The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (USEPA) define wetlands as follows, “Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

Wetlands are areas that are covered by water or have saturated soils for long periods (a minimum of 14 consecutive days) during the growing season. Plants growing in wetlands are capable of living in saturated soil conditions for at least part of the growing season. Wetlands such as swamps and marshes are often obvious, but some wetlands are not easily recognized, often because they are dry during part of the year or “they just don’t look very wet” from the roadside. Caution: Many wetlands lack both standing water and saturated soils during at least part of the growing season.

There are no definitive maps of federally regulated wetlands or waterways. Therefore, it is often difficult to determine USACE’s jurisdiction based solely on an in-office review. In most cases, a site inspection is the only definitive means of determining the presence/absence and extent of wetlands, streams, and other conveyances of water that may be present on a parcel. The USACE consults the following in-office resources to evaluate the potential for wetlands or waterways that may be present on a site:


- National Wetland Inventory (NWI) maps - [http://www.fws.gov/wetlands](http://www.fws.gov/wetlands) Use these maps with caution. Many federally regulated wetlands in Ohio are not on the NWI maps. The NWI maps are published by the U.S. Fish and Wildlife Service as habitat maps based on aerial photography. These maps are not ground verified and mapped boundaries may not be consistent with wetland boundaries established according to the USACE 1987 Wetland Delineation Manual and associated Regional Supplements. These maps were not developed for use as confirmation as to the presence/absence of federally (USACE) regulated wetlands. Further, the absence of a mapped wetland on the NWI maps cannot be interpreted to indicate that no wetlands exist within the non-mapped area. As indicated above, the only definitive information usually results from a site inspection.

- Natural Resources Conservation Service (NRCS) web soil survey which has replaced County Soil Surveys - [http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm](http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm) This tool will help identify the presence of hydric soils or soils with hydric inclusions/components. Hydric soils exhibit poorly and/or very poorly drained characteristics that typically occur in wetlands.

- Other On-line Resources
  - [http://maps.google.com](http://maps.google.com)
Aerial photography (various websites – see below)

Mapped indicators implying that wetlands or waterways may be present on a given parcel include, but are not limited to the following:

- Wetland or waterway symbols on the USGS maps
- Identified wetland types on the NWI or other wetland maps
- Hydric soils or partially-hydric (a non-hydric soil with hydric inclusions or components) indicated on the NRCS soil survey. Hydric soils are poorly and very poorly drained soils typically occurring in wetlands.
- Streams, drainageways, ponds or other water bodies indicated on the USGS map or NRCS Soil Survey.

If any of these indicators are mapped within a project site, the USACE recommends further investigation to determine if regulated wetlands or waterways exist and whether a Department of the Army permit may be required for the proposed work. It is not necessary that USACE personnel conduct the preliminary review of these resources. An individual can expedite the review process by conducting the initial review and compiling information which can be provided to the USACE in the event that further investigation is required. A review should be conducted on any land that is in an undeveloped “natural” state (e.g. wooded, scrub shrub, meadow, old field, etc.), that exhibits the mapped indicators noted above, or is not currently being cropped and designated as “Prior Converted” (PC) cropland by the U.S. Department of Agriculture/NRCS.

If your preliminary review indicates that wetlands and streams may be present on the parcel, you should engage an individual familiar with federal delineation, such as an environmental consultant, to conduct a formal delineation to identify all wetlands, streams, ditches, drainageways, etc. on the parcel. Delineation is the procedure used to flag and map the upland/wetland boundary and to identify and map all streams, drainages, other waterways/conveyances etc. on a parcel. Wetlands are required to be delineated in accordance with the 1987 Corps of Engineers Wetland Delineation Manual (Manual) and appropriate Regional Supplements to the Manual. Copies of the Manual and current versions of the Midwest Region or Northcentral and Northeast Regional Supplements can be obtained at:


After a wetland and waters delineation has been completed, a delineation report should be submitted to the USACE for review and verification. The report should contain a request that the USACE provide confirmation of the mapped location and boundaries of all aquatic resources identified and a request for determination of federal jurisdiction of the resources.

The delineation should be verified by the USACE prior to finalizing any project design for the site to ensure that no further modifications of project plans would be needed to comply with the 404(b)(1) Guidelines (Guidelines). These Guidelines require that all practicable steps are taken to avoid and minimize impacts to aquatic resources. These steps may include, but are not limited to, redesign of the project and consideration of alternative project sites that contain less or no aquatic resources.
Compensatory mitigation can be considered only after avoidance and minimization efforts and consideration of alternatives have been evaluated.

