RGP B:

1. Stream realignment/relocation
   a. Does not include removing accumulated sediment
2. Stream channelization
   a. Includes: the manipulation of a stream's course, condition, capacity, or location causing more than a minimal interruption of normal stream processes
      i. Increasing the capacity adjacent to the existing structure in order to protect it from sediment deposition will typically be permitted. Increasing capacity upstream and not adjacent to the structure is not permitted.
   b. Ex: channelization to reduce or negatively impact the capacity of the stream.
3. Stream stabilization

   a. Re-grading and reinforcing stream bank
      i. ex: rock toe, biodegradable coir rolls, and live stake vegetation
   b. Channel maintenance that affects channel characteristics
      i. ex: riffles upstream of a structure; significantly negatively lowering the flow line
   c. Slope protection not directly associated with an existing structure (includes rock channel protection)
4. Stream restoration
   a. Installing riffles
   b. Creating pools
   c. Re-contouring stream bank
   d. Exposing existing riffles (if fill is involved – excavation is not regulated)

Avoid:

1. Projects in Section 10 waters
2. Projects in streams and/or townships with federally endangered species/habitat
3. Projects in a flowage easement of a flood control facility
4. Projects in National or State Wild and Scenic Rivers
5. Projects in Critical Resource Waters or within the Oak Openings
6. Projects that will impacts fens, bogs, or other Category 3 wetlands
7. Temporary fill exceeding 300 feet upstream to downstream in perennial and intermittent streams
8. Wetland impacts greater than 0.1 acre
9. Wetland impacts greater than 0.5 acre

K. Regulations Considered in the Highway Operations Environmental Checklist

This section is intended to provide background information on federal and state regulations, allowing the county maintenance staff to be aware of, and compliant with, the environmental laws.
Federal and State regulations related to environmental compliance for Highway Operations projects are listed below. *The relevant HOEC items are listed underneath the regulation in italics with their corresponding checklist letter.*

1. **Clean Water Act of 1977**: The U.S. Army Corps of Engineers (USACE) has authority to regulate discharges of fill into waters of the U.S. under the Federal Water Pollution Control Act Amendments of 1972," 86 Stat. 886, 33 U.S.C.A. 1251, as amended by the "Clean Water Act of 1977," 91 Stat. 1566, 33 U.S.C.A. 1251, and all other amendments to that act (CWA).
   a. **Section 404** of the CWA is jointly administered by the USACE and the U.S. Environmental Protection Agency (USEPA). USACE regulates Section 404 by the authorization of discharge(s) of dredged and/or fill material into waters of the U.S. Authorization for projects which propose to impact waters of the U.S. is dictated by the 404 permit process, which includes 404 Nationwide Permits (NWP) and 404 Individual Permits (IPs).
   b. **Section 401** of the CWA is administered by the Ohio Environmental Protection Agency (OEPA). Section 401 requires that any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, to provide the licensing or permitting agency a certification from the State in which the discharge originates.
      i. **Ohio Surface Water Free-From Rules (OAC 3745-1-04)** are water quality criteria that apply to all surface waters of the state including mixing zones. These criteria state that all waters shall be free from sludge, floating debris, oil and scum, color and odor producing materials, substances that are harmful to human, animal or aquatic life, and nutrients in concentrations that may cause algal blooms.

   Relevant HOEC items:
   a) place fill (below OHWM)into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream

2. **Ohio Water Pollution Control Act**: OEPA has a general prohibition in The Ohio Water Pollution Control Act as provided in **Ohio Revised Code (ORC) 6111.04(A)(1)** to ensure that "No person shall cause pollution or place or cause to be placed any sewage, sludge, sludge materials, industrial waste, or other wastes in a location where they cause pollution of any waters of the state."
   a. The regulatory definition of waters of the state includes essentially every accumulation or conveyance of water within the state.
   b. Please note: non-jurisdictional ditches are technically protected by the general prohibition of **ORC 6111.04(A)(1)**. This prohibition is supported by monetary fines and jail time (ORC 6111.99). In the past, in situations where ODOT has impacted non-jurisdictional ditches, OEPA has not enforced this rule.
   c. OEPA has the authority to regulate discharges of fill to isolated wetlands in provided in **ORC 6111.02 through 6111.028**
   d. The Ohio Water Pollution Control Act provided in **6111.12** details an **antidegradation policy** applicable to surface waters of the state pursuant to applicable federal laws and regulations. (A) The director of environmental protection shall establish an antidegradation policy applicable to surface waters of the state pursuant to applicable federal laws and regulations.

