9 September 2021

From: Larry G. Harris 56 Oyster River Rd. Durham

To: Durham Town Council

Dear Town Council Members:

Thank you for all your effort into what is a complex and difficult issue to decide on. I have read over the responses by VHB to questions posed by the public, including mine. There are several points I would like to make concerning the VHB responses.

- 1. Recreation: As VHB correctly responded to my inquiry about recreational activities, there is a very short section on recreation in the initial report (page 79), Conservation areas (pages 79-80) and the implications of removal or repair (pages 80-81). First the report does list most of the recreational activities, but then describes three areas well above Thompson Lane (Oyster River Park) and below the dam (Old Town Landing and Jackson Landing), which are not part of the pond or Hamel Brook. They make no mention of the park on Mill Pond Road adjacent to the Milne Sanctuary (also set up as a park), which is the primary staging area for most of the winter sports and some of the summer activities. The response suggests fishing will still be available, but that will be through Oyster River Park and not the pond, backwater and connected portion of the Oyster River. I live at the confluence of the Oyster River and Mill Pond and Hamel Brook sections and the combination of invasive overgrowth and lack of sufficient water to support fish populations will certainly eliminate any fishing or other water sports, including winter sports if the dam is removed.
- 2. Fish Runs: The VHB response keeps emphasizing how important herring (Alewife and Blueback) runs are to the greater Gulf of Maine. If this resource was so important, why didn't NH Fish and Game propose installing a migration notch similar to Wiswall Dam in the past? They keep emphasizing the importance of a free, flowing river, when the presence of the UNH Dam upstream and dams on Hamel Brook have major impacts on water flow. Having stood at the confluence of the Oyster River and Mill Pond and Hamel Brook during summer drawdowns, one can easily see how shallow the narrowed portions of all three will be, which is very unlikely to support any fish or other aquatic wildlife during most summers. Since at least Blueback Herring young remain in freshwater through most of the summer, it is highly unlikely that dam removal will support any fish runs unless water flow is increased and water quality is addressed.
- 3. Aquatic Ecosystem, Invasive Species and Mosquitos: The VHB reports certainly suggests that dam removal would be preferable to dam repair and a migration notch. Dam removal implies the elimination of a rich and diverse warm water ecosystem that also provides a range of recreational opportunities. If one observes the shoreline adjacent to the park on Mill Pond Road and College Brook below the Plaza parking lot, it is obvious that maintaining open space to support access has not been a high priority in Durham. Invasive species management is an on-going process and not a one-time fix. Also, as

images of previous drawdowns have illustrated, there will be low areas that collect water during wet periods. Such areas act as vernal pools which are prime breeding areas for mosquitos and lack of stable shallow vegetated areas will eliminate habitat for dragon flies and damsel flies, which control biting insects during the daylight hours.

Dam removal will eliminate a great deal that contributes to the quality of life in Durham and all for a possible promised fish run that might contribute elsewhere. It seems like a false choice. I am as biased as VHB, but in favor of maintaining the pond ecosystem and repairing the dam with an installed migration notch that might contribute to both the ecosystem, recreation and fish runs.

Thank you again for your efforts on this issue.

Respectfully submitted, Larry G. Harris

From: Sent: To: Subject: Attachments: Todd Selig Thursday, September 9, 2021 4:42 PM April Talon; Richard Reine FW: Mill Pond Dam on the Oyster River - Sean Moriarty Final Oyster River Letter_Moriarty.pdf

Dear April and Rich,

For the public file.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

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From: sean moriarty <spmoriarty17@yahoo.com>
Date: Thursday, September 9, 2021 at 3:19 PM
To: Todd Selig <tselig@ci.durham.nh.us>, Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam on the Oyster River

Good afternoon,

First off, thank you all for your service to our community. You all clearly have a great love for this community and actually 'walk the walk' and put in the time & energy.

Attached is a short write-up I put together in an attempt to express my viewpoint on this issue. It's how I look at it as a natural resource professional, father, Durham Resident and person conscious to the bigger ecological, historical and human picture.

All the best,

Sean P. Moriarty

Sent from Mail for Windows

The Mill Pond Dam on the Oyster River Sean P. Moriarty

The Oyster River Valley was shaped by the last glacial retreat in the northeast roughly 12,000 years ago; shortly after which Native Americans migrated to the area for the warmer temperatures and abundant flora & fauna.

The first gaggle of Europeans showed up around 1600; and by the middle of the century, some form of wooden dam was being utilized on the river to harness its power for sawmills and gristmills, which were likely integral components to successfully establishing the township. The settlers made productive use of the river's vast resources; in large part due to their exceptional ingenuity, but they also needed these resources for the community to survive and live on through the progressive succession of future generations.

Now here we are in 2021; just 400 years later on a natural timeline that began 12,000 years ago. A visual representation of this timeline is provided below using fish (*) emojis.

~12,000 Years of the Oyster River Valley:

~400 Years of the Mill Pond Dam: 🐄.

In 2021, a concrete dam constructed in 1913 still sits on the Oyster River and it is not in place as a means of harnessing power. The settlers borrowed from a plentiful coastal resource for the means of survival; now here we are 400 years later debating on what to do with a failing structure acting as an impoundment on a coastal river that has already lost certain ocean running species with others in chronic decline. Today the dam acts as a barrier to migrating fish and has created a stagnant, eutrophic body of water upstream.

This debate on whether to remove the dam and restore the river (removal and restoration would mostly utilize government grants costing Durham taxpayers little) is a sobering reminder of just how dangerous humans can be when a community is faced with making an important natural resource decision. This is just an observation; I am human as well and often act out of my own self-interest and can make silly decisions out of fear of change. This is not exclusive company.

