

# Hydric Soils List Criteria

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## New NASIS Database Selection Criteria

### Federal Register Doc. 2012-4733 Filed 2-28-12

The NTCHS has updated the criteria to select map units components for the hydric soils list. The former database selection criteria created to select soils that may meet the definition of hydric soils did not cover the full extent of what is included in the hydric soils definition.

Due to issues with database population, it was easier for a soil scientist to individually populate a field that identified those soil map unit components that meet the definition of hydric soils and which criterion or criteria the soil met rather than to auto-populate using the developed query. The list has evolved from a national list of hydric soil series that may be hydric to a comprehensive list of all map units that have at least one map unit component that is hydric. The list also provides information on what component is at least in part hydric and where it is located on the landscape. Since map unit components may consist of soil series that cross the hydric/nonhydric boundary, a map unit component listed as hydric may also include portions that are non-hydric.

The updated criteria are as follows:

1. All Histels except Folistels and Histosols except Folists; or
2. Map unit components in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, or Andic, Cumulic, Pachic, or Vitrandic subgroups that:
  - a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - b. Show evidence that the soil meets the definition of a hydric soil;
3. Map unit components that are frequently ponded for long duration or very long duration during the growing season that:
  - a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - b. Show evidence that the soil meets the definition of a hydric soil; or
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
  - a. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
  - b. Show evidence that the soils meet the definition of a hydric soil.

## Glossary of Terms Used in Hydric Soils Criteria

*Anaerobic* means a situation in which molecular oxygen is virtually absent from the environment.

*Artificial hydric soil* means a soil that meets the definition of a hydric soil as a result of an artificially induced hydrologic regime and did not meet the definition before the artificial measures were applied.

*Drained* means a condition in which ground or surface water has been removed by artificial means.

*Flooded* means a condition in which the soil surface is temporarily covered with flowing water from any source, such as streams overflowing their banks, runoff from adjacent or surrounding slopes, inflow from the high tides, or any combination of sources.

*Frequently flooded, ponded, saturated:* a frequency class in which flooding, ponding, or saturation is likely to occur often under usual weather conditions (more than 50 percent chance in any year, or more than 50 times in 100 years).

*Hydric soil* means a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. This definition includes soils that developed under anaerobic conditions in the upper part but no longer experience these conditions due to hydrologic alteration such as those hydric soils that have been artificially drained or protected (e.g., ditches or levees).

*Long duration* means a duration class in which inundation for a single event ranges from 7 days to 1 month.

*Map unit* means a collection of areas defined and named the same in terms of their soil components or miscellaneous areas or both.

*Map unit components* means the collection of soils and miscellaneous areas found within a map unit.

*Phase, map unit* means a subdivision of a map unit based on features that affect its use and management (e.g., slope, surface texture, stoniness, and thickness).

*Ponded* means a condition in which water stands in a closed depression. The water is removed only by percolation, evaporation, or transpiration.

*Very long duration* means a duration class in which inundation for a single event is greater than 1 month.

## **What's included on the hydric soils lists?**

### **National List**

“Hydric Soils of the United States” is a compilation of all map units with either a major or minor component that is at least in part hydric. This could include components that are soil series, components that are classified at categories higher than the series level in Soil Taxonomy, and miscellaneous land types. Because the list includes both major and minor (small) percentages for map units, in some cases most of the map unit may not be hydric. Also, some components may be phases of soil series that have a range of characteristics that both meet and do not meet hydric indicator requirements; therefore, only a portion of that component’s concept (or range in characteristics) may in fact be hydric. The list is useful in identifying map units that may contain hydric soils. The national list is generated once per calendar year (usually in January or February) to satisfy legislated mandates. The NRCS Hydric Soils Lists are by soil map unit component. Detailed and up-to-date hydric soil lists (e.g., by soil survey area map unit component) are maintained by the NRCS State offices and local field offices and can be downloaded from the Web Soil Survey at:

<http://websoilsurvey.nrcs.usda.gov/>.

### **State Lists**

The State lists are subsets of the national hydric soils list by State. For more detailed State lists by map unit, contact the appropriate NRCS State office.

### **Local Lists**

NRCS has developed local lists of map units that contain hydric soils for each county, parish, or soil survey area in the United States. These local lists are available at the NRCS State offices, local NRCS field office, and on the Web Soil Survey at: <http://websoilsurvey.nrcs.usda.gov/> and are the preferred lists for use in making preliminary wetland determinations. Information from the Web Soil Survey is the most up-to-date information as well as the official soil survey information. Since the national list is only compiled once a year and Web Soil Survey may be updated on a more frequent basis, the Web Soil Survey should be deferred to when there is a discrepancy.