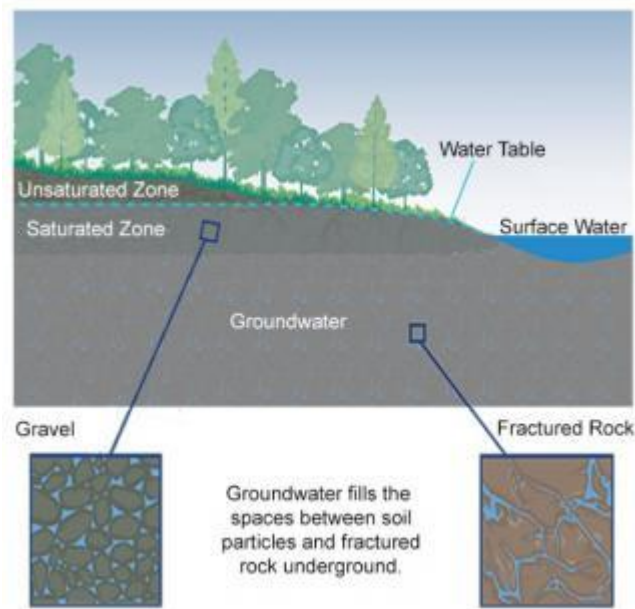


# What are Wetlands & Watercourses?



(Information from the Connecticut Department of Energy and Environmental Protection's Website)

We usually identify wetlands and watercourses using the familiar terms marsh, swamp, river, brook, pond or lake. However, the CT [Inland Wetlands and Watercourse Act](#) (Act) defines inland wetlands by [soil type](#). The soil types are poorly drained, very poorly drained, alluvial, and floodplain.

Identifying inland wetlands by soils allows us to recognize those areas during times of drought when there is no surface water present, or during winter when characteristic wetland indicator plants may not be obvious.

Inland wetlands *may not always* appear wet. For example, all floodplain soils are considered inland wetlands regardless of drainage class and some floodplain soils can be quite dry.

Areas disturbed by human activities and no longer in their natural state, may or may not be classified as wetlands due to their soil characteristics. The National Resources Conservation Service (NRCS) provides [Clarification of Wetland Criteria](#) as guidance for interpreting Connecticut's soil types. Consult with a natural resource professional with the proper expertise, such as a soil scientist, if this is an issue at your location of interest.

## Wetland Soils

Wetland soils are defined in the Act by soil drainage class and landscape position:

- **Poorly drained-** These soils occur where the water table is at or just below the ground surface, usually from late fall to early spring. The land where poorly drained soils occur is nearly level or gently sloping. Many of our red maple swamps are on these soils.

- **Very poorly drained-** These soils generally occur on level land or in depressions. In these areas, the water table lies at or above the surface during most of the growing season. Most of our marshes and bogs are on these soils.
- **Alluvial and Floodplain-** These soils occur along watercourses occupying nearly all level areas subject to periodic flooding. These soils are formed when material is deposited by flowing water. Such material can be composed of clay, silt, sand or gravel. Alluvial and floodplain soils range from excessively drained to very poorly drained.

## Types of Watercourses

The Act also defines the term watercourses very broadly to mean rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private. Although the Act defines inland wetlands and watercourses separately, they occasionally may represent the same area as in the case of a marsh or swamp. Types of watercourses include:

- **Marshes-** Located in low lying areas having a high water table and characterized by the absence of trees and shrubs. The dominant vegetation in marshes is soft-stemmed plants such as cattail, bull rush and pickerelweed. However, some marshes can support woody vegetation.
- **Swamps-** Located in low lying or gently sloping areas, but unlike marshes, are characterized by the presence of trees and shrubs. Soft-stemmed plants, such as tussock sedge, form the ground level vegetation.
- **Bogs-** Unlike marshes and swamps, bogs are most often located in glacial kettle holes. Water pools in these depressions forming an acidic environment where many unique forms of vegetation grow. The most characteristic plant in a bog is Sphagnum moss. Sphagnum forms mats along the bog surface. New layers grow on top of the old, which subsequently become compacted with other plant debris to form peat. The depth of peat accumulation can exceed 40 feet.
- **Intermittent Watercourses-** Intermittent watercourses provide valuable fishery habitat during the spring months and during times of high flow and are an integral part of the natural storm water drainage system. They are recognized by a defined permanent channel and bank and the occurrence of two or more of the following characteristics:
  1. Evidence of scour or deposits of recent alluvium or detritus;
  2. The presence of standing or flowing water for a duration longer than a particular storm incident; and,
  3. The presence of hydrophytic vegetation.

**Vernal pools-** Also known as ephemeral pools, autumnal pools, and temporary woodland ponds, are seasonal wetlands that are covered by shallow water for variable periods from winter to spring but may be completely dry during the summer and fall.