   Relevant HOEC items:
   a) place fill (below OHWM) into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream
   b) create a disturbed area that will be 1 acre or greater
   c) work above OHWM (including bridge washing) on a bridge or culvert that:
      i. is over surface water
      ii. has bird nests
      iii. has bats roosting on the bridge
      iv. is a stone culvert
   e) use land outside of existing ROW

3. **Federal Water Pollution Control Act Amendments of 1972," 86 Stat. 886, 33 U.S.C.A. 1251, as amended by the "Clean Water Act of 1977," 91 Stat. 1566, 33 U.S.C.A. 1251, and all other amendments to that act, and the Ohio Water Pollution Control Act ORC 6111**

a. Specifically, the OEPA General Permits OHCO00001, OHCD00002, and OHC000003 that cover construction activities include any clearing, grading, excavating, grubbing and/or filling activities that disturb one or more acres of land. The one acre is a lower threshold for applicability under these general permits. Exceeding of the one acre threshold requires compliance with either the general permit (OHC000003) or the watershed specific permits (currently only OHCO00001, OHCD00002). Permit applicability is dependent on the project location.
b. Specifically, the OEPA General Permits OHCO00001, OHCD00002, and OHC000003 that cover construction activities include any clearing, grading, excavating, grubbing and/or filling activities that disturb one or more acres of land. Further this permit requires a maintenance agreement, assuring maintenance in perpetuity, for all structural post-construction BMPs prior to terminating general permit coverage (Part IV.B.1).

Relevant HOEC items:

a) place fill (below OHWM) into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream
b) create a disturbed area that will be 1 acre or greater

4. **Wild and Scenic River Regulations:**
   a. **National Wild and Scenic Rivers Act,** created by Congress in 1968 (Public Law 90-542; 16 USC 1271 et seq.), seeks to preserve rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers, while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. The U.S. Department of the Interior, National Park Service (NPS) administers the National Wild and Scenic River Program with assistance from a state managing agency (Ohio Department of Natural Resources within Ohio).
      i. NPS is the authority for protecting these resources, and a Section 7(a) approval from NPS is required to impact these resources.
      ii. The DEC is the point of contact for each district to initiate all coordination with ODNR for scenic river issues.
   b. **Ohio Wild, Scenic, and Recreational River Act** was created as a state program to protect Ohio's remaining high quality streams for future generations. The Act allows State designated scenic rivers to retain most of their natural characteristics at a time when many rivers reflect the negative impacts of human activities (ORC 1547.82).
      i. ODNR is the authority for protecting these resources, and approval from ODNR in accordance with ORC Section 1517.16 is required to impact a state scenic river.
      ii. For emergency, minor maintenance, and exempt projects on Ohio's State Scenic Rivers, there is a Memorandum of Agreement between Ohio Department of Natural Resources (ODNR) and ODOT that covers the coordination/approval process. This MOA covers certain work activities within 1,000 feet of these State designated rivers.
      iii. The DEC is the point of contact for each district to initiate all coordination with ODNR for scenic river issues.

Relevant HOEC items:

a) place fill (below OHWM) into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream
c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert

5. **Coastal Management Law of 1988** designates the Ohio Department of Natural Resources (ODNR) to implement the Ohio Coastal Management Program (OCMP) in cooperation with other state agencies and local governments. The Coastal Management Act mandates cooperation of other state agencies to carry out the program. OCMP implements the federal consistency provisions of the federal Coastal Zone Management Act (CZMA). The CZMA requires that all federal actions that are likely to affect any land or water use or natural resource of the Designated Coastal Zone Management Area, must be consistent with the OCMP. ODOT operates under a signed MOU between ODNR and ODOT for work within in this zone.

Relevant HOEC items:

a) place fill into, clean out (excavate), relocate, modify, straighten, channelize, realign, deepen, widen, and/or relocate a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream

6. **The Fish and Wildlife Coordination Act**, and the amendments enacted in 1946, require consultation with the U.S. Fish and Wildlife Service and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified" by any agency under a Federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources." If the activity is not under federal permit or license then no coordination is assumed required.