However, the only thing we must fear is the possibility that this local 'fear of change' influences the Town Council to vote in favor of spending LARGE amounts of taxpayer dollars (not for nothing; but Durham, we're good on taxes for now:) to repair the dam and make a feeble attempt at somehow 'playing god' with the pond and the river with the hope of reaching acceptable water quality above the impoundment. I believe \$18 million was the price tag for this effort and it would be ongoing for future generations.

Durham, we are insignificant compared to every aspect of this great resource. The river was here long before the settlers and our short timeline is minuscule compared to the Native Americans who managed to live off it for over 10,000 years without bringing Atlantic salmon runs to an abrupt halt.

The river will return to its natural state regardless of how long we decide to mess around playing with the pond...we will eventually be gone, and the rising tides don't care. However, we would be wasting money and effort in vain while passing the "responsibility" down to future generations. This would be anything BUT a brave, scientific exploration; would solve nothing and create more problems.

Or there's this:

-We humbly thank the Oyster River for all it has provided to our community; including the temporary impoundment which helped the Town become established and provided recreational opportunities for those wishing to partake.

-We consider the results of the Feasibility Assessment we paid \$200K+ for; without any fear or selfinterest involved, then realize how insignificant we really are.

-We then ask ourselves which side of history we want to be on. To those who wish to foolishly be on the side that would selfishly ignore what the natural science, economics, and true cultural value of the river are; then I propose we have a mural of that team painted in the post office and that we dedicate a local holiday where they all walk around in a circle kicking each other in the asses like a Monty Python skit at Cowell Stadium.

The river does not belong to us. Let's stop wasting time and money pretending to be in charge of it. Pull the dam, restore as needed then actively monitor. These projects go well once human nature surrenders to reality.



From:Jim OBrien <jim_obrien@tnc.org>Sent:Friday, September 10, 2021 2:34 PMTo:Durham Town CouncilCc:Todd Selig; April TalonSubject:Letter from The Nature ConservancyAttachments:Durham Council September 2021 Letter.pdf

Good afternoon,

Please find attached a letter from The Nature Conservancy regarding the Mill Pond dam. We very much appreciate the time, attention, research, and public discourse you have led regarding the future of the dam. Please do not hesitate to reach out with any questions.

Have a great weekend and enjoy the wonderful weather.

Jim

Jim O'Brien

Director of External Affairs @jim_obrienNH (603) 224-5853 Ext. 228 (Phone) (603) 856-5378 (Mobile) (603) 228-2459 (Fax)

jim obrien@tnc.org

Find us on facebook!

The Nature Conservancy New Hampshire 22 Bridge Street 4th Floor Concord, NH 03301 nature.org





22 Bridge Street, 4th Floor Concord, New Hampshire 03301 [603] 224-5853 Nature.org/NewHampshire

Durham Town Council 8 Newmarket Road Durham, NH 03824

RE: Mill Pond Dam

Dear members of the Durham Town Council:

The Nature Conservancy deeply appreciates the time, attention, research, and public discourse you have led regarding the future of the Mill Pond Dam. We understand how difficult this type of a decision is for a community. Your focus on transparency, scientific analysis and rigorous questioning has allowed the public to gain not only an understanding of the financial costs of the various options, but also the environmental and natural resource implications associated with repair or removal of this infrastructure.

We have been actively following your discussions, and have reviewed the numerous studies, reports and analysis prepared by your consultants for this project. With the weight of all that evidence, The Nature Conservancy continues to believe that removal of the dam will result in a significantly better environmental outcome for the estuary and Oyster River system than would repair of the dam.

As a science-based conservation organization with long and deep roots in the Durham community, we felt it important to again share our thoughts on this matter, and to reiterate our offer to use our experience and expertise to support the Council and the greater Durham community if a decision to remove the dam and restore the river is made.

A repaired dam will continue to act as a barrier in this important tidal river system – blocking the natural migration and movement of fish and other aquatic organisms. While we understand that the idea of installing a fish ladder has been raised, such devices have limited capability, are costly, and are not a substitute for a functioning and connected river system.

We do understand the concerns expressed about changes to existing conditions if dam removal is chosen. And, while it is undeniable that the post-dam conditions would be different, a restored tidal river system will bring the community additional recreational and natural resource opportunities, with no financial obligations or risks associated with the continued maintenance of expensive infrastructure. Intact natural systems are also inherently more resilient to pollution and other stresses resulting from development and a changing climate.

Thank you again for your time and for your service to Durham. The Nature Conservancy has been an active partner with communities on dam removal projects here in New Hampshire, across the U.S. and around the globe. Durham has a <u>once in a lifetime</u> opportunity to dramatically improve the environmental conditions of the Oyster River system by reconnecting it with the Great Bay Estuary. We stand ready to assist the Council where and when appropriate to help make a dam removal project successful.

Please do not hesitate to reach out with any questions.

Sincerely,

Charles DeCurtis Freshwater Program Manager charles.decurtis@tnc.org

From: Sent: To: Subject: Attachments: Todd Selig Friday, September 10, 2021 3:22 PM April Talon; Richard Reine FW: Oyster River Dam at Mill Pond, Durham, NH NH State.pdf

Dear April and Rich,

For your information.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

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From: Todd Selig <todd.selig@gmail.com>
Date: Friday, September 10, 2021 at 3:18 PM
To: Todd Selig <tselig@ci.durham.nh.us>
Subject: Fwd: Oyster River Dam at Mill Pond, Durham, NH

Todd Selig Durham, NH USA Cell: 603.817.0720 Sent from my IPhone. ~~ Please pardon typographical errors.

Begin forwarded message:

From: Katherine Marple <kittyfmarple@gmail.com>
Date: September 10, 2021 at 3:07:52 PM EDT
To: Todd Selig <todd.selig@gmail.com>, council@ci.durham.nh.us
Subject: Fwd: Oyster River Dam at Mill Pond, Durham, NH

Begin forwarded message:

From: "Labash, Marika" <<u>Marika.S.Labash@dncr.nh.gov</u>> Subject: Oyster River Dam at Mill Pond, Durham, NH Date: September 10, 2021 at 3:05:54 PM EDT To: "<u>kittyfmarple@gmail.com</u>" <<u>kittyfmarple@gmail.com</u>>

Hello Katherine,

I am sending the attached letter of support on behalf of Nadine Miller, Deputy State Historic Preservation Officer. Please share this letter at the town meeting on Monday, September 13th.

