

May 2, 2021

The Holderness Planning Board
Holderness, NH 02345

Re: Case #21-04-01, Application submitted on behalf of George and Austine Howard for Subdivision on property located on Lane and Coxboro Roads.

Dear Members of the Planning Board:

The White Oak Pond Watershed Association (WOPWA) was informed that an application was filed by George and Austine Howard (“the Applicants”) with the Planning Board for a subdivision on Lane and Coxboro Roads. Our Board and members are deeply concerned about the environmental impact this subdivision will have on White Oak Pond directly below. We write to request that the Planning Board require the Applicants to prepare and submit an environmental impact study including a hydrological study of the proposed subdivision, as well as an accurately detailed topographical map. We also request that the Planning Board invite the input of the town’s Conservation Commission concerning the proposed subdivision.

WOPWA was established in 1973 to promote the conservation of the natural, scenic and historic resources of the White Oak Pond watershed and to protect the quality of the waters and tributaries of White Oak Pond. To that end, WOPWA has participated for decades in the New Hampshire Department of Environmental Services (DES) Volunteer Lake Assessment Program (VLAP). Our water testing volunteers have monitored the water quality of the pond every summer by collecting water samples in multiple locations in and around the pond. These samples are analyzed by DES and they provide us with a “report card” every year on the pond’s water quality. These reports have been concerning for the past few years. The 2020 DES report referenced toxic cyanobacteria blooms for the past three years and recommended “the development of a watershed management plan to identify and quantify nutrient loading to the pond and make recommendations on implementing best practices to reduce stormwater runoff.” In fact, according to DES, stormwater runoff contributes to over 90% of the water quality problems in New Hampshire. (See <https://www4.des.state.nh.us/SoakNH/wp-content/uploads/2020/03/Homeowners-Guide-to-Stormwater-Management-2019.pdf>)

Last year, WOPWA commissioned Dr. Rick Van de Poll to conduct a Natural Resources Inventory of the White Oak Pond Watershed. Dr. Van de Poll’s report found that the “higher than average total phosphorus levels” in the pond have “likely been responsible for outbreaks of cyanobacteria” and that continued “stress on the planktonic life in the pond could lead to a chain reaction that results in more toxic algal blooms and possible fish die-offs.” In short, White Oak Pond is in danger.

The WOPWA Board scheduled an emergency meeting last week to discuss developing a watershed management plan, a public campaign to educate our members and those around the pond about the dangers to White Oak and how best to mitigate them. We also discussed the proposed subdivision.

The WOPWA Board is aware that the Planning Board as well as the subdivision Applicants may have no idea that White Oak Pond is in such peril. Given the present danger to White Oak Pond, the proposed subdivision on Lane Road is alarming.

The Planning Board cannot determine whether the proposed subdivision meets the requirements of the Subdivision Regulations without an Environmental Impact Statement including a hydrological study.

The Planning Board has the authority to require an environmental impact study under Subdivision Regulation 5.14, which states the following:

The Board may require special investigative studies by a qualified engineer for the purpose of reviewing a subdivision plan, including drainage and erosion control.....The Board may also require other assistance for special investigative studies such as, environmentalreview of documents or other matters requiring professional assistance in relation to a particular subdivision. The cost of the assistance to the Board, as well as the cost of engineering studies shall be the responsibility of the applicant.

WOPWA requests that the Planning Board exercise its authority under this provision and require the Applicants to prepare and submit such an environmental impact study including a hydrological study. An environmental impact statement is necessary in this instance for the Board to determine whether the proposed subdivision complies with the provisions of the Subdivision Regulations for the following reasons:

1. The Planning Board cannot determine whether the proposed subdivision conforms with the Holderness Zoning Ordinance without an Environmental Impact Study

Section 6.1 of the Subdivision Regulations states that “[t]he plan shall conform with the Holderness Zoning Ordinance”. The proposed subdivision above Coxboro Road and White Oak Pond is particularly troublesome to WOPWA because it is located on very steep slopes. There is already substantial runoff from the steep slopes as evidenced by the six culverts under Coxboro Road directly below the proposed subdivision.

In March 2008, the Town enacted Zoning Ordinance Section 500 dealing specifically with steep slopes equal to or greater than 15 percent recognizing that “[t]he nature of the *soils* on *steep slopes* in the Town is such that the land is exceptionally vulnerable to *erosion* and associated problems.” One of the stated purposes of this Steep Slopes Zoning Ordinance was “to reduce damage to streams, lakes and groundwater from the consequences of excessive or

improper construction, erosion, storm water runoff, or effluent from improperly sited or designed sewage disposal systems.”

