

CONSERVATION ADVISORY COUNCIL To the Town of Ancram

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The Conservation Advisory Council (CAC) provides information, tools, and advice for use in town planning; reviews land use proposals, and advises town government in the protection of our environment. The CAC conducts town-wide natural resource inventories, reviews development proposals, and gathers and distributes information to town agencies, land use applicants, and the general public.

(Adapted from Gretchen Stevens, CAC Hillsdale)

Dear ZRC,

Vernal pools are depressional wetlands that can be characterized by their generally small size, physical isolation from navigable bodies of water, and alternating periods of flooding and drying which impedes the presence of fish (Babbitt and Veysey, 2009). Vernal pools can also be identified by their obligate species of wildlife such as Wood frogs, Spotted salamanders, Jefferson salamanders, and Fairy shrimp. Obligate species are ones that rely solely on a particular resource or system for survival. Vernal pool obligates have evolved dependent on these pools because they cannot reproduce in water containing fish. These obligate amphibians are extremely vulnerable to fish in their larval stage, and in the absence of vernal pools would perish (Guidelines for the Certification of Vernal Pool Habitat, 2009) (Marchand, 2004). Large numbers of invertebrates, such as dragonflies, damselflies, and midges, are also produced in these pools. These invertebrates attract many different species of birds and mammals especially in the spring breeding season when food is most critical. If vernal pools are removed from an area the overall biodiversity in the surrounding forest decreases dramatically (Scheffers et al., 2006).

Why local governments need to protect vernal pools: The Clean Water Act (CWA) of 1977 was established to protect interstate waters and their associated water sheds from degradation and pollution. In the 2001 Solid Waste Agency of Northern Cook County (SWANCC) vs. US Army Corps of Engineers (US ACE) decision, the US Supreme Court ruled that the US Congress did not give authority to the US ACE under section 404 of the Clean Water Act to regulate the filling of isolated wetlands. This decision led the EPA and US ACE officials to issue guidance in January 2003 that made it more difficult for regulators to protect isolated wetlands, such as vernal pools (Brooks and Paton 2005). Due to their small size, vernal pools seldom meet the size criteria of ≥ 12.4 acres to be classified as a New York State regulated wetland, unless they are found to be of unique local importance (Freshwater Wetlands Act, 1975). Many of our surrounding states, including Connecticut, Massachusetts, and New Hampshire, have adopted laws to protect these seasonal pools (Brooks and Paton, 2005). Since the Supreme Court decision in 2001, protecting vernal pools in New York has fallen into the hands of local governments.

Definition of Vernal Pool in Ancram's Comprehensive Plan

In Ancram's final draft of the Comprehensive Plan, vernal pools are defined as "Seasonal wetland areas that support the spring growth of certain specific species. In the winter vernal pools may be frozen over after having been filled with fall rains. In the spring, usually around mid-March through April, the season of the vernal equinox, the pools melt and animals begin to lay their eggs there (Ancram Comprehensive Plan, 2010)."

Steps for a major subdivisions determination if vernal pools are present:

1. When an applicant first applies for a major subdivision, the application is submitted for a parcel within the study area for the Biodiversity Map. The planning board will refer to the Map which will provide some preliminary and specific information on the habitats. If the subdivision takes place in an area yet unmapped, the planning board shall contact the CAC for more information about this parcel.
2. When a subdivision application is first submitted, the planning board will forward the application to the CAC. The CAC will first review aerial photographs, the USGS topographic and the County Soil map (Case 1989) to gain a preliminary understanding of the habitats present on and near the parcel. Then the CAC will walk the property for an overview of the habitats and to identify areas of special concern. In order to properly determine whether or not vernal pools are present, the pools should be documented in the spring time during the months of March and April. Although they can be seen in the fall when there are heavy rains, this varies greatly from year to year and should not be used as a reliable determination of their location.
3. Natural Heritage and Endangered Species Program (NHESP) observation form for mapping vernal pools (Guidelines for the Certification of Vernal Pool Habitat, 2009) will be used to confirm the presence of a vernal pool.
4. Vernal pools along with buffers will be mapped and included in the biodiversity assessment mapping.
5. The new subdivision will be planned to best offset impacts to vernal pools and associated upland habitat.

Section 2.2 of the Ancram Comprehensive plan excludes all development, mining, and commercial logging within a minimum of 100 feet of water, streams, wetlands, vernal pools and other hydrologically sensitive areas. This 100 foot buffer zone set for vernal pools and other waterways is critical to their existence. The loss and fragmentation of terrestrial habitat associated with vernal pool communities can be the direct cause for severe, rapid extirpation of some populations and the endangerment of others through genetic isolation and increased mortality rates (Windmiller and Calhoun, 2006).

Section 2.4 "Establish a 100 foot buffer to protect vernal pools, and review the adequacy of vernal pool protection as part of the site plan review process for major subdivisions (Ancram Comp. Plan, 2010)." Vernal pools exist mainly in mixed hardwood forests, generally in the shade of the forest canopy. Within the 100' buffer, 100 percent of the tree cover should be maintained as part of the vegetative buffer in order to protect the integrity of the pool (Kittredge, 1999).

Section 2.23 Natural Habitats –"Incorporate into land use laws the review and protection of critical natural habitats by requiring a biodiversity assessment before a major subdivision is presented for consideration. New projects should avoid fragmenting forestlands,

and should protect vernal pools and their associated upland habitats. In areas such as the Drowned Lands Swamp area, the Town should recognize that conditions may warrant a wetland buffer in excess of the 100-foot minimum required by DEC and proposed for Town zoning. This requirement to review natural habitats as part of the development process will be mandatory for major subdivisions, and recommended for minor subdivisions (Ancram Comp. Plan, 2010).” An Inner Woodland Pool (IWP) is a vernal pool that still has a large track of forested upland habitat surrounding it. These pools can have greater biodiversity of amphibians than a partially disturbed pool, and are more ecologically significant (Scheffers et al., 2006). If an IWP is found in an area for a proposed major subdivision the conditions may warrant a buffer in excess of 100-foot minimum.

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