Thank you,

Marika Labash

ARCHAEOLOGIST/ R & C PROGRAM SPECIALIST NH DIVISION OF HISTORICAL RESOURCES 19 PILLSBURY ST. CONCORD. NH 03301 603-271-3558 marika s labash@dncr nh gov



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

 State of New Hampshire, Department of Natural and Cultural Resources

 19 Pillsbury Street, Concord, NH 03301-3570

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 FA

 www.nh.gov/nhdhr

 preservat

Resources 603-271-3483 603-271-3558 FAX 603-271-3433 preservation@dncr.nh.gov

September 10, 2021

Katherine Marple, Chair Durham Town Council 8 Newmarket Rd. Durham, NH 03824

Re: Oyster River Dam at Mill Pond, Durham, NH

Dear Ms. Marple:

I am writing as a follow-up to our February, 2021 letter in support of the Oyster River Dam in Durham, NH. Consultation under "Section 106" of the National Historic Preservation Act hasn't officially been initiated by the Lead Federal Agency. However, the consultant team has kept the DHR informed on all phases of early project planning and we understand that the Town will be making a decision on Monday, September 13, 2021 as to whether or not the dam will be rehabilitated or removed.

Many factors go into decision making at the local level and the DHR is aware that a variety of studies were conducted regarding the Oyster River Dam. The dam is a contributing feature of the National Register listed historic district and is significant individually as well. The Oyster River Dam is New Hampshire's earliest known example of an Ambersen-type dam, a design that relies on a series of evenly-spaced concrete buttresses anchored in the bed of the river to support a watertight slanted concrete slab upstream. There are only six other similar dams remaining in New Hampshire. The dam is also a key environmental feature in this part of Durham, establishing a beautiful backdrop to recreational opportunities to residents and visitors alike.

The removal of the Oyster River dam will destroy this historic property and forever change the historic district's setting. Avoidance is the best option under Section 106 of the National Historic Preservation Act and we urge the Town to choose this alternative during upcoming deliberations.

Sincerely,

Nadíne Míller

Nadine Miller Deputy State Historic Preservation Officer

From: Sent: To: Subject: Todd Selig Friday, September 10, 2021 9:37 PM April Talon; Richard Reine Fwd: Mill Pond Dam and Indigenous People

Dear April and Rich, For your general information. Todd

Todd Selig Durham, NH USA Cell: 603.817.0720 Sent from my IPhone. ~~ Please pardon typographical errors.

Begin forwarded message:

From: Daniel Day <rbdan@comcast.net>
Date: September 10, 2021 at 7:11:48 PM EDT
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam and Indigenous People

To the Durham Town Council:

First, I want to thank this Council for all the thought and consideration you've put into the Mill Pond Dam study. I appreciate your willingness to look at both sides of the argument. One of the major arguments I've heard supporting the Mill Pond Dam's removal has been centered around respect for the Indigenous People. I've heard emotional stories several times during the public comment sessions that the Indigenous People treated the land as sacred, they used every part of every animal they killed, and would never have dammed a river. Those advocates argued that the Town should remove the dam to revive the legacy of the Indigenous People.

However, it has come to my attention that many of those stories are not true and they should not affect your decision on the dam's fate. The reality is, Indigenous People built dams too. They also completely exploited their resources at times, including the American Bison.

Here are some true stories that I found:

https://fee.org/media/4296/schweikart1202.pdf

https://www.jstor.org/stable/30246164

https://parentseyes.arizona.edu/node/530

Sincerely,

Daniel Day

From:	Todd Selig
Sent:	Monday, September 13, 2021 8:58 AM
То:	April Talon; Richard Reine
Subject:	FW: Mill Pond Dam Dilemma (Pre-PTSD Planning) - feedback from Joshua Meyrowitz
Attachments:	The Mill Pond Dam Dilemma d 09-12-21.pdf

Dear April and Rich,

For your general information.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

From: Joshua Meyrowitz <prof.joshua.meyrowitz@gmail.com>
Date: Monday, September 13, 2021 at 3:12 AM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Mill Pond Dam Dilemma (Pre-PTSD Planning)
Resent-From: <council@ci.durham.nh.us>

Dear Town Councilors,

Thank you for the dedication and attention to detail and respect for public input that you have exhibited in your deliberations on the incredibly complex Mill Pond Dam issue.

I have continued to update and refine what may be the only Durham resident attempt to summarize the Mill Pond Dam Debate in writing without advocating for one final action or another. *(See latest version attached.)* I ran the first draft of my summary by five ardent "save-the-dam" advocates and five ardent "remove-the-dam" advocates and integrated their comments.

As most of you know, the one "position" I *have* advanced is about the process of the decision and the need for what I describe as "pre-PTSD" work. Excerpts from the attached include:

1) There is disagreement even on a number of the basic "facts" about the issue,

2) Many people who are often on the same "side" in other Town debates are divided on this one,

3) Whatever decision is made by a Council vote or by a ballot referendum will leave some social scars that could take years or decades to heal.

The vastly differing views have led me to argue that the Town take time for more forums, apart from official Town meetings, and even time for field trips to related sites, including other Towns, all in advance of a time-specific "final decision" by citizens, such as in the March 2022 elections. Perhaps there could still be some changing of minds or at least more understanding of others' perspectives by the many, many residents who will, *regardless of outcome*, find themselves on a "losing side."

Moreover, with a decision in the hands of voters, you, as Councilors, would not be the targets of attacks from those many citizens who feel you betrayed them with your individual vote.