   Relevant HOEC items:
   a) place fill (below OHWM) into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream
   c) work (including bridge washing) on a bridge or culvert that:
      i. is over surface water
      ii. has bird nests
      iii. has bats roosting on the bridge
      iv. is a stone culvert

7. **The Endangered Species Act** authorizes the United State Fish and Wildlife Service to regulate the take of federally listed species. The take of federally listed species is prohibited under **Section 9 of Endangered Species Act (ESA)**. Otherwise lawful activities can be authorized for the take of endangered species. This authorization can be obtained by receiving an ESA Section 10 permit.
   a. Take is defined as: harm, harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Further it defines the term "harm" to include any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

   Relevant HOEC items:
   a) place fill (below OHWM) into and/or excavate (clean out) a stream, wetland, jurisdictional ditch, post-construction stormwater BMP, and/or captured stream
   c) work above OHWM (including bridge washing) on a bridge or culvert that:
      i. is over surface water
      ii. has bird nests
      iii. has bats roosting on the bridge
      iv. is a stone culvert
   e) remove any live, dying, or dead woody plant, with a trunk 3 inches or greater in diameter at a height of 4.5 feet above the ground surface, and with a minimum height of 13 feet during April 1st through September 30th

8. **State of Ohio Endangered Species Rules:**
   a. State of Ohio Endangered Animal Ohio Revised Code Laws allow for the ODNR Chief of the Division of Wildlife (DOW), with the approval of the wildlife council, to adopt, modify, and repeal rules restricting the take or possession of native wildlife that he finds to be threatened with statewide extinction. The rule identifies the common and scientific names of each endangered species and can be modified from time to time to include all species on the list of endangered fish and wildlife pursuant to Section 4 of the "Endangered Species Act of 1973," 87 Stat 884, 16 USC 1531, as amended, and that are native to this state, or that migrate or are otherwise reasonably likely to occur within the state.
   b. State of Ohio Endangered Plant Ohio Revised Code Laws allow for the ODNR Chief of the Division of Natural Areas and Preserves (DNAP) to set forth criteria for identifying and designating a list of species of plants native to this state that are in danger of extirpation or are threatened with becoming endangered. The list includes all species native to this state that are listed on the "United States list of endangered and threatened wildlife and plants" pursuant to the "Endangered Species Act of 1973," 87 Stat. 884, 16 USC 1531-1543, as amended. Further, ODNR publishes lists of plant species which include the names of species of plants that may become threatened in the future through habitat loss, commercial exploitation, or other means (ORC 1518.01).
   c. Under written permission from the chief, the rules provide for the taking of species threatened with statewide extinction for zoological, educational, and scientific purposes, and for propagation in captivity to preserve the species (ORC 1531.25).

   Relevant HOEC items:
   c) work above OHWM (including bridge washing) on a bridge or culvert that:
      i. is over surface water

ii. has bird nests
iii. has bats roosting on the bridge
iv. is a stone culvert

d) remove any live, dying, or dead woody plant, with a trunk 3 inches or greater in diameter at a height of 4.5 feet above the ground surface, and with a minimum height of 13 feet during April 1st through September 30th

9. **Bald and Golden Eagle Protection Act** (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment. The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

   Relevant HOEC items:
   g) occur within 660 feet of an active bald eagle nest

10. **Migratory Bird Treaty Act** makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations.

    Relevant HOEC items:
    c) work above OHWM (including bridge washing) on a bridge or culvert that:
    i. is over surface water
    ii. has bird nests
    iii. has bats roosting on the bridge
    iv. is a stone culvert

11. **Section 149.53 of the ORC – Archaeological and historic survey and salvage work**: All departments, agencies, units, instrumentalities, and political subdivisions of the state shall cooperate with the Ohio history connection and the Ohio historic site preservation advisory board in the preservation of archaeological and historic sites and in recovery of scientific information from such sites, and for such purposes shall, whenever practical, by contract or otherwise provide for archaeological and historic survey and salvage work during the planning phases, before work on a public improvement begins or at other appropriate times; and require that contractors performing work on public improvements cooperate with archaeological and historic survey and salvage efforts and notify the Ohio history connection or the board about archaeological discoveries.
    a. ODOT has developed an agreement on how ODOT will "cooperate" with these historic preservation offices when ODOT undertakes state-funded projects. This agreement describes the work activities and settings that ODOT can internally review without coordination with these offices, and those that require coordination. The DEC works with OES to coordinate under this agreement.