**The USACE is the only regulatory agency authorized in determining the presence/absence of jurisdictional waters of the U.S., including wetlands on a given property.**

A Department of the Army permit may be required if work is purposed in federally regulated wetlands and waters. A Permit Application and instructions can be found on the USACE Buffalo District website at: [http://www.lrb.usace.army.mil](http://www.lrb.usace.army.mil)

**Additional Resources**

Ohio EPA Division of Surface Water: [http://www.epa.state.oh.us/dsw](http://www.epa.state.oh.us/dsw)

U.S. EPA: [water.epa.gov/type/wetlands/index.cfm](http://water.epa.gov/type/wetlands/index.cfm)

**The following County websites contains aerial photographs and parcel information:**

- Allen County Auditor - [http://www.co.allen.oh.us/auditor/auditor.php](http://www.co.allen.oh.us/auditor/auditor.php)
- Ashland County Auditor - [http://www.ashlandcoauditor.org/](http://www.ashlandcoauditor.org/)
- Ashtabula County GIS - [http://ashtabulaoh-auditor.ddti.net/](http://ashtabulaoh-auditor.ddti.net/)
- Auglaize County Auditor - [http://www.auglaizeauditor.ddti.net/Map.aspx](http://www.auglaizeauditor.ddti.net/Map.aspx)
- Crawford County Auditor - [http://www.crawfordauditor.info/disclaimer.html](http://www.crawfordauditor.info/disclaimer.html)
- Cuyahoga County GIS - [http://gis.cuyahogacounty.us/](http://gis.cuyahogacounty.us/)
- Defiance County Auditor - [http://defiance.ddti.net](http://defiance.ddti.net)
- Erie County Auditor - [erie.iviewauditor.com](http://erie.iviewauditor.com)
- Fulton County Auditor - [http://fultonauditor.ddti.net/](http://fultonauditor.ddti.net/)
- Geauga County Auditor - [http://www.auditor.co.geauga.oh.us/ag/](http://www.auditor.co.geauga.oh.us/ag/)
- Hancock County Auditor - [http://hancock.iviewauditor.com](http://hancock.iviewauditor.com)
- Huron County Auditor - [http://www.huroncountyauditor.org](http://www.huroncountyauditor.org)
- Lake County Auditor - [http://www.lake.iviewauditor.com](http://www.lake.iviewauditor.com)
- Marion - [http://gis.co.marion.oh.us/website/viewer/viewer.htm](http://gis.co.marion.oh.us/website/viewer/viewer.htm)
- Medina - [http://www.medinacountyauditor.org/gis/gisfind.htm](http://www.medinacountyauditor.org/gis/gisfind.htm)
- Ottawa County Auditor – [http://www.ottawacountyauditor.org](http://www.ottawacountyauditor.org)
- Portage County Auditor- [http://portagecountyauditor.org/](http://portagecountyauditor.org/)
- Putnam County GIS – [http://www.putnamcountygis.com](http://www.putnamcountygis.com)
- Richland County Auditor – [http://www.richlandcountyauditor.org](http://www.richlandcountyauditor.org)
- Sandusky County GIS - [http://www.sanduskycountygis.org/sandgis](http://www.sanduskycountygis.org/sandgis)
- Seneca County Auditor - [http://www.senecacountyauditor.org](http://www.senecacountyauditor.org)
- Shelby County Auditor - [http://co.shelby.oh.us/Auditor/index.asp](http://co.shelby.oh.us/Auditor/index.asp)
- Summit County GIS- [http://fiscaloffice.summitoh.net/index.php/geographic-information](http://fiscaloffice.summitoh.net/index.php/geographic-information)
- Trumbull County Auditor- [http://property.co.trumbull.oh.us/](http://property.co.trumbull.oh.us/)
- Van Wert County Auditor - [http://www.co.vanwert.oh.us](http://www.co.vanwert.oh.us)
- Williams County Auditor - [http://www.williamsoh.ddti.net](http://www.williamsoh.ddti.net)
- Wood County Auditor - [http://auditor.co.wood.oh.us](http://auditor.co.wood.oh.us)
USACE Buffalo District Regulatory Field Office Locations in Ohio:

Oak Harbor
240 Lake Road, Unit D
Oak Harbor, Ohio 43449
(419) 898-3491

Orwell
33 Grand Valley Ave
Orwell, Ohio 44076
(440) 437-5842

Stow
1100 Graham Road Circle
Stow, Ohio 44224
(330) 801-7271