I wish you wisdom and compassion (toward and from others).

Best, Joshua Meyrowitz 7 Chesley Drive, Durham 868-5090

Joshua Meyrowitz, Ph.D. Professor Emeritus Department of Communication Horton Social Science Center University of New Hampshire Durham NH 03824-2616 603-862-3031 – 24-hr voice mail; 603-868-5090 – Home <u>Prof.Joshua.Meyrowitz@gmail.com</u> <u>https://unh.academia.edu/JoshuaMeyrowitz</u> NOTE: I rarely check "Messenger" or Facebook

The Mill Pond Dam Dilemma

Joshua Meyrowitz, 7 Chesley Dr, Durham, 603-868-5090, Prof. Joshua. Meyrowitz@gmail.com

I don't claim any unique expertise on this complex issue, but a <u>few things that I know for certain about</u> <u>the Durham Dam controversy are</u>: 1) There is disagreement even on a number of the basic "facts" about the issue, 2) many people who are often on the same "side" in other Town debates are divided on this one, 3) whatever decision is made by a Council vote or by a ballot referendum will leave some social scars that could take years or decades to heal, unless some careful "pre-PTSD" work is done, and that 4) I would not want to be in charge of making the decision of how to move forward! Please watch the upcoming Council deliberations with some compassion.

The removal or the Mill Pond Dam is supported by the Conservation Commission and opposed by the Historic District Commission and Durham Historic Association (see all three recommendations <u>here</u>). After many months of rebuffed requests by residents to see all letters submitted on the Mill Pond Dam, it's been great that letters since 2013 were finally scanned and have been posted in several batches <u>here</u>, along with the Dam Feasibility Study documents by the consultants at VHB.

See VHB <u>presentation</u>, <u>executive summary</u>, & <u>summary matrix</u> (the latter limited to removal vs. stabilization-with-dredging, while most stabilization advocates have argued that the inexpensive stabilization can be done on its own without the super-expensive, if even possible, dredging). Also see the consultants' answers to Town Councilors' questions <u>here</u>, the March <u>request</u> for, and resulting <u>Supplemental Analysis</u> (July 2021), resident <u>comments</u>, and consultant <u>responses</u>.

A Jan 2021 *Foster's* article describes how **residents are split on removing or stabilizing the Dam.** However, this article omitted the option that has some significant backing: stabilizing the Dam without dredging the Pond, something that some dam-removal advocates have said is not really practical. The consultants' summary chart (echoed in *Foster's* article above) argues that dam removal will be cheapest in both the short and long run, but that has long been disputed by those who say that the actual cheapest option is to stabilize the dam (filling it with reinforced concrete) and *not* dredging the pond. In Aug 2021, VHB finally confirmed that stabilization without dredging would indeed be the cheapest option (\$1,069,370 versus \$1,443,350 for dam removal and active channel restoration).

One resident says that the most informative video on the *start* of the recent dynamic for Dam removal over repair is the 25-minute Town Council discussion from <u>Nov 26, 2018</u>, starting at 10:03pm.

Even a skim of the citizen input will give you sympathy for Council Members' and the Town's dilemma. The <u>Feb 15, 2021</u> Town Council meeting was impressive because of how many issues and questions raised in the submitted letters were discussed. And see the <u>July 12, 2021</u> Town Council meeting for the consultants' supplemental study of the stabilization without dredging option and the unexpectedly dramatic Public Comments portion of the Town Council meeting on <u>August 16, 2021</u>.

SUMMARY OF THE REMOVAL VS. STABILIZE ARGUMENTS

The debate over what to do with Durham's Mill Pond Dam (and Pond) is so fierce that I've had trouble finding "facts" that everyone can agree on to advance understanding. Indeed, my comprehension of the issues has shifted a bit with each new piece of input. Therefore, I have been speaking in favor of everyone learning more about everyone's else's positions, through posting of all the letters that have been written and giving people time to read more deeply and attend informational and debate sessions apart from formal Town meetings.

My hope has been that, whatever is decided either by the Town Council or by a ballot referendum, there will be some greater understanding by the many, many residents who will, regardless of outcome, find themselves on a "losing side." This summary is an attempt in that direction.

<u>I think most (though not all) people would agree with the following statements</u>: The Dam cannot be left as it is. The Dam is deteriorating and could break (causing property damage and a messier, "removal" process) and the general trend is to remove dams (even ones in better condition) when they no longer provide power and to restore more "natural environments" for fish runs, boating, and all that nature knows how to do. "Saving" the Dam actually means filling it with reinforced concrete so that it does not fall further apart, and then either leaving the pond area alone or dredging it (perhaps repeatedly) at great expense to restore a real pond. **That's the essence of the removal case.**

Yet, the Dam is not just *any* dam. It is historic (eligible for National Register status in 10 categories) and visually iconic (especially given its unique siting as a gateway to the Town, in contrast to many other town dams, such as the one removed in Exeter). Moreover, the Mill Pond that the dam creates has for over 100 years been a cherished open-air spot for skating and other recreation (see <u>pp. 5-25</u>). Moreover, other dams are seen as valuable, such as those that help to create the beloved Mendums Pond, Lake Winnipesaukee, and Lake Ossipee. Additionally, the location of the Mill Pond was dammed in *some* way for over 350 years, and a new habitat has developed (for both humans and other animal species) from the current dam and its predecessors. **Some species will be favored through saving the Dam; other species will be favored by removing the Dam**. Dam savers say that restoring a pre-dam "natural environment" is no longer even possible. A one writes: "Prior to colonial times there were no invasive species like Buckthorn, runoff from increasing paved areas and water extraction for a growing population." **That's one summary of the save-the-dam argument**.

Some dam-removal advocates, however, argue that the historical argument to save the Dam privileges white colonial takeover of this area and marginalizes the earlier and longer history and practices of the indigenous peoples who inhabited the area – and who did not construct dams.