    Relevant HOEC items:
    c) work above OHWM (including bridge washing) on a bridge or culvert that:
    i. is over surface water
    ii. has bird nests
    iii. has bats roosting on the bridge
    iv. is a stone culvert
    b) use of land outside of existing ROW

12. **Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)** and the **Superfund Amendment and Reauthorization Act (SARA)**. If properties are shown to be contaminated, then those materials must be removed from the site during construction and must be properly identified and managed under the **Resources Conservations and Recovery Act (RCRA)** and the **Hazardous and Solid Waste Amendments (HSWA)**. For sites requiring remediation, in an enforcement action or regulatory oversight, coordination with the U.S. Environmental Protection Agency (USEPA), Ohio EPA and/or the Bureau of Underground Storage Tank Regulations (BUSTR) may be needed for the project.

    Relevant HOEC items:
    e) use of land outside of existing ROW
    f) create regulated wastes that require special management

L. Appendix 1: Highway Operations Environmental Checklist

Highway Operations Environmental Checklist (v1.1.18)

A four-step process to improve compliance with environmental regulations before doing 100% state-funded maintenance work.

County:	Today's Date:
Route:	Dates of Proposed Work:
Reviewer:	Work Type:

1. Review Your Work Plan

Work that is adjacent, places material into, or modifies streams, wetlands, ditches; vegetation management; projects that disturb soil; work outside the right of way; work that creates regulated wastes; or work on a bridge or culvert should all be reviewed with this checklist prior to proceeding with work. The goal of reviewing our work against this checklist is to improve the Department's compliance with environmental regulations. If directed by the checklist below, coordinate with your District Environmental Coordinator (DEC) prior to beginning the work to stay in compliance. It's a good idea to be familiar with your DEC, and to ask them for help with this review process.

2. Inspect the proposed Work Area. Will the work (**circle all that apply**):

a) place **fill** (below OHWM) into and/or excavate (clean out) a **stream**, **wetland**, **jurisdictional ditch**, **post-construction stormwater BMP,** and/or **captured stream**
b) create a **disturbed area** that will be 1 acre or greater
c) work above OHWM (including bridge washing) on a bridge or culvert that:
   i. is over surface water
   ii. has bird nests
   iii. has bats roosting on the bridge
   iv. is a stone culvert
d) Clearing of large trees or high quality areas between April 1st and September 30th: **ODOT's first preference is for no summer tree clearing**. However, if tree clearing between April 1st and September 30th must occur, then there shall be no clearing of trees that are over 16" DBH (Diameter at Breast Height: 4.5 feet above ground), in a woodlot that is more than 0.5 acre in size, or any trees part of a riparian corridor. Tree trimming (removing individual limbs <8" in diameter) can occur year round. *100% State-Funded tree cutting to remove hazard trees/threats to safety must proceed immediately without delay*.
e) use of land outside of existing ROW
f) create regulated wastes that require special management
g) occur within 660 feet of an active bald eagle nest

If any item under a-g applies, the work will need DEC review prior to beginning work.

3. Check the TIMS Environmental Map (link)

Zoom in to your work area. Along the left in the legend, click on the work types you propose in this area. Is any part of a highlighted road length within the proposed work area?

-YES, the proposed work type is highlighted in my work area, *Coordinate with the DEC prior to starting work.*
What is highlighted:_____

-NO, the proposed work type is not highlighted in my work area. If the task also did not trigger an item under #2 above, the work can proceed as needed.

4. Coordinate with the DEC as needed

After following steps 1-3, if required, submit this form to the DEC for assistance. Please provide the DEC: a work location map, plans if available, and photos (of the project ROW, vegetation, standing or flowing water, areas of saturation, problem or issue to be fixed). Keep a copy in your files of all checklists submitted to the DEC. The DEC will respond to you within in a few business days regarding the necessary next steps, if any, to be sure the work is completed within the limits of state and federal law.

DEFINITIONS

Captured Stream = drainage that originates outside the ROW and is "captured" or routed into the ditch line. **Disturbed area** = clearing, grading, excavating, grubbing and/or filling activities and includes action area, borrow areas, spoil areas, and staging areas. **Fill** = access roads or pads, work pads, coffer dams, sheet piling, plywood, dewatering (pumping), culverts, piers, pier encasements, retaining walls, wing walls, rock channel protection/rip rap, earth work, roadway fill. Fill activities can include the disposal of spoil. **Jurisdictional Ditch** = ditch that flows at least 3 months continuously each year with an OHWM. **OHWM** = Ordinary High Water Mark; line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter and debris. **Post-Construction BMP** = permanent stormwater treatment system such as a vegetated biofilter, manufactured system or other improvement designed to treat stormwater runoff. **Stream** = conveyance of water with defined bed and bank. **Wetland** = area with standing water or saturated soil for at least a part of the growing season.