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FORESTRY SERVICES ~ WETLAND IMPACT ASSESSMENTS
WETLAND DELINEATIONS AND PERMITTING ~ E&S/SITE MONITORING
WETLAND FUNCTION & VALUE ASSESSMENTS

4/28/2025

Wentworth Civil Engineers LLC
177 West Town Street
Lebanon, CT. 06249

Attn: Wes Wentworth, P.E.

Re: Wetland function & value report for property located at 82 Maple Avenue, Montville, Connecticut.

Dear Mr. Wentworth,

At your request, I have inspected the above referenced property for the purposes of assessing the wetland functions and values.

The wetland function and value assessment was conducted on April 25th, 2025.

Existing Conditions

The property is 16.71 acres in size and is located on the southern side of Maple Avenue in Oakdale, Connecticut.

The general topography across the property is nearly level in the wetlands adjacent to Maple Avenue to moderately sloping through the central portion of the property. The southern portion of the parcel transitions to nearly level.

The northern portion of the property is occupied by a large palustrine forested wetland and intermittent watercourse.

The watercourse forms from groundwater breakout and flows to the northeast, off the property.

Wetlands

The palustrine forested wetland that lies adjacent to Maple Avenue is oriented northwest to southeast.

This wetland corridor is vegetated with red maple and white ash in the overstory, and the understory is mainly comprised of polewood sized red maple, and shrub species such as, winterberry, ironwood, arrowwood, highbush blueberry, spicebush, autumn olive, multiflora rose, and Japanese knotweed & barberry.

Vines included grape vines, poison ivy and bittersweet.

Herbaceous vegetation included skunk cabbage, cinnamon and sensitive ferns, Canada mayflower, jewelweed, marsh violet and sphagnum moss.

Wildlife tracks/sign found or directly observed in and adjacent to the wetland/watercourse included mammals and bird species such as: white tailed deer, eastern coyote, red fox, raccoon, red tailed hawk, American crow, and numerous songbird species.

No reptiles or amphibians were directly observed although undoubtedly, this wetland complex serves as valuable habitat to these species.

Wetland Functions and Values

The forested wetlands and watercourse were inspected to determine wetland functions and values utilizing the Army Corps. Of Engineers methodology as outlined in "The Highway Methodology Workbook Supplement".

This methodology recognizes 8 separate wetland functions: groundwater recharge/discharge, floodflow alteration/storage, fish/shellfish habitat, sediment/toxicant/pathogen retention, nutrient removal/retention/transformation, production export, sediment/shoreline stabilization and wildlife habitat.

The 6 wetland values include: recreational value, educational/scientific value, uniqueness/heritage value, visual quality/aesthetics, threatened/endangered species habitat and marine fish & shellfish habitat.

Forested Wetland Functions:

The following is a list of the wetland functions exhibited by these wetlands and watercourse and their rationale:

Ground water recharge/discharge:

The wetland is associated with a watercourse; signs of groundwater recharge and discharge are present and the quality of the water associated with this wetland is high.

Floodflow alteration/storage:

This wetland contains hydric soils and exists in a relatively flat area that has some flood storage potential, it has an intermittent outlet, and ponded water. It receives overland runoff from surrounding uplands, in the event of a large storm it may receive and detain excessive flood water from a watercourse, the wetland is associated with a watercourse and its outlet is constricted.

Sediment/toxicant retention:

Potential sources of sediments/toxicants are present in the watershed above this wetland, mineral, fine grained and organic soils are present, the wetland edge is broad and intermittently anoxic, this wetland corridor is associated with a watercourse, and no indicators of erosive forces or high water velocities are present.

Nutrient removal/retention: Overall potential exists in the wetland, the wetland is saturated for most of the season, slowly drained mineral and organic soils are present, dense vegetation is present, the opportunity for nutrient attenuation exists and water moves slowly through this wetland.

Production export: Wildlife food sources grow within the wetland, detritus development is present, there is evidence of wildlife use in this wetland, high vegetation density is present, the wetland contains flowering plants that are used by nectar gathering insects, and indications of export are present.

Sediment & shoreline stabilization: This wetland is associated with a watercourse, roots from herbaceous grasses and plants, shrub species and trees found in the wetlands bind and stabilize soils which helps prevent erosion along edges of the watercourse & wetlands.

Wildlife habitat: The water quality associated with the wetlands and watercourse is high, the wetland is not fragmented by development, the wetland is contiguous with other wetland systems, wildlife overland access to other wetlands is present, wildlife food sources are present, and the dominant wetland class includes a wooded swamp and animal signs were observed. Wildlife habitat is the primary function of this wetland.

The only wetland function not exhibited was fish/shellfish habitat, this is due to the lack of a fish population, lack of sufficient flows and depths in the watercourse to provide habitat, and barriers to fish are present.

Forested Wetland Values:

The following wetland values were exhibited by this wetland/watercourse:

Educational/scientific value:

Little disturbance is occurring within this wetland, potential educational site is undisturbed and natural, the wetland is considered to be a valuable wildlife habitat, site is within a short drive to schools and other plant communities.

This wetland did not exhibit the wetland values of uniqueness/heritage, visual quality/aesthetics, recreation, endangered species habitat or marine fish/shellfish habitat.

These values were not exhibited as the property lacks scenic views, is not part of a recreation area, park or forest, it has no public access, this wetland and surrounding areas are not shown within the shaded areas on the D.E.E.P. Natural Diversity Database mapping for state or federal listed threatened or endangered species and the wetland system is palustrine not marine or estuarine.

Summary:

Overall, the wetland function and value assessment indicates that this wetland exhibits significant wetland function and value. These wetlands exhibit 8 of the wetland functions and values out of the potential 14.

If you have any questions concerning the site assessment or this report, please feel free to contact me.

Sincerely,

Joseph R. Theroux

Joseph R. Theroux
Certified Forester and Soil Scientist
Member SSSSNE, SSSA