Since I first attempted a summary, Dam abutters Steve Burns and Andrea Bodo have written a waiver "to hold the Town of Durham harmless for potential flood damage to our cottage and land arising from the existence of the Mill Pond Dam. We understand from the NH Dam Bureau our willingness to accept this risk will enable the NH Dam Bureau to change the classification of the Mill Pond Dam from a Low Hazard dam to a Non-Menace dam." This waiver advances the dam-saving argument, but it does not change the fact that the deteriorating Dam cannot be safely left as is.

Adding to the complications is that the "pond" has evolved toward a "meadow," the water quality is said by most to be very poor (and would, it is claimed by the Town's consultants, improve at least somewhat with dam removal) – and there are multiple toxic chemicals in the sediment (including heavy metals cadmium, chromium and lead), from a mix of natural and probably UNH science labs and power-plant sources that have since improved their treatment of College Brook (known in the old days as the "College Drain"). Dredging to restore the pond fully would be *very* expensive (probably in the millions) and NHDES permits to allow it are said to be not that likely (since the dredging would be mostly for aesthetic reasons and not for ecological restoration). Dredging would also likely cause problems with the toxic sediments.

A sharp inclination to move toward "removal" seemed to arise at the Town Council <u>Feb 15, 2021</u> meeting when the threat of an "algae bloom" was discussed. Such a bloom (google it!) can be harmful or toxic to humans and animals and could close off the remaining recreational options that are touted by Dam savers. That sounded like a convincing "removal" argument to me. Why spending hundreds of thousands of dollars to stabilize a pond that could kill some of us or our pets?

Yet, after the Dam seemed doomed from that discussion, there was a resurgence of saver action. A two-hour Zoom session on Feb 26, 2021, with Prof. James Haney, UNH Biological Sciences, complicated that algae argument. He reported trying to find algae samples at the Pond, without success. He argued that we are dealing with a complex, holistic ecosystem, that one has to look at upstream impact on the Pond, and that removing the Dam would not solve the problems that are being described. Indeed, he argued that the pond actually functions as a useful retention pond collecting sediments, that the water-quality problems are not only from the Dam, but from what does and done not happen upriver, and that, if toxins are ever a threat, removing the Dam could still leave them on the exposed rocks, which could kill dogs and harm humans. Confused? I am as well!

A resident's Feb 2021 letter to the Council promoted the use of an aeration device that might be able to reduce and reverse the vegetation growth within and around the edges of the Mill Pond, noting that such aeration is "used for this purpose in ponds at golf courses and parks, and in lakes not fed by underground springs to prevent algal blooms." (But the July 2021 Supplemental VHB study disputes that aeration devices could work in the Mill Pond, given its size, temperature, near-shore pollution.)

Even for those who agree with what I've written so far, it gets very contentious after that. A resident scientist reported to me that he discussed the sediment issues with the Town's consultant, and he reports that "restoring the Dam will leave the sediments where they are. Removing the dam will cause 260,000 cu ft of toxic sediments to move. Some will be trucked away and the rest will deposit into the reach below the Dam." But another scientist responded: "I dispute his assumption that all the sediments behind the Dam will be mobilized when it is taken out.... Stabilization of the sediments will

be part of the restoration/removal plan. The bathymetry [measurement of depth of water] clearly shows the fully formed historic channel which is still intact. The Dam will be drawn down and the soils outside of the historic channel will be stabilized as part of the restoration efforts. The vegetation will likely volunteer quickly as we saw happen in 4-6 months when the Littlehale Road flash boards were taken out a few years ago. This will prevent mobilization and sequester the pollutants in place." In short, it's not easy to get one set of facts.

With removal, the dam savers say, dozens of "waterfront" homes would be living at mud flats (affecting property values and lifestyles), and because the major dam on the Oyster River is a mile further upstream (the UNH reservoir), the "restored" river from dam removal, although flowing *more freely*, would not flow fully freely, and it would not look anything like the restored Exeter river after its dam removal. That narrowing of the flow appears to be confirmed by Mill Pond Dam drawdown pictures from 2008 & 2009 and also, as one dam saver argues, on p. 5 <u>here</u> of pictures from one month and one year after removal of the Lisbon, NH, dam (but on different type of terrain).

Dam removal advocates have forcefully dismissed the notion that the flow down the river would be reduced to a "trickle" in summer. But resident historian Janet Mackie found a report from the 1974 Town Report, p. 81, "The Durham Swans" by Lorus J. Milne and Margery Milne, Howard E. Forrest and Esther Mae Forrest, which indeed describes a "trickle" (emphasis added):

But on August 27, the millpond began to disappear. Contractors hired jointly by the Town and the New Hampshire Fish and Game Department opened the dam gates as the first step toward repairing the dam and installing a fish ladder. To the surprise of almost everyone, the water level dropped rapidly. It exposed large areas of shallow bottom choked with pickerel weed, then larger mud flats studded with the gaping shells of freshwater mussels.... Within three days, only two large puddles of murky water remained, connected by a trickle representing the combined flows of the Oyster River and the College Brook."

As further confirmed by the hired consultant at Council discussions, water width and depth would shrink considerably from dam removal, even if not usually to a trickle by their estimates, and some current pond areas would be muddy and tidal. Current walking, skating, snowshoeing, and cross-country skiing on the impounded frozen water would no longer be possible. Removing the dam, savers argue, will actually *reduce* boating options in the impounded area and might possibly deposit enough sediments near the Town Landing to negatively affect boating there. Yet, some dam removal advocates claim property values could go up, as in this comment: "Frankly, it's laughable that folks are saying their property values will go down when property values on the tidal rivers and streams all around Durham are far higher than on the Mill Pond impoundment." Yet, who should determine what form of "nature" is to be preferred for each homeowner? Not a lot of agreement, obviously!

