

Wetlands of Amenia



AMENIA CAC NATURAL RESOURCE INVENTORY 2005

Wetlands in Amenia

What is a Wetland?

Swamps, bogs, marshes, and meadows are commonly referred to as “wetlands”. Most wetlands share a single characteristic of having soil or substrate that is at least periodically saturated or covered by water.

The Freshwater Wetland Act of 1975 uses “indicator plants” to identify freshwater wetlands. The law defines wetlands as:

- a. Lands and submerged lands commonly called marshes, swamps, sloughs, bogs, and flats supporting aquatic or semi-aquatic vegetation.
- b. Lands and submerged lands containing remnants of any vegetation that is not aquatic or semi-aquatic that has died because of wet conditions over a long period, provided that such wet conditions do not exceed a maximum seasonal water depth of six feet and provided further such can be expected to persist indefinitely, barring human intervention.
- c. Lands and waters substantially enclosed by aquatic vegetation or dead vegetation as described in b.

In Dutchess County, there exists a list of “official wetland” indicator plants as shown in Table 1.

Table 2 is a classification scheme used in Dutchess County in an attempt to neatly group wetlands into separate types. In reality, many wetlands have characteristics that overlap and are not easily classified.

Wetland Boundaries

Since wetlands are defined by soils and vegetation, locating the boundary of a wetland is a lot more difficult than just finding that point or line where your feet stop getting wet. The actual boundary includes the place where the vegetation in Table 1 stops plus a 100 foot "buffer zone". Wetlands are not permanent features and they change over time. So, even though maps exist of wetlands, the real boundaries have to be determined in the field by qualified experts. DEC will, upon request, "flag" or mark the limits of a wetland.

Wetland Regulation

The Freshwater Wetlands Act (FWA) passed by the New York State Legislature in 1975 requires that a permit be obtained before altering a wetland of 12.4 acres (5 hectares). Local governments were given the option of being the regulating body and were also given the option of regulating wetlands smaller than 12.4 acres. The FWA is a lengthy document and covers many aspects of wetlands including recognition, definition, and regulation. The law clearly spells out the benefits of wetlands to the public and the need to protect and preserve those benefits.

Why are Wetlands Important?

Wetlands have several valuable functions including the following:

1. Flood, erosion, and storm control
2. Sediment and pollution control
3. Water discharge and recharge
4. Nutrient source and food production
5. Wildlife habitat
6. Recreation
7. Education and scientific study
8. Open space and aesthetics

For a much more detailed explanation and description of wetlands, refer to the document “Freshwater Wetlands of Dutchess County, Part 1, Inventory and Guide for Local Governmental Officials”. This is an excellent and definitive guide to managing wetlands.

The Wetlands of Amenia

Amenia has 28 regulated wetlands of 12.4 acres or above totaling 1350 acres and amounting to 5.1% of the Town’s area. In addition, there are 7 wetlands between 5 and 12.4 acres totaling 51 acres, and 102 of 5 acres or less totaling 146 acres. Altogether, this amounts to 137 wetlands, 1547 acres, and **5.9%** of the Town’s area. Only the wetlands above 12.4 acres are presently protected and regulated by the State. Smaller wetlands come under the aegis of the U.S. Army Corps of Engineers. The totals stated above are only approximate because wetlands are constantly changing.

The Amenia CAC has the following wetland maps and information:

1. “Streams, Water Bodies, and Wetlands” of Amenia, 2004, scale :2 inches = 1 mile. This map is part of a larger set that includes a tax map overlay.
2. “Wetlands of Amenia” Based on USGS quads. Scale 1 inch equals 2,000 feet. Map is very battered and needs to be replaced.
3. Overlay of wetlands in Amenia. Based on USGS map. Old and outdated but still useful.
4. A detailed field study of most of the regulated wetlands in Amenia. This is a very detailed study done by wetland experts for the DEC in the late 70’s. It needs to be updated.
5. “Freshwater Wetlands of Dutchess County, Part 1, Inventory and Guide for Local Government Officials”. Very useful guide and information source. All you need to know about wetlands, their value, and their regulation.

Recommendations

Because of development pressures that are already threatening the health and existence of wetlands of all sizes in Amenia the CAC strongly recommends that the Town adapt a local ordinance for wetland, waterbody, and water course protection. The CAC has models for such an ordinance.

TABLE 1

Plants which are used as indicators in determining freshwater wetlands in New York State
(Adapted from Article 24 Freshwater Wetlands Act.)

