



RECOGNIZING WETLANDS

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What's a wetland? There are many different types of wetlands across the United States. Swamps, marshes, bogs, fens, lagoons, vernal pools, pocosins, bottomland hardwood forests, quagmires, prairie potholes, are all names for wetlands. For the purpose of the Clean Water Act, wetlands are areas that must meet three important factors: hydric soils, wetland vegetation, and wetland hydrology.

How can I tell if an area is a wetland? Some types of wetlands are easy to identify, others are more challenging. In most cases, wetlands are dry for a portion of the year making it difficult for an untrained person to identify them. However, here are a few tips that may help you identify a wetland.

Tip 1. Ask your local Corps office. Before you do anything else, ask your local U.S. Army Corps of Engineers (Corps) District Regulatory office (www.usace.army.mil/Contact/Office-Locator). The Corps has been delineating wetlands for over 40 years and has resources that could assist you. They may already have knowledge about and familiarity with the site. You may also wish to hire a wetland delineation professional. If you decide to hire a wetland delineation professional, asking the Corps should be part of their initial due-diligence review as well.

Are Puddles Wetlands?

No. Puddles are not wet long enough to create hydric soils or to change the plant community.

in a line (like at the edge of a lake). If your area has distinct wet and dry seasons, the best time to look is often after the middle of the wet season or after several soaking rains. In areas with wet, cold winter weather, the best time to look is at the beginning of the growing season just as the buds are bursting on deciduous trees or the first spring plants are sprouting. If you hire a wetland delineation professional, they should also look at these areas. Finally, when uncertain about the best time to look for wetlands in your area, ask your local Corps District Regulatory office.

Tip 3. Look for wetland plants. Walk the site during the wet portion of the growing season and look for wetland plants. Wetland plants vary from region to region. You can get the list of plants for your region from the National Wetland Plant List (wetland-plants.usace.army.mil). In addition, the U.S. Department of Agriculture (USDA) has a website full of pictures and other information about thousands of plants at plants.usda.gov. You may also contact your local Corps District Regulatory office for more information about commonly occurring wetland plants in your area. In general though, you should have a wetland delineation professional look at the area if you see cattails, bulrushes, cordgrass, smartweeds, sphagnum moss, cypress, willows, mangroves, sedges, rushes, arrowheads, etc. The Corps' Engineer Research and Development Center has created a YouTube Channel called *All Things Wetland Plants Video Series* that can assist the wetland delineation professional (www.youtube.com/channel/UCI-wASW82yGEgMNHQqKnLYq).

Wetlands Legal Definition

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. (33 CFR §328.3(b)).

Tip 2. Look for areas where water collects. When looking at an area for potential wetlands, look not only for standing water, but also for areas where the soil is waterlogged or saturated. You can also look for signs that water was there recently. For example, look for things like water rings (or staining) on trees, rocks, and fence posts. Look for debris piled up on fences, trees, rocks and other structures, or debris deposited



*Vernal pool wetlands at Jepson Prairie, California.
Photographed by James Robb, 2017.*

Do I Have to Hire a Private Consultant?

No. The Corps will delineate wetlands on your property if requested. However, due to limited resources that can result in a delay in the process. Hiring a private delineation professional is entirely up to you, but such professional can, in many cases, provide data necessary to delineate wetlands which generally speeds up the process.

Tip 4. Look at a soil map. The Natural Resources Conservation Service (NRCS) has created maps of the different soil types all over the U.S. and publishes that information on the Web Soil Survey at websoilsurvey.nrcs.usda.gov. If there are hydric soils on or near the area in question, or if mapped soils contain hydric inclusions, then the area may be a wetland. In this case, you may consider consulting with a wetland delineation professional for more help or contacting your local Corps District Regulatory office.

Tip 5. Look at the National Wetland Inventory (NWI). The U.S. Fish and Wildlife Service (FWS) mapped wetlands throughout the country (www.fws.gov/wetlands). There are limitations to these data as much of the mapping is old. In addition, many wetlands are not mapped due to limits of technology, aerial imagery used, etc.

Since FWS has a different legal definition of wetlands, there could be some areas that are mapped that do not meet the Corps' definition and some areas that are not mapped that would meet the Corps' definition. The NWI mapping does not include all wetlands and does not identify wetlands which are federally regulated by the Corps. The bottom line though, is if you see a mapped wetland on or nearby your property, it's probably a good idea to consult a wetland delineation professional or your local Corps District Regulatory office.

Tip 6. Look at aerial photos. Wetlands often show up as darker areas in aerial photographs. This is because water absorbs light, so wet soils tend to look dark from the air. The reverse can also be true with wetlands appearing brighter than the surrounding uplands when water, early in the growing season, suppresses plant growth then dries up, leaving more bare ground than in the surrounding landscape. You can find aerial photography from a variety of sources and the number is constantly growing. In rural areas, your local Farm Service Agency (agency of the USDA) offices are a great place to start. Other options include Google Earth (www.google.com/earth), U.S. Geological Survey's EarthExplorer (earthexplorer.usgs.gov), National Oceanic and Atmospheric Administration's CoastWatch (coastwatch.noaa.gov), and USDA's Geospatial Data Gateway (datagateway.nrcs.usda.gov).



Wetlands show up darker than the surrounding land in this 1998 USGS image via Google Earth.

Who are wetland delineation professionals and what do they do? The Corps has wetland delineation professionals on staff. The NRCS also has wetland delineation professionals who can help farmers, ranchers, and other similar landowners regarding programs under the Food Security Act; however, the Corps may not be able to use wetland determinations made by the NRCS and there are often data sharing limitations between the agencies. There are also many private consultants who provide wetland delineation services and can submit a delineation to the Corps for verification. There is no license or certification for wetland delineation professionals that is recognized by the Corps. However, the Association of State Wetland Managers has developed some suggestions for selecting a consultant at www.aswm.org/pdf_lib/consultant0607.pdf. Your local Corps office may also keep a list of wetland delineation professionals that work in your area, but cannot make any recommendations. The wetland delineation professional will follow the Corps 1987 Wetland Delineation Manual and the applicable regional supplement to collect data from sample points and, using that data, identify and potentially map any wetlands within the site (www.usace.army.mil/reg/reg_supp/).

What to do if your area has wetlands that you propose to alter? Contact the Corps District Regulatory office that has responsibility for the permitting process in your area. This office will assist you in discussing your options, and will provide instructions for applying for a permit, if necessary.