A few dam-removal advocates argue that a *portion* of the existing dam could remain (or be nearby) to serve as a historical marker. And another dam-removal advocate highlights the potential for "place-

based learning." She adds: "River restoration would provide limitless opportunities to engage Oyster River School District students in real-time, community-based learning. The Mill Pond Dam's removal would give the student's a fascinating case study that contains elements of a wide swath of topics covered in and out of the classroom: engineering, social studies, ecology, mathematics, history, art, and geology, among others."

Dam savers argue that the current water level has been holding back *unique* invasive species at the site, and that the tidal (salt) water that would come upstream from dam removal could have other unpleasant consequences, such as foul odors. As one dam saver wrote to me, "The Dam was built on natural falls of the Oyster River used by the Abenaki marking the limits of salt water. It will drain the Mill Pond, forming an unnatural channel for tidal salt water to flow into a narrow channel mixing fresh water bordered by a drastically altered Mill Pond that would become a tidal swamp." Also, if the Dam is built on a natural falls, then boating up or down that area would be problematic or impossible.

Yet, dam removal advocates say that the "invasive argument" is misleading. Invasive species, they note, are an area-wide problem, apart from this issue. (Moreover, the VHB's Supplemental Analysis offers a 5-year plan to deal with them at reasonable expense). Dam removal advocates also say that other tidal areas further downstream do not emit unpleasant odors. One scientist advocating removal, for example, wrote to me: "Tidal salt marsh would establish in and adjacent to the restored channel upstream of the dam. One needs to only look at marshes downstream of the dam, or over in the Bunker Creek Marsh along Route 4 to visualize what it would look like (and how it would smell). It is a beautiful highly ecologically productive habitat that can adapt to sea level changes and can be explored and enjoyed by kayak at any high tide."

Dam-removal advocates also point to a paradox: the stabilizing method destroys the historic value of the cherished artifact to be "saved." On the other side, one resident argues that sea-level rise will flood the whole area in any case in a century or two, and we might as well enjoy the skating with dam stabilization while currently living Durham residents walk (and skate) the planet. Both sides claim that there will be grant-funding possibilities to support their preferred outcome. You see the challenge!

In short, I've been arguing that the Town desperately needs some "pre-post traumatic stress therapy" about the Dam for the sake of Durham's social fabric in the next few decades. There is a lot of money, emotion – and a breadth of hearts and minds – at stake. The vastly differing views have led me to argue that the Town take time for more forums, apart from official Town meetings, and even time for field trips to related sites, including other Towns, all in advance of a time-specific "final decision," such as in the March 2022 elections. Perhaps there could still be some changing of minds or at least more understanding of others' perspectives.

As noted above, VHB's initial report on the Mill Pond dam, at the Council's direction, focused on two options – dam removal with river restoration and dam stabilization with dredging. Since the report's release, many members of the community have expressed their strong desire for a third option – dam

stabilization without dredging.

Following discussion on March 1, 2021, the Council decided that it and the community would benefit from some additional information on this third option. As a result, VHB was tasked with evaluating this third alternative coupled with realistic ways to improve quality and reduce Nitrogen and Phosphorous in the pond's watershed, to the extent that is possible in a meaningful way. (See <u>Friday Updates</u>, March 5, 2021 for how complex this issue is when considered in combination with other actions, including Nitrogen reduction due to the implementation of stormwater regulations in new downtown projects; increasing impoundment flow rates by releasing water from the UNH Dam during periods of low flow; notching or otherwise changing the dam configuration to better allow the downstream migration of diadromous fish (a general category of fish that spend their life cycles partially in fresh water and partially in salt water).

Some of the Supplemental Analysis conclusions (mainly quotes): Most of the impairment issues in Mill Pond are related to over-enrichment of the pond with nutrients, primarily phosphorus. Implementation of the non-point source program outlined in the 2018 Mill Pond Nutrient Control Study would *not* reduce total phosphorous enough to eliminate the water quality impairments. Water quality in the Oyster Reservoir upriver from the dam is roughly equivalent to Mill Pond, at least in terms of nutrient enrichment. Thus, water from this source is not likely to benefit Mill Pond without substantial upstream non-point source load reduction. But that also means that removing the dam would not have a substantial positive benefit for the water quality either. A meaningful improvement in the water quality within Mill Pond would require a watershed-wide effort, requiring substantial investment (\$20~ million) from multiple stakeholders beyond Durham. Other management techniques – dilution/flushing, dredging, side-stream aeration – may have some benefits, but none appear able to address the cause of the water quality impairment. Dam removal would substantially reduce the upstream depth and width of the Oyster River and Hamel Brook, especially during low-flow conditions.

At the July 12 Council meeting, the consultants argued that removing the dam would have ecological benefits, primarily removing a barrier to fish passage. Additionally, they argued, a river passes nutrients more efficiently than an impoundment. And removal would restore a more "natural" tidal environment. (It's best for all interested parties to read the report's Executive Summary and watch the July 12, 2021, Council Meeting (video).

Criticisms of the supplemental analysis I've heard so far (see, for example, pp, <u>35-43</u>) include: that the *averages* presented by VHB mask the specifics of conditions related to actual water releases from the UNH reservoir upriver, that the "drought" months chosen are not actually the lowest water-flow months, that no convincing data have been presented that there would be enough water for herring runs that are highlighted, and that the impact on the full natural and **recreational** ecosystem (for species other than herring) that has developed with the dam is largely missing from the analysis.

