

Karen Edwards

From: Michael Behrendt
Sent: Wednesday, February 09, 2022 1:19 PM
To: Karen Edwards
Subject: Mill Pond WEBSITE Con Com
Attachments: DCC Oyster River Vision DRAFT 2.07.2022.docx

Karen,

Please add the email from Jake below and the attachment under Mill Pond Dam for the CONSERVATION COMMISSION. Thanks.

Michael Behrendt

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From: Jake Kritzer <jake.kritzer@gmail.com>
Sent: Monday, February 07, 2022 8:32 AM
To: John Nachilly <nachilly@gmail.com>; colleen@durhamboat.com; Walter Rous <walterrous@gmail.com>; Erin Hardie Hale <ehardiehale@gmail.com>; Roanne Robbins (roannerobbins@me.com) <roannerobbins@me.com>; external forward for cwelsh <cardentc2@gmail.com>; James Bubar (james@bubar.org) <james@bubar.org>
Cc: Michael Behrendt <mbehrendt@ci.durham.nh.us>
Subject: Feb. 14 Con Com meeting

Dear Con Com members,

We are meeting one week from today to discuss action we might want to take as the Town approaches the March 8 vote on the Mill Pond Dam. This is a special meeting being held because we did not have time to address this topic during our January meeting.

I would like to be better prepared for this discussion than we were for the Mill Plaza discussion in January, trying to learn lessons from that experience as outlined in the novella I sent soon after. I think it is important that we avoid substantive discussion of the issues outside of our meeting, but we can and should hold any needed planning discussion, including identifying objectives and options we might want to consider.

Given the timeline and limits on what a volunteer commission can do, the most realistic outcome I see is some kind of statement or other information that would be available on the Con Com website and disseminated through the Friday Updates. However, if anyone has ideas for other types of actions/outcomes we should consider, please send those along for consideration at the meeting. We won't discuss those idea via email, but knowing what's on the table will help with time budgeting.

I see at least four directions we might go:

1. Take no action.
2. Simple re-affirmation of our January 4, 2021 recommendation (akin to our recent action on Mill Plaza).
3. Produce more technical guidance on specific issues to inform ongoing debates (sediment management, fish communities, water quality, invasives, etc.).
4. Offer a broader vision for how dam removal can shape the future of the watershed.

An attempt at #4 is attached. I believe that Michael advised that this should be made available before the meeting on the Town website. If so, I'll ask him to do that. For the rest of you, please give this a look and come to the meeting with thoughts, but refrain from discussion via email for the sake of transparency. And if you'd like to offer anything to be considered at the meeting, please send that along ASAP.

Best,
Jake

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A Rare Moment for the Oyster River

A Restoration Vision from the Durham Conservation Commission

Durham is approaching an important community decision that will shape the future of the Oyster River. On March 8, 2022, our Town will vote on whether to uphold a Town Council decision to move forward with technical designs for removal of the Mill Pond Dam and restoration of the lower Oyster River, or overturn the Council's decision and determine another course of action.

On January 4, 2021, the Conservation Commission recommended to the Town Council that the Mill Pond Dam be removed in order to alleviate a critical impact on the lower Oyster River, consistent with Council's decision. Decades of accumulated sediment have made the impoundment progressively shallower, starving downstream marshes of needed sediments, and one day it will completely fill without repeated maintenance dredging. In the meantime, the shallow water has become warmer and holds less oxygen, with further deoxygenation caused by excessive nutrients that have also accumulated behind the dam and climate change. The dam also impedes migration of native sea-run fish species, including imperiled river herring, rainbow smelt, and American eels, and prohibits expansion of saltmarsh habitat into what should be tidal reaches above the dam. Removing the dam and restoring the lower Oyster River will alleviate all of these impacts and help return the degraded artificial impoundment toward a more natural free-flowing tidal river ecosystem.

Additionally, this action will have fiscal and public safety benefits, and provide an opportunity to honor Indigenous heritage alongside our post-colonial history. Our Abenaki neighbors have identified dam removal and river restoration as the highest priority action that we as a community can take to recover some of what they value, and have lost, in their ancestral homeland. For millennia, the lives of Abenaki people were strongly tied to rivers. Sea-run fishes represented one of their most important food sources, and riverways served as transportation routes and gathering places. Indigenous heritage and environmental stewardship are often inextricably intertwined, as is the case in our decision about the fate of the dam and river.

Removing the dam and restoring the river might be the single most significant environmental action that a small town like ours can take. Open space preservation, for example, brings local benefits in the way of recreational opportunities and community aesthetics. It can also have landscape-scale benefits through wildlife habitat and even global benefits through carbon capture. However, those benefits will only accrue if other communities, states, and nations take similar action. On the other hand, very few communities are home to a head-of-tide dam and responsible for the significant and singular ecological bottleneck that it represents. Very few communities have the opportunity to eliminate a barrier to the critical upstream-downstream connectivity that is fundamental to the functioning of rivers and estuaries. With one action we can not only enjoy the local benefits of a free-flowing river mouth, but also deliver benefits upstream and downstream as well. It is notable that several respected environmental organizations – The Nature Conservancy, Trout Unlimited, Conservation Law Foundation, Native Fish Coalition – prioritize removal of head-of-tide dams and have urged our Town to seize the rare opportunity for environmental restoration before us.

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This is not to say that removing the dam and carrying out ecological restoration in the area of the impoundment will alleviate all of the environmental impacts on the Oyster River watershed – far from it. But watershed stewardship is a matter of ‘and’, not ‘or’. We should remove the Mill Pond Dam *and* address fish passage and water flow at the UNH reservoir dam. We should remove the dam *and* diligently manage invasive species in the area. We should remove the dam *and* improve water quality inputs from College Brook and other tributaries. We should remove the dam *and* address fertilizer use in the watershed. We should remove the dam *and* properly manage the contaminated sediments it has allowed to accumulate in the impoundment. And so on.

Indeed, we have a very rare opportunity to approach this important Town decision with a view to creating an ecological whole that is greater than the sum of its parts. Passage of the bipartisan infrastructure bill has allocated hundreds of millions of dollars for environmental restoration and climate resilience. Elected officials and federal agencies have demonstrated willingness to invest in ambitious watershed-scale initiatives when local partners join together to offer a holistic vision. Look no further than the Penobscot River and St. Croix River in Maine to see these investments being put into practice, or to the mammoth Snake River out west for an eye-popping next-generation vision.

We stand at a unique moment that invites similar ambition and vision for the river that we steward. Beginning with the restoration opportunity before us if we choose to remove the dam, we can work upstream to address a range of ecological restoration needs. We can restore riparian buffers along embankments and further improve water quality on the mainstem, College Brook, and other tributaries. We can provide fish passage at the UNH reservoir dam and other impassable dams and culverts, removing barriers where possible or reconfiguring them otherwise. We can manage invasive species and plant saltmarshes in tidal reaches, mirroring the Town’s widely recognized Wagon Hill Farm shoreline restoration. We can improve access, protect artifacts, and provide signage about natural, Indigenous, and colonial history and heritage in the watershed. We have blueprints at the ready, such as the *Oyster River Management Plan*, to guide us on where to go.

This decision comes before us in an era of distressing loss of biodiversity and natural habitats. Climate change and its outcomes – ocean acidification, sea level rise, altered rainfall regimes, and more – are accelerating those losses. Removing the dam and restoring the tidal river presents a rare opportunity to build resilience against those growing threats and reclaim a piece of what has been lost. We simply need the vision and the will to move toward a new future for the Oyster River watershed.