

From: [Carroll, John](#)
To: [Karen Edwards](#)
Subject: Fw: Thoughts on Gerrish wetlands and avoiding big problems on the Gerrish issue
Date: Friday, January 08, 2021 4:17:15 PM

Hello Karen,

Please send this to the Planning Board members. Thank you.

John

From: Carroll, John
Sent: Tuesday, January 5, 2021 9:32 PM
To: barbaradill@gmail.com <barbaradill@gmail.com>
Cc: Diana Carroll <dianacarrollnh@gmail.com>
Subject: Thoughts on Gerrish wetlands and avoiding big problems on the Gerrish issue

Barbara Dill, PB Project Chair for the Gerrish Wetland, and the Planning Board

Hello Barbara,

I understand that you are chairing the Planning Board for the Gerrish wetland issue. Please share this with all the members of the Planning Board.

As I gazed this week at the little flowing brook crossing what was formerly Pam Bradley's homesite on the east side of Ambler and downstream of Canney Road, I was reminded how large and complex the hydrological system is that feeds the Gerrish wetlands. I noted the directional flow of that water through a small culvert beneath Ambler and thence downhill across the former Eric/Chris Boswell property to conjoin with other streams below Otis Sproule's property before going through the larger culvert which lies beneath the Ambler/Gerrish junction. These many small streams then immediately conjoin at that point, as we know, coming off the Lewis, the Merton/Kelley, the White and the Kim Sweetman properties before all joining together beneath the town owned Gerrish wetlands.

This means that the watershed, the hydrologic system of the Gerrish-Ambler Horseshoe, extends virtually all the way to Canney Road, a geographically broader and more complex area than most people realize. And while Mike White is correct in saying that some of the water entering the town owned Gerrish wetland is contaminated from street run-off (salt, oil, etc.), much of it is also fresh spring water coming from multiple small springs. The town owned Gerrish wetland, with its many trees, its thick wetlands vegetation, and its soil is boxing in (i.e., holding or containing) this water, dissipating some of it through the trees and other vegetation, as well as yielding some through evaporation, and slowing down the remainder

before releasing it into the gully on the Mulhern property and thence downstream to Gerrish Brook, Johnson Creek and beyond. It's all much more complex than we are sometimes led to believe.

Thus, the ecological and hydrological role played by the town-owned wetland is no small matter and is deserving of careful hydrological and ecological study by two independent scientists working collaboratively, one a hydrologist, the other an ecologist. The ecological services that Durham receives and that all downstream landowners receive from this functioning watershed and functioning natural wetland is no small matter. Therefore, a comprehensive and independent hydrological/ecological study is needed before any damage is done to the Durham-owned wetland. Such a study should reflect the four seasons and be conducted before any decision is made by the Planning Board.

All of this can be avoided by choosing a different access which does not involve the town owned Gerrish wetland. The Bagdad Access, which involves much less wetland, is an appropriate and ecologically and environmentally acceptable alternative, and the Planning Board should study that alternative carefully, starting with a site walk from the Bagdad Road. The many photos provided by Gail Kelley of an already designed and used access road from Bagdad (the "Bagdad Access") is further reason to avoid all the complications and expense associated with any Gerrish Access over town-owned land, the use of which destroys all the wetlands therein. Thus, a site walk is needed starting at the Bagdad Access.

Bottom Line: The functioning Gerrish wetland must be protected if we are to avoid trouble. And it will not be "good trouble".

Sincerely,

John E. Carroll

Professor Emeritus of Environmental Conservation

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