

## SECTION II – NATURAL RESOURCES INFORMATION

### 1. Soils

#### Soil Interpretations

##### Hydric Soil Interpretations

Hydric soils are developed under conditions sufficiently wet to support the growth and regeneration of hydrophytic vegetation. This listing includes phases of soil series that may or may not have been drained. Some soil series, designated as hydric, have phases that are not hydric depending on water table, flooding, and ponding characteristics.

This list will have a number of agricultural and nonagricultural applications. These include assistance in land-use planning, conservation planning, and assessment of potential wildlife habitat. An area that meets the hydric soil criteria must also meet the hydrophytic vegetation and wetland hydrology criteria in order for it to be classified as a jurisdictional wetland (See the "Corps of Engineers Wetlands Delineation Manual", 1987).

##### **Definition of Hydric Soil**

A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The concept of hydric soils includes soils developed under sufficiently wet conditions to support the growth and regeneration of hydrophytic vegetation. Soils that are sufficiently wet because of artificial measures are included in the concept of hydric soils. Also, soils in which the hydrology has been artificially modified are hydric if the soil, in an unaltered state, was hydric. The following criteria reflect those soils that meet this definition.

##### **Criteria for Hydric Soils**

1. All Histels except Folistels and all Histosols except Folists, or
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that are:

- a) Somewhat poorly drained with a water table equal to 0.0 foot (ft) from the surface during the growing season, or
- b) poorly drained or very poorly drained and have either:
  - (1) water table equal to 0.0 foot during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches, or
  - (2) water table equal to 0.5 foot from the surface during the growing season if permeability is equal to or greater than 6.0 inches/hour in all layers within 20 inches, or
  - (3) water table equal to 1.0 foot from the surface during the growing season if permeability is less than 6.0 inches/hour in any layer within 20 inches, or
- 3. soils that are frequently ponded for long duration or very long duration during the growing season, or
- 4. soils that are frequently flooded for long duration or very long duration during the growing season.

### **Hydric Soil Lists**

The list of hydric soils was created by using criteria that were developed by the National Technical Committee for Hydric Soils. The criteria are selected soil properties that are documented in Soil Taxonomy (Soil Survey Staff, 1999) and were designed primarily to generate a list of hydric soils from the national soil database. Criteria 1, 3, and 4 serve as both database criteria and as indicators for identification of hydric soils. Criterion 2 serves only to retrieve soils from the database.

**The most up-to-date hydric soil lists for Oregon Soil Surveys can be generated with the following instructions.**

## Instructions for Generating a Hydric Soil List from Web Soil Survey (WSS)

May 2013

Below are three options for viewing and printing a hydric soils list from Web Soil Survey.

- 1) Hydric soil list for an entire county or area
- 2) Hydric soil list for a specific area
- 3) Hydric soil list and map for any area

To begin the instructions follow the link to Web Soil Survey and select the big green button to *Start WSS*.

Link to the website:

<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

How to Generate a Hydric Soil List for an Entire County or Area	
To select the entire county or area:	
1	On the front page of WSS under <i>Quick Navigation</i> select <i>Soil Survey Area</i>
2	Enter a state, county, and soil survey area
3	Select <i>Set AOI</i>
It will take a few seconds for the entire survey area to load after which you can generate reports on the entire survey area.	
To generate a hydric soils list:	
1	Select <i>Soil Data Explorer</i> - a tab across the top
2	Select <i>Soil Reports</i> - a tab across the top
3	Expand <i>Land Classifications</i> - a tab on the left
4	Select <i>Hydric Soil List-All Components</i>
5	Select <i>Options</i>
6	Check the box to <i>Include Minor Soils</i>
7	Select <i>View Soil Report</i>
A report in table form will appear under the map. This is the preferred report as it displays all major and minor components, map unit name and symbol, percent composition, landform, hydric status and hydric criteria.	
To Save or Print	
1	Select <i>Printable Version</i> - Tab at the upper right corner above the map
2	Select <i>View</i>
3	Choose to <i>Open</i> or <i>Save</i> the report
4	To print immediately <i>Open</i> the report and select your print button
5	To save select <i>Save</i> and download the file