The topographical map submitted by the Applicants identifies slopes of between 15 – 25%; however, it is apparent, by analysis of the contour lines, that some of the slopes are, in fact, over 25%. **As an initial matter, WOPWA requests that the Planning Board also ask the Applicants for a more detailed topographical map of the property that clearly identifies the grade of all the slopes.** This information is necessary in order for the Planning Board to properly evaluate the subdivision application to ensure it conforms with Section 500 of the Holderness Zoning Ordinance as any area with a slope greater than 25 percent is considered to be unsuitable for development and is excluded from the calculation of “useable lot area.” (See Zoning Ordinance 500.4.6 and 500.5.1)

Further, without an environmental impact study the Planning Board will have insufficient information to assess whether the proposed subdivision complies with the mandate of the Zoning Ordinance to prevent damage to waterbodies due to “erosion, storm water runoff, or effluent.”

2. An Environmental Impact Study is necessary for the Planning Board to ensure that the proposed subdivision does not lead to the pollution of land and waters as required by the Subdivision Regulations

Subdivision Regulation 1.2 outlines the purpose of the regulations to prevent subdivisions which “by reason of inadequate provisions for drainage” leads to the “pollution of our land and waters.” Subdivision Regulation 6.14 specifically addresses the drainage issues which are of particular concern to WOPWA:

Lots shall be laid out in relation to the topography and graded sufficiently to provide adequate drainage, eliminating flood or stagnant water pools, without diversion of water onto other lots or onto property adjoining the subdivision.... Provisions should be made to effectively accommodate any increased runoff caused by changed soil and surface conditions during and after development. Where feasible, natural vegetation should be retained and protected.

The hydrology of the subdivision given its location on steep slopes is of utmost importance to the water quality of the pond. The pond’s health is dependent on the quantity and quality of drainage and run-off into its waters. The fact that there are six culverts on a short stretch of Coxboro Road directly below the proposed subdivision is clear evidence that there is already a great deal of storm water run-off down the steep slopes. This is even without the construction of four new homes on top of the slopes and the anticipated forest clearing to accommodate the new structures as well as a view corridor from the ridge. When “forested land is cleared for homes, the natural ability of the landscape to soak up rainwater is reduced. As a result, more runoff picks up pollutants on the way into waterbodies. Once in the lake,

these pollutants increase the growth of plants, bacteria, algae and harmful algal blooms (cyanobacteria)” (See <https://nhlakes.org/state-of-nh-lakes/>)

The Planning Board cannot know whether the proposed subdivision complies with the subdivision regulations without an environmental impact study from the Applicants. That study must assess whether the anticipated increase in storm water runoff from the steep slopes due to development will impair the waters of White Oak Pond. The study should also indicate what steps will be taken to ensure that natural vegetation will be retained and protected to minimize storm water runoff due to development. Finally, the Board must also determine whether the existing culverts on Coxboro Road – for which the Town is financially responsible – can adequately handle the increased storm water runoff from the steep slopes above. If they cannot, there is a risk of not only flooding on Coxboro Road but of toxic sediment flowing directly into White Oak Pond.

3. The Planning Board must ensure that the proposed subdivision conforms with the Town’s Master Plan

Section 6.1 of the Subdivision Regulations also mandates that the plan shall conform with the Master Plan. As adopted by the Planning Board in May 2020, the updated Master Plan on Natural Resources repeats the concerns articulated in the Zoning Ordinance about developing on steep slopes; it states that for “planning purposes” slopes 25% or higher are not “developable” at all and “moderately steep slopes, 15% to 25%also pose development challenges and erosion risks.”

The 2020 Master Plan states that “economic vitality and environmental protection are inextricably linked, and so are sustainable development and conservation”. The Plan further recognizes that climate change will result in “earlier spring runoff, increased total rainfall, and more severe weather events that result in increased risk of flooding.”

The Master Plan specifically recommended “[i]ncreased awareness and enforcement of current ordinance provisions, particularly as they apply to the natural resources.” The environmental impact study requested by WOPWA, including a hydrological study, will ensure that the Planning Board implements this recommendation of the Master Plan by enforcing the zoning ordinance provisions outlined above which apply to the proposed subdivision.

In addition to requiring an environmental impact statement, the Planning Board should request that the Conservation Commission review the proposed subdivision and provide input on its impact to the town’s natural resources. New Hampshire statute Chapter 36-A:2 provides for towns to establish Conservation Commissions “for the proper utilization and protection of the natural resources and for the protection of watershed resources of said city or town”. Chapter 36-A:4 enumerates the powers of such Conservation Commissions, one of which is to “provide input to any other municipal board.” Given the grave potential harm posed by the proposed subdivision to the town’s natural and watershed resources, WOPWA strongly

urges that the Planning Board seek such input from the Conservation Commission on the proposed subdivision.

In light of the current fragility of White Oak Pond, our association is committed to doing what we can to organize our members and stakeholders in the watershed to do whatever each person can to mitigate the existing threat to the pond. We ask the Planning Board – and the Applicants – to join us in this effort by requiring an environmental impact statement to understand the potential impact of the proposed subdivision **before** making a decision on the plan. It would be tragic to learn later that steps could and should have been taken to mitigate negative effects on the pond only **after** one of the town's most precious natural resources has been irreparably damaged.

Sincerely,

Board of WOPWA and other Members of WOPWA willing to sign will be listed