From:	Todd Selig
Sent:	Monday, September 13, 2021 9:05 AM
То:	April Talon; Richard Reine
Subject:	FW: Non-Analogous River Systems - Mill Pond Dam on Oyster River feedback from
	Scott Bogle
Attachments:	Bogle Letter on River Comparability 9-12-21.pdf

Dear April and Rich,

For your general information.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

From: Scott Bogle <scottbogle@yahoo.com>
Date: Sunday, September 12, 2021 at 10:29 PM
To: Todd Selig <tselig@ci.durham.nh.us>, Durham Town Council <council@ci.durham.nh.us>
Cc: public works common <publicworks@ci.durham.nh.us>
Subject: Non-Analogous River Systems

Dear Todd and Members of the Council,

Please consider the attached letter documenting how the three river systems VHB has cited as analogs to the Oyster River for anadromous fish habitat are not comparable in either size or target species. VHB neglected to inform the Council that each of the three brooks/rivers they reference is connected to one or more large lakes or ponds which form the primary spawning habitat in each system. These range in size from >7X to >27X the acreage of spawning and rearing habitat that would remain on the Oyster River following dam removal.

I hope you'll review the information here in advance of any vote at tomorrow evening's Council meeting. VHB continues a pattern of presenting the Council and town residents with incomplete information heavily biased toward dam removal.

Respectfully,

Scott Bogle

4 Croghan Lane Durham, NH

Scott Bogle 4 Croghan Lane Durham, NH 03824

September 12, 2021

Mr. Todd Selig, Town Administrator Town of Durham 8 Newmarket Road Durham, NH 03824

Dear Todd and Members of the Town Council,

The choice of whether to rehabilitate the Mill Pond Dam or remove it is a difficult one. I appreciate Council members' careful thought and information gathering to inform your decision. This work would be somewhat easier if you could feel confident that the town's consultants from VHB were presenting you with complete and unbiased information on the pros and cons of the choices before you.

There is a tendency among some consultants to have a favored solution from a previous project which they then recycle for other settings. Sometimes that solution may make sense for the next setting, sometimes it may not. Hopefully the consultant takes the time to: 1) truly understand the new setting in all of its dimensions; and 2) explain to the client all the ways in which their solution is or isn't a good fit. I'd suggest that VHB has done neither.

Thus far VHB in their reports and presentations has:

- Avoided discussing, until forced to do so through Council and resident questions, how very low seasonal flows in August and September, especially in drought years, may impact the survival of young herring which remain in fresh water into the fall. By citing only annual averages or three month averages they studiously avoided calling the Council's attention to late summer low flows, even when asked to do so in the supplemental report.
- Avoided discussing, until forced to do so through Council and resident questions, that water withdrawals from the Oyster River reservoir result in multiple successive days of no water passing over the upper dam. They used monthly averages to assert that water withdrawals have no effect on flow to the river below - but daily flow and withdrawal data refute this. This included five days in 2020, 23 days in 2016, and higher numbers prior to the Spruce Hole Well coming online. At the August 16th Council meeting VHB acknowledged that their hydrological model was not sophisticated enough to reliably show what would remain of the river below the upper dam when no water passed over that dam.
- Paid scant attention to recreational uses of the impoundment, going so far as to omit discussion of
 recreational value altogether from their summary matrix comparing the pros and cons of dam
 removal and rehabilitation.

- Asserted in their executive summary that water quality problems below College Brook and in the upper reach of Hamel Brook are ubiquitous throughout the impoundment, when field measurements shown in the body of the supplemental report showed dissolved oxygen (DO) levels to not be problematic in significant parts of the middle impoundment and Hamel Brook.
- Misrepresented the historical significance of the Mill Pond Dam, failing to mention it has been found individually eligible for the National Register of Historic Places and asserting incorrectly that a change in its concrete structure would eliminate its historic significance and status.
- Suggested in their executive summary, through citation without context of an anomalous data point from 30 years ago, that removal of the dam would lead to the return of an anadromous fish run exceeding 150,000 herring/year. Over the last 20 years the three much larger rivers in the region (Lamprey, Exeter, Cocheco) have averaged runs of less than a third of that level.

Most recently VHB was asked by residents and Council to supply examples of 2-3 rivers comparable to the Oyster River in size, seasonal lows in water flow, and habitat potential to support restored anadromous fish runs. They listed the three brooks/rivers in the table below, asserting comparability based on length and drainage area. <u>What VHB neglects to mention is that the large ponds or lakes</u> <u>referenced in the footnotes only as endpoints for stream stretches are primary spawning grounds for the anadromous fish in each system</u>.

	Oyster River Durham, NH	Parker River Newbury, Rowley, Groveland, MA	Bride Brook East Lyme, CT	<u>Town Brook</u> Plymouth, MA
Drainage Area	20.2 sq mi	24.9 sq mi	3.7 sq mi	9.0 sq mi
Length	1.7 mi	7.0 mi	2.5 mi	1.6 mi
Connecting ponds/lakes serving as spawning and rearing habitat	None following dam removal	Pentucket Pond, Crane Pond, Parker Reservoir	Bride Lake	Billington Sea
Combined acreage of ponds/lakes serving as spawning and rearing habitat	River minus impoundment includes perhaps 9.5-10.5 acres	120+ acres (excludes river acreage)	78 acres (excludes brook acreage)	285 acres (excludes brook acreage)
Acreage of habitat vs. Oyster River		> 10X	>7X	> 27X
Primary target species for herring restoration efforts (per CT and MA state materials)	Unclear. Likely Blueback Herring given habitat characteristics don't match alewife preferences. Perhaps smelt?	Alewife	Alewife	Alewife

Below is an updated version of VHB's table on supposedly comparable rivers. VHB's original information is in white. Information on connecting pond/lake spawning habitat is highlighted in green.

<u>These three systems don't appear to be analogous in size (they range from 7X to over 27X the aquatic</u> <u>habitat size of the Oyster River) or target species.</u> The anadromous fish runs on all three rivers are primarily Alewife, which spawn in the ponds that form their headwaters. No such ponds would exist on the Oyster River following dam removal since the upper dam lacks a fish ladder. Blueback herring, which prefer faster moving water, appear to be the target species for an Oyster River restoration.

