## Wetlands

Projects funded by the Agency are not to be built within wetlands. Some utilities can cross wetlands if installed properly which usually means boring under them. The definition of a wetland varies slightly depending on the source. For the purposes of the Agency's environmental review, an area is considered to be a wetland if it has **all three** of the following: the hydrology (water – year-round or seasonal), hydrophyic vegetation, and hydric soil.

Owners with large tracts of land may have wetlands present, but still be allowed to use the nonwetland areas. This will be determined on a project by project basis and may require some form of mitigation to limit the environmental impact. Small projects sites with large areas of wetlands and very limited buildable area should be avoided.

The best way to document any site wetlands is to visit the site and take pictures. These can be included within the report with a short text explanation of the site features. USDA Rural Development employees are generally not soil experts. Just use your best judgment in making a determination if a wetland is present. Most sites will be obvious; others are difficult even for the experts to determine. Drought conditions complicate the issue.

Use the data gathered to make a conclusion. The letter to the United State Corp of Engineers asking for review should include the site photos, wetland map, and the Agency's determination: "No effect", "May affect - Not likely to adversely affect" (add the common wetland mitigation measure), or "May affect – Likely to adversely affect".

A good source to create a wetlands map for sites within the state of Texas can be found here: <u>http://www.fws.gov/wetlands/Data/Mapper.html</u>. Scroll down and click on the words, "Click here to open the Wetland Mapper". A new blue window will open with a disclaimer note you can just click, "OK" and remove it. A map of the USA will appear on screen with different colors of shading.

The meaning of the different shading is explained in the lower right legend titled, "Status". Some areas of the map are in a digital format (best), some are scanned maps (hand drawn), and some areas have no data on wetlands. Texas has a mix of maps available, whereas Oklahoma has digital maps for the whole state.

To find your site, there are at least three options. Click in the white box at the top of the page and type in the town (ex: Temple Texas) and then click the, "Find Location" button. The map will zoom to that area. A second method to find your site is to use the + and - scale along the left hand side of the map. Click the + symbol on the scale and pan (grabbing and re-centering) with the mouse to keep the map on target with your site. The third method is to zoom in with the center wheel on the mouse and pan with the left mouse button. Use the method you prefer.

Once you get within a scale range you can make out the site area (about at a city level of clarity), you need to remove the color shading. You do this by un-checking the, "Wetland Status" in the legend on the right of the page. Remember this status is only to identify the type of map available for that area and is not required for mapping. Click the **closest box** near the words, "Wetlands" this will turn on the layer of the map which identifies the wetlands.

The farthest box or first box adjacent to the word, "Wetland" will bring up a control which you can use to lighten or darken the wetland layer. Grab the triangle area and move along the bar. This may be required depending on the background contrast of the type of map you want to print. You can use this later just before printing the map. The default is 0.60 and is good for most maps.

If you do not see the wetland indications on the screen, then you are still too far away from the property. Zoom in. If you are in an area with digital maps, you will see different colors showing different types of wetlands (reference the Wetland ledge for wetland type). When you are very close to the property the wetland codes will appear within the colored wetland areas.

If you are in an area with scanned maps, you will see hand drawn locations with the wetland code adjacent to the wetland area. The trick is to be at the right scale (zoom in or out) to read the map information. If there is no data at any scale, you could be in the area in Texas with no data available.

You now need to determine what kind of map you want to print out. Click on one of the four options located at the top of the page: "Streets", Imagery/Labels" (which is the default), "Topo", or USGS Topo". Look at each type. It is easy to changes the background with each click of the button. Print the one you prefer and the one easiest to comprehend in the printed report.

Once you are satisfied with the map you may need to fine tune the scale (zoom in zoom out) to place the project site within the overall map. A site with no wetlands anywhere near it may require you to zoom out to shown the closest wetlands. This gives the site some visual reference.

If the project site has a wetland on or near it, you may want to zoom in to be able to exactly show how the site will not affect the wetland. After you print the map, you can mark the exact project site location (property lines) my hand. If the wetland is extremely close, also mark the building location. This will help in determining the environmental impact.

When you are ready to print, click the "Print Map" button at the top center of the page. A new blue box will open indicating that you can click and "grab" the map to make any final adjustments. Do this if need. Click "OK" to remove the dialogue box. There is also a print options box where you can type in the map title and remarks. You can experiment with this to see how it displays. The title will appear at the top right corner of the final map and the remarks will be under the map to the left.

After you complete the editing, click the "submit" button. A blue dialogue box will appear and you can click, "OK" or it will disappear when it is ready Save or Open the map. Recommend saving your map to your computer and then printing it out. You will have it for reference later. Print the document out as you would any color copy. Edit the Saved PDF as required.

The site can also be used to print out topo, road, and aerial maps of the site location to include within the environmental report. Uncheck the "Wetlands" in the legend and it will turn off.

If you need the wetland codes, you can find the meaning to the codes on this web page: <u>http://137.227.242.85/Data/interpreters/wetlands.aspx</u>. Just type in the codes from the map in the white box and hit the "Decode" button. It will then display the meaning for each symbol. You can print this for the report. Each code that you need to define will need to be entered and printed separately. Just print out the codes around and nearest the site.



NWI Logo

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Enter Classification code:

(Example: L1UB1Hx)

For geographically specific information\* (optional), please enter a State code:

(Example: **TX** for Texas)

Description for code PUSCh :

P System PALUSTRINE: The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: 1. are less than 8 hectares (20 acres); 2. do not have an active wave-formed or bedrock shoreline feature; 3. have at low water a depth less than 2 meters (6.6 feet) in the deepest part of the basin; 4. have a salinity due to ocean-derived salts of less than 0.5 ppt.

Subsystem :

**US** Class **UNCONSOLIDATED SHORE**: Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and; (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.

Subclass :

Modifier(s):

- **C** WATER REGIME **Seasonally Flooded**: Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
- h SPECIAL MODIFIER Diked/Impounded: These wetlands have been created or modified by a man-made barrier or dam which obstructs the inflow or outflow of water. The descriptors 'diked' and 'impounded' have been combined into a single modifier since the observed effect on wetlands is similar. They have been combined here due to image interpretation limitations. For clarification of the extent of impoundment see discussion of Lacustrine System limits.

## **TX** Plant Specie(s):

file:///C|/...20Consultants/USDA%20Staff%20Information%20-%20November%202011/Wetlands%20Code%20Interpreter.htm[12/1/2011 4:16:53 PM]

Scientific Name			Common Name			Indicator				Reference Info.
TX Soil(s):										
Series	Subgroup	Soils Fields Ind.	Drainage Class	Flood Frequency	Flood Duration	Flood Latest	HWT Depth	HWT Latest	LRR	Soil-5 Code