Vegetative Covertypes	Description	Common Name	Botanical Name
1. Wetland Trees	Depends upon seasonal or permanent flooding or sufficiently water-logged soils to give them a competitive advantage over other trees	Red Maple Willows Black Spruce Swamp White Oak Red Ash American Elm Larch Black Ash Silver Maple	<i>Acer rubum</i> <i>Salix</i> spp. <i>Picea mariana</i> <i>Quercus bicolor</i> <i>Fraxinus pennsylvanica</i> <i>Ulmus americana</i> <i>Larix laricina</i> <i>Fraxinus nigra</i> <i>acer saccharinum</i>
2. Wetland Shrubs	Depends upon seasonal or permanent flooding or sufficiently water-logged soils to give them a competitive advantage over other shrubs	Alder Buttombush Bog Rosemary Leatherleaf Dogwoods	<i>Alnus</i> spp. <i>Cephalanthus occidentalis</i> <i>Andromeda glaucophylla</i> <i>Chamaedaphne calyculata</i> <i>Cornus</i> spp.
3. Emergent Vegetation	Areas of herbaceous plants growing in standing water or water-logged soils	Cattails Pickereelweed Bulrushes Arrow Arum Arrowheads Reed Wildrice Bur-reeds Purple Loosestrife Swamp Loosestrife Water Plantain	<i>Typha</i> spp. <i>Pondtredia cordata</i> <i>Scirpus</i> spp. <i>Peltandra virginica</i> <i>Sagittaria</i> spp. <i>Phragmites communis</i> <i>Zizania aquatica</i> <i>Sparganium</i> spp. <i>Lythrum salicaria</i> <i>Decodon verticillatus</i> <i>Alisma plantago-aquatica</i>
4. Rooted, Floating- Leaved Vegetation	Vegetation in open water which is rooted, having vegetative portions floating	Water-lily Water-shield Spatterdock	<i>Nymphaea odorata</i> <i>Brasenia schreberi</i> <i>Nuphar</i> spp.
5. Free Floating Vegetation	Vegetation in open water which is free floating	Duckweed Big Duckweed Watermeal	<i>Lemna</i> spp. <i>Spirodela polyrhiza</i> <i>Wolffia</i> spp.
6. Wet Meadow Vegetation	Depends upon seasonal or permanent flooding or sufficiently water-logged soils to give it a competitive advantage over other open land vegetation	Sedges Rushes Cattails Rice Cut-grass Reed Canary Grass Swamp Loosestrife Spikerush	<i>Carex</i> spp. <i>Juncus</i> spp. <i>Typha</i> spp. <i>Leersia oryzoides</i> <i>Phalaris arundinacea</i> <i>Decodon verticillatus</i> <i>Eleocharis</i> spp.
7. Bog Mat Vegetation	Refers to floating mats of vegetation found in bogs	Sphagnum Mosses Bog Rosemary Leatherleaf Pitcher Plant Cranberries	<i>Sphagnum</i> spp. <i>Andromeda glaucophylla</i> <i>Chamaedaphne calyculata</i> <i>Sarracenia purpurea</i> <i>Vaccinium macrocarpon</i> and <i>V. oxycoccos</i>
8. Submergent Vegetation	Those plants that normally grow beneath the surface of the water	Pondweeds Naiads Bladderworts Wild Celery Coontail Water Milfoils	<i>Potamogeton</i> spp. <i>Najas</i> spp. <i>Utricularia</i> spp. <i>Vallisneria americana</i> <i>Ceratophyllum demersum</i> <i>Myriophyllum</i> spp.

TABLE 2

A Classification of Dutchess County Wetlands

Wooded Swamp	saturated soil which may be covered with up to one foot of water. Dominant vegetation over fifteen feet high - most common wetland plants - red maple, elm, ash, and swamp white oak.
Shrub Swamp	saturated soil which may be covered with up to one foot of water - vegetation under fifteen feet - willow, dogwoods, alders, are the most common shrubs.
Marsh	saturated soil most often covered with water up to three feet. Dominant vegetation - herbaceous - cattails, arrow arum, arrowheads, bulrush, reed, pickerelweed, wild rice, purple loosestrife. Most significant waterfowl production areas.
Meadow	soil is saturated to within a few inches and without standing water during the growing season (depending on rainfall may be dry enough to be used for agriculture during the growing season) grasses, sedges and rushes.
Bogs	spongy saturated soil usually deep (spongy nature of soil is due to decomposed and living moss) sphagnum mosses, pitcher plant, leather leaf, cranberries, bog rosemary.
Open Water	water less than ten feet deep which is bordered by emergent vegetation (marsh type) - floating vegetation includes duckweed, water lily, water shield and water meal. Submerged vegetation - pondweeds, naiads, wild celery, muskgrass, coontails. Open water is important area for waterfowl production.
Wet Areas of Dead Vegetation	dead trees and shrubs are predominant - vegetation that has died because of permanent increase in water level.