

November 1, 2022

Essex Inland Wetlands and Watercourse Commission
c/o Carey Duques
Via Email

Re: 32 Birch Mill Trail
Essex IWC application 22-18
CLA

To The Commission:

CLA Engineers has received and reviewed the letter prepared by third party reviewer Ecomaps LLC, and has the following response to that letter. CLA offer as context for the discussion of wetland impacts, especially those due to alterations within the upland review zone (URZ) CTDEP's 1997 publication "Guidelines Upland Review Area Regulations, Connecticut's Inland Wetlands & Watercourses Act June 1997". This document, though published in 1997, remains in force with CTDEEP and serves as a primary reference for consideration of the potential effects of activities within upland review zones on the wetlands themselves. The document is attached to this letter and reference is made to page 1 of that document which indicates that the regulation of activities within upland review zones hinges on the likelihood that the activities will impacts the wetland itself. Alterations of the upland review zone are not automatically assumed to create wetland impacts.

CLA has visited the site, spoken with the owner and assessed the impacts due to the owner's past activities as well as the potential for impacts due to the activities proposed and shown on the plans submitted to the commission. The direct wetland impacts include excavation of pond sediments from the water frontage of the property. This removed beneficial wetland vegetation, benthic species and altered the nature of the habitat from palustrine emergent to open water. It also appears to CLA that the lower stone patio impinged upon the inland wetland resulting in at least disturbance and possibly a few square feet of fill being placed in the wetland. The lower patio also represents an area of limited permeability being placed in and along the wetland edge, which creates a localized disruption in the hydrology of the upland and wetland. CLA believes that although the dredging has resulted in wetland impacts, replacing the material dredged from the pond is not advisable and that if simply left alone, the seed stock and root stock already present on the site will generate the appropriate vegetation for the new water depths. CLA concurs with Ecomaps that the overall ecosystem of Birch Millpond was not negatively affected.

In examining the upland review zone activities that were performed to install the lower patio, beneficial vegetation immediately along the wetland edge was removed and replaced with a dry mortared stone patio. This alteration removed shade, biomass inputs to the wetland and cover habitat for wetland wildlife species. CLA concurs that the lower patio should be removed and the area restored with a wildflower seedmix, and the erosion and sedimentation measures shown on the plans be properly installed and maintained. The upper patio, as indicated by Ecomaps,

has not resulted in negative wetland impacts. In examining the site, CLA did not note any erosion, sedimentation or other issues within the upland that resulted in wetland impacts. This is consistent with the statements made in the CTDEP 1997 publication cited above, that at some distance from the wetland, alterations of the upland have a de minimis impact.

CLA believes that the proposed work, including removal of the patio, installation of a new patio approximately 15 feet from the wetland edge, installation of shrubs along the wetland edge, and seeding the former lower patio area with a wildflower mix, will not result in adverse wetland impacts. As no direct wetland impacts are proposed, no habitat will be altered or lost. As no trees will be removed, no canopy shade will be altered and the trees will continue to provide detritus to the local soils and the pond, as well as soil stability. The rock patio area will be of lesser permeability, but given its small size will not result in a significant change in the hydrology of the pond. CLA did not see signs of non-point source pollution from the property affecting the pond and does not see the small area of upland alteration changing that. The shrub plantings will help to restore the habitat and add to soil stability, effectively jump starting the return to a more natural condition. CLA does not believe that the work proposed in the upland will negatively affect the wetland resource.

CLA also understands that the commission has specific concerns regarding the work in the upland provides the following responses:

1. The presence of invasive species, as noted in the Ecomaps report, could degrade the habitat, and three years of control, overseen by an experienced professional, should be noted on the plans and undertaken.
2. There was concern for vegetation clearing and the presence of stumps in the upland review zone, CLA did not encounter any stumps, however the commission may wish to specify a limited path along the wetland edge.
3. CTDEEP protected species have already been address per notes added to the plans.
4. Non mortared stone patios such as is proposed allow the transmission of oxygen to tree roots and given the small size of the patio, should not harm the existing trees.
5. The excavation of the pond resulted in steep banks which may not be accessible to turtles. If the commission desires, tree trunks could be placed along the bank for turtle access and basking. CLA believes that this is more directly applicable to the site than wood duck boxes or bat houses, however those are both reasonable actions.
6. CLA does not recommend preparation of a pond management plan, bathymetry or other measures involving the entire pond as the applicant does not control the pond and such measures appear out of scale with the violation.

In summary, CLA believes that the plan presented represents a reasonable course of action that will not further impact the pond and allow it to return to its previous status over time.

Sincerely,

Robert C. Russo

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