To: Michael Behrendt, Planner and members of the Planning Board and Conservation Commission.

May 22, 2020

Wetlands are fragile. Wetlands are delicate. Wetlands are valuable. Wetlands have a purpose. Untouched wetlands are home to a diverse community of animal and plant life, and functioning wetlands are helpful to humans (as outlined in numerous letters you have received). Once wetlands become out of balance they no longer function as wetlands. This ultimately causes problems.

Wetlands are generally not impressive to the human eye and their contributions have been vastly underappreciated, which is why they have been destroyed over the centuries. They've been filled in, their water flow has been rerouted, and they have been sprayed with chemicals to eradicate mosquitos and other insects.

To move this housing development forward means to eradicate ---indeed, obliterate ---- a wetland that is currently a road right-of-way on Town maps. A wetland and a road cannot coexist on the same site. It is one or the other.

And if houses are built on the upland areas, then we can correctly guess what will take place. Fertilizer will be brought in for landscaping. Landscaped areas will likely be sprayed with herbicides, and pesticides may also be applied. The area is riddled with mosquitos and ticks. As time goes on, more pesticides may be used on a regular basis. What effect will this have on the upland and wetland habitat? Insects destroyed means less food for birds, toads, frogs and other species. Fewer insects mean less pollination for some plants in the area. Toxins in herbicides and pesticides can also affect hawks and owls, which are common in the Gerrish neighborhood. Many of those toxins remain in the wetland sediments and keep their toxicity, affecting aquatic life.

The last sentence of Article XIII of the Wetland Conservation Overlay District 175-65 A. Performance Standards, Naturally Vegetated Buffer Strip, reads:

"The Application of Fertilizers, pesticides, or herbicides within the buffer strip shall be prohibited except in conjunction with agricultural activities."

Since I've always been concerned about spraying in areas of Town that, according to our Zoning, should not be sprayed, I contacted Audrey Cline, Code Enforcement Officer, to ask a few questions.

I have understood that, if there is a violation of the use of herbicides and pesticides, someone, most likely a neighbor, would need to call this violation into Audrey Cline. This is how our Town zoning works. Audrey corroborated. And this is also how state-level protection of wetlands works according to chapter 5 of the NH Department of Environmental Services publication "NH Water Resource Primer".

It certainly would take a neighbor with courage to make this kind of call----though the call may be able to remain anonymous.

During Audrey's tenure of 5 year in Durham, she has received only a "handful of calls" reporting wetlands violations.

To sum up: Wetlands are valuable areas that are home to a biodiversity of animal and plant life. Functioning wetlands benefit people with a number of free services. If any of these services is lost, people will have to pay in dollars and cents to try to remediate the situation. As Joy Zedler, professor emerita of botany and restoration ecology at the University of Wisconsin, Madison, points out in a June 2018 NPR interview, no human engineer, restoration ecologist, etc. has figured out how to create a fully functioning wetland.

There are far too few protections for wetlands---especially wetlands that are in close proximity to development.

Summing up her work as an ecologist, Prof. Zedler makes a statement we would do well to heed:

"Every square inch of wetland deserves protection because of its enormous functional value. We would be smart to protect every inch."

Respectfully submitted,

Diana Carroll