How to Generate a Hydric Soils List for a Specific Area	
To select just a specific area:	
1	On the front page of WSS under <i>Quick Navigation</i> select how you want to navigate to your area of interest or AOI (most commonly <i>Address</i> or <i>Latitude and Longitude</i> )
2	Enter your specific destination
3	Select <i>View</i>
4	Use the map tools to zoom-in or pan to more precisely locate your AOI 
5	Once your AOI is fully displayed on the screen use the AOI tools to outline it on the map. Sketch a rectangle by placing the cross-hairs on the map and left click to draw. When you release the left-click your area will be created and displayed with hash marks. Sketch a polygon by placing the cross-hairs on the map and click around your area, double clicking to close the shape, after which your area will be created and displayed with hash marks. To re-draw your AOI select <i>Clear AOI</i> under the <i>AOI Properties</i> menu on the left. 
To generate a hydric soils list:	
1	Select <i>Soil Data Explorer</i> - a tab across the top
2	Select <i>Soil Reports</i> - a tab across the top
3	Expand <i>Land Classifications</i> - a tab on the left
4	Select <i>Hydric Soil List-All Components</i>
5	Select <i>Options</i>
6	Check the box to <i>Include Minor Soils</i>
7	Select <i>View Soil Report</i>
A report in table form will appear under the map. This is the preferred report as it displays all major and minor components, map unit name and symbol, percent composition, landform, hydric status and hydric criteria.	
To Save or Print	
1	Select <i>Printable Version</i> - Tab at the upper right corner above the map
2	Select <i>View</i>
3	Choose to <i>Open</i> or <i>Save</i> the report
4	To print immediately <i>Open</i> the report and select your print button
5	To save select <i>Save</i> and download the file

<b>How to Generate a Hydric Soils List and Map for any Area</b>	
Follow the instructions below for the type of area (whole county or specific) of interest to you.	
To select the entire county or area:	
1	On the front page of WSS under <i>Quick Navigation</i> select <i>Soil Survey Area</i>
2	Enter a state, county, and soil survey area
3	Select <i>Set AOI</i>
It will take a few seconds for the entire survey area to load after which you can generate reports on the entire survey area.	
To select just a specific area:	
1	On the front page of WSS under <i>Quick Navigation</i> select how you want to navigate to your area of interest or AOI (most commonly <i>Address</i> or <i>Latitude and Longitude</i> )
2	Enter your specific destination
3	Select <i>View</i>
4	Use the map tools to zoom-in or pan to more precisely locate your AOI 
5	Once your AOI is fully displayed on the screen use the AOI tools to outline it on the map. Sketch a rectangle by placing the cross-hairs on the map and left click to draw. When you release the left-click your area will be created and displayed with hash marks. Sketch a polygon by placing the cross-hairs on the map and click around your area, double clicking to close the shape, after which your area will be created and displayed with hash marks. To re-draw your AOI select <i>Clear AOI</i> under the <i>AOI Properties</i> menu on the left. 
To generate a hydric soils map and list:	
1	Select <i>Soil Data Explorer</i> - a tab across the top
2	Under the open <i>Suitabilities and Limitations for Use</i> tab expand <i>Land Classifications</i>
3	Select <i>Hydric Rating by Map Unit</i>
4	Select <i>View Rating</i>
This provides you a map and a report for your AOI. The report provides the map unit symbol, map unit name, hydric rating, acres, and percent area of the map unit in the AOI. Each map unit is identified with a hydric rating of not hydric, partially hydric, all hydric, unknown hydric, and not rated or not available.	
To Save or Print	
1	Select <i>Printable Version</i> - Tab at the upper right corner above the map
2	Select <i>View</i>
3	Choose to <i>Open</i> or <i>Save</i> the report
4	To print immediately <i>Open</i> the report and select your print button
5	To save select <i>Save</i> and download the file