



HOW TO SPOT WETLANDS FROM 100s OF MILES AWAY IN 3 EASY STEPS

IS YOUR TASK TO IDENTIFY A SUITABLE SITE OR MANY OF THEM ACROSS A BROAD GEOGRAPHIC AREA?

You want to stay clear of wetlands and waters that will result in infeasibility or drastically increase project costs and timelines before you spend thousands on other portions of your due diligence and design. The steps below will take about 15 minutes and yield reasonably accurate results.

Using Google, you will need to search for the following websites or click on the Hyperlinks below:

- National Wetlands Inventory Wetlands Mapper: <https://www.fws.gov/wetlands/data/mapper.html>
- The National Map Viewer: <https://apps.nationalmap.gov/viewer/>
- NRCS Web Soil Survey: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

STEP 1

CHECK THE US FISH AND WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY (NWI)

Using the online NWI mapping application, navigate to your site or area of interest. If the area is mapped as wetland, it will be shaded. If not, you're home free, right? Well, not so fast. Many of the nation's wetlands are not mapped by the NWI and some mapped wetland areas contain uplands. Make note as to whether there are mapped wetlands or streams in the area.

STEP 2

CHECK THE NATIONAL HYDROGRAPHY LAYER OF THE NATIONAL MAP VIEWER

Using the online National Map Viewer mapping application, navigate to your site or area of interest. Click the layers button at the top and turn on the National Hydrography Dataset. Look for blue lines (either solid or broken lines) or blue overlay that looks like little blue grass clumps anywhere in or near the project area. Also, look at the base map topographic contours and look for areas with widely spaced or few or no contour lines, particularly such areas adjacent to or near any blue (solid or broken) lines or the blue wetland 'grass' clumps. These areas are typically broad floodplains, stream terraces, and bottomlands that can be wetland. Areas with tightly spaced brown lines are typically hill slopes. Wetlands are typically more common on broad areas with little topographic relief. It should be noted that crossing or otherwise impacting any surface water (mapped or not) may require a state and/or federal permit. In some locations, buffers where development is restricted or conditioned are mandatory.

STEP 3

CHECK THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY

After navigating to your site or area of interest using the Web Soil Survey online mapper, click the rectangular AOI button, draw a rectangle around your area of interest, and click the Soil Map tab at the top. Soil coverage polygons will appear. A soil name abbreviation code will appear within each polygon. Click the soil type names to the left and scan down to the field that is identified as "drainage class" and note the drainage class of the dominant and wettest components (if multiple components are listed). If any component is listed as somewhat poorly drained, poorly drained, or very poorly drained, the project area may contain soils that are conducive to the formation of wetlands.

If any of the above 3 steps indicate the possible presence of wetlands or waters, the services of a qualified wetland scientist/consultant will likely be needed to conduct a formal, on-site, wetlands/waters determination and ultimately determine whether a project will impact wetlands or waters.

ECA has completed thousands of wetland determinations and delineations. ECA has also successfully permitted many projects within wetland areas. If you have questions regarding wetlands identification or permitting, please contact Ben Salter: ben.salter@eca-usa.com, (828) 505-0755.

ECA is an environmental, cultural resources, and geotechnical consulting and engineering firm with a 30+ year track record of excellent service to our clients. ECA attributes its success to providing timely and innovative services and solutions with a persistent focus on the objectives of customers.