
Dichotomous Key to General North Carolina Wetland Types

Accompanies NC WAM User Manual Version 5

Before using this key, the assessor should read and become familiar with descriptions of the general wetland types. The assessor should use best professional judgment to verify that the wetland type determined with the use of this key matches the written description (see User Manual page number following wetland type name).

The following rule should be used to assist in the selection of the most appropriate general wetland type. Narrative descriptions are also available to assist in this choice (see User Manual Section 3.1).

Wetlands with alterations (man-made or natural) should generally be classified as the original, naturally occurring type if this determination can be made. However, if the full range of stable, existing, wetland parameters (vegetation, hydrology, and soils) better resembles another wetland type because of long-established, permanent alterations, the wetland should be classified as this current, more appropriate type.

If there is evidence suggesting the wetland is a type other than the keyed type, the wetland may be classified as the evidenced type. Also, if the wetland does not appear to conform to any of the following general types, the site should be evaluated based on what the assessor believes is the closest wetland type. If the wetland is "intensively managed" or "intensively disturbed," the assessor should note this fact on the field assessment form and then select the most appropriate general wetland type based on the guidance provided above.

- I. Wetland affected by lunar or wind tide, may include woody areas contiguous with tidal marsh
 - A. Wetland affected, at least occasionally, by brackish or salt water
 - i. Dominated by herbaceous vegetation – **Salt/Brackish Marsh** (p. 12)
 - ii. Dominated by woody vegetation – **Estuarine Woody Wetland** (p. 15)
 - B. Wetland primarily affected by freshwater
 - i. Dominated by herbaceous vegetation – **Tidal Freshwater Marsh** (p. 17)
 - ii. Dominated by woody vegetation – **Riverine Swamp Forest** (p. 19)
- II. Wetland not affected by tides
 - A. Not in a geomorphic floodplain or a natural topographic crenulation and not contiguous with an open water 20 acres or larger
 - i. On a side slope – **Seep** (p. 24)
 - ii. On interstream divides or on a coastal island
 1. Flats on interstream divides in Coastal Plain ecoregions
 - a. Dominated by deciduous trees
 - i. Seasonally saturated to seasonally inundated (typically dominated by sweetgum and oaks) – **Hardwood Flat** (p. 26)
 - ii. Seasonally to semi-permanently inundated (typically dominated by cypress and black gum) – **Non-Riverine Swamp Forest** (p. 28)
 - b. Dominated by evergreens
 - i. Dominated by dense, waxy shrub species (typically include gallberries, fetterbushes, honeycup, greenbriar); canopy may include pond pine, Atlantic white cedar, and bays – **Pocosin** (p. 30)
 - ii. Not dominated by dense, waxy shrub species
 1. Dominated by long-leaf or pond pine and wire grass – **Pine Savanna** (p. 32)
 2. Dominated by loblolly or slash pines – **Pine Flat** (p. 33)
 2. In depressions surrounded by uplands anywhere in the state (mafic depressions, lime sinks, Carolina bays) or contiguous with an open water

Dichotomous Key to General NC Wetland Types, Continued

2. In depressions surrounded by uplands anywhere in the state (mafic depressions, lime sinks, Carolina bays) or contiguous with an open water (repeated from the previous page)
 - a. Dominated by dense, waxy shrub species (typically include gallberries, fetterbushes, honeycup, greenbriar); canopy may include pond pine, Atlantic white cedar, and bays and not characterized by clay-based soils– **Pocosin** (p. 30)
 - b. Not dominated by dense, waxy shrub species and not characterized by a peat-filled bay – **Basin Wetland** (p. 35)
- B. In a geomorphic floodplain or a natural topographic crenulation or contiguous with an open water 20 acres or larger
 - i. Northern Inner Piedmont or Blue Ridge Mountains ecoregions and dense herbaceous or mixed shrub/herbaceous vegetation with characteristic bog species (see wetland type description), with or without tree canopy; at least semi-permanent saturation; typically on organic or mucky soils; sphagnum moss commonly present – **Bog** (p. 37)
 - ii. Anywhere in the state and not Bog
 1. Dominated by herbaceous vegetation. At least semi-permanently inundated or saturated. Includes lacustrine and riparian fringe and beaver ponds with dense herbaceous vegetation; sphagnum moss scarce or absent – **Non-Tidal Freshwater Marsh** (p. 40)
 2. Dominated by woody vegetation. Trees may be present on edges or hummocks.
 - a. Localized depression and semi-permanently inundated – **Floodplain Pool** (p. 43)
 - b. Not “a”
 - i. Less than second-order stream or in a topographic crenulation without a stream. Diffuse surface flow and groundwater more important than overbank flooding.
 1. Seasonally to semi-permanently saturated and/or only intermittently inundated – **Headwater Forest** (p. 45)
 2. Seasonally to semi-permanently inundated – **Riverine Swamp Forest** (p. 19)
 - ii. Second-order or greater stream or contiguous with an open water 20 acres or larger
 1. Intermittently to seasonally inundated (may be dominated by sweetgum, ash, sycamore, and oaks) – **Bottomland Hardwood Forest** (p. 49)
 2. Seasonally to semi-permanently inundated (may be dominated by cypress and blackgums in Coastal Plain and ash, overcup oak, and elms in Piedmont and Mountains) – **Riverine Swamp Forest** (p. 19)

¹See stream order schematic diagrams in User Manual Appendix F.