<u>Perhaps analogous short, low-flow (and seasonally very low-flow) rivers or brooks exist that support</u> <u>substantial runs of blueback herring or smelt without a large pond or lake preferred by alewife - but</u> <u>VHB and the fisheries agencies they consulted don't seem to be able to find one.</u>

It seems to have become an article of faith for the consultants and state and federal fisheries agencies that dam removal is the correct solution for any river; and if the dam is gone surely herring will return in large numbers which trumps any other consideration. Based on their careful avoidance of looking at how true drought conditions and water withdrawals impact this particular river, and tossing out comparisons that bear little resemblance to our river, I'm feeling less and less confident that the consultants really have much idea of how well the Oyster River with one vs two dams will or won't support new herring let alone the existing native fish population.

At the Town Council meeting on August 16th Dennis Meadows pointed out how little attention has been paid throughout this process to the cultural value of the dam and the impoundment - recreational use, community character, historical value. These are harder to quantify than water quality, but to me at least they are just as important as which species among a variety of native fish is most successful in a very small river. I grew up skating, XC skiing, canoeing and fishing on the pond and river. I moved away for 24 years but returned to town because I had reflected on what a great place Durham is to raise kids. Access to paddling and skating a few blocks from home is part of that. I value that my kids are able to walk from home to skate, ski, kayak and fish on the pond and river much as my friends and I did as a kid.

This is not a question of "restoring nature" but rather which of two resource sets we choose to value. Do we manage mainly for herring or with a broader range of ecological and cultural values in mind? Neither option before the Council will restore the ecosystem that existed on the Oyster River 400 years ago. If the dam is removed we know we lose a character defining feature of our historic district, a recreational resource and a large area of habitat that supports a range of native fish and other aquatic life. Near-shore areas of the pond that are overgrown with duckweed, and already on their way to becoming meadow through natural succession, would be de-watered immediately. That might be a positive aesthetically, assuming invasive plants can be controlled in a sustained way. Conditions for adult blueback herring will likely improve with dam removal, but by how much? We still have no examples from truly comparable rivers to gauge that. Are we sacrificing these other values for 50,000 more herring per year? 10,000? 5,000? What is the carrying capacity of a river whose natural flow is choked off by water withdrawal for five days in a row as in 2020? How about twenty-three days as in 2016?

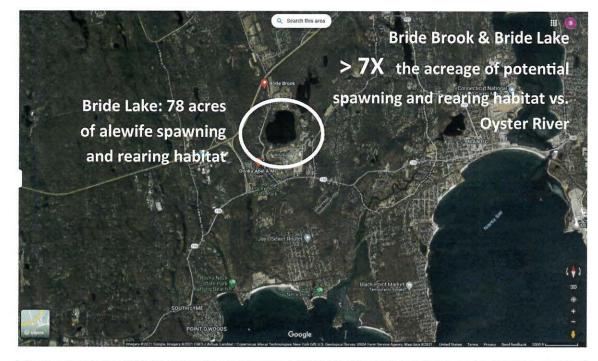
This is a difficult choice. I hope it doesn't become an "oops moment" as one Councilor reflected.

Thank you again for listening to input from all residents and reading the consultant's report critically.

Sincerely. Scott Bogle

Are These Really Comparable River Systems?

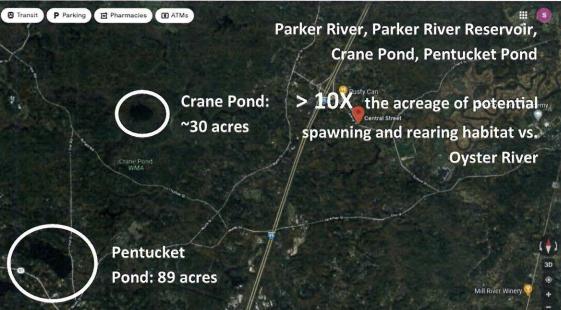
VHB was asked to reference 2-3 rivers comparable to the Oyster River in size, seasonal lows in water flow and habitat potential to support restores anadromous fish runs. VHB listed three rivers <u>while neglecting to mention their large connected lakes/ponds</u>.



Bride Brook & Bride Lake

East Lyme, CT

According to Connecticut Department of Energy and Environment, alewife are the primary anadromous fish on this system and the <u>78 acre Bride Lake</u> forms their primary spawning ground rather than Bride Brook itself.



Google

Parker River, Parker River Reservoir, Crane Pond, Pentucket Pond.

Newbury, Rowley, Groveland, MA

Over 7 miles the Parker River passes through multiple ponds, the largest of which are <u>89 acre Pentucket Pond</u> and <u>Crane Pond (approx. 30 acres)</u>.

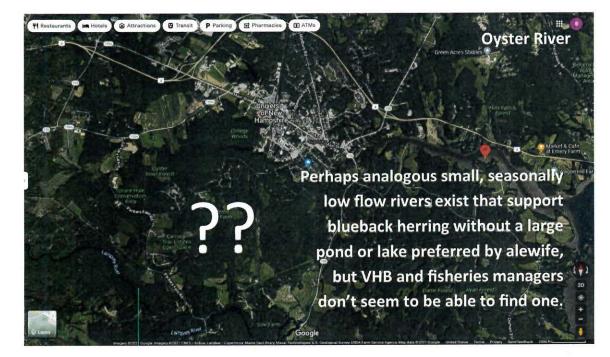
Town Brook & Billington Sea > 27X the acreage of potential spawning and rearing habitat vs. Oyster River

Billington Sea: 285 acres

Town Brook & Billington Sea

Plymouth, MA

According to the Massachusetts Division of Fisheries and Wildlife alewife are the primary anadromous fish on this system and the <u>285 acre Billington Sea</u> forms their primary spawning ground - rather than Town Brook itself. Billington Sea is described as a "weedy and fertile eutrophic lake" with an average depth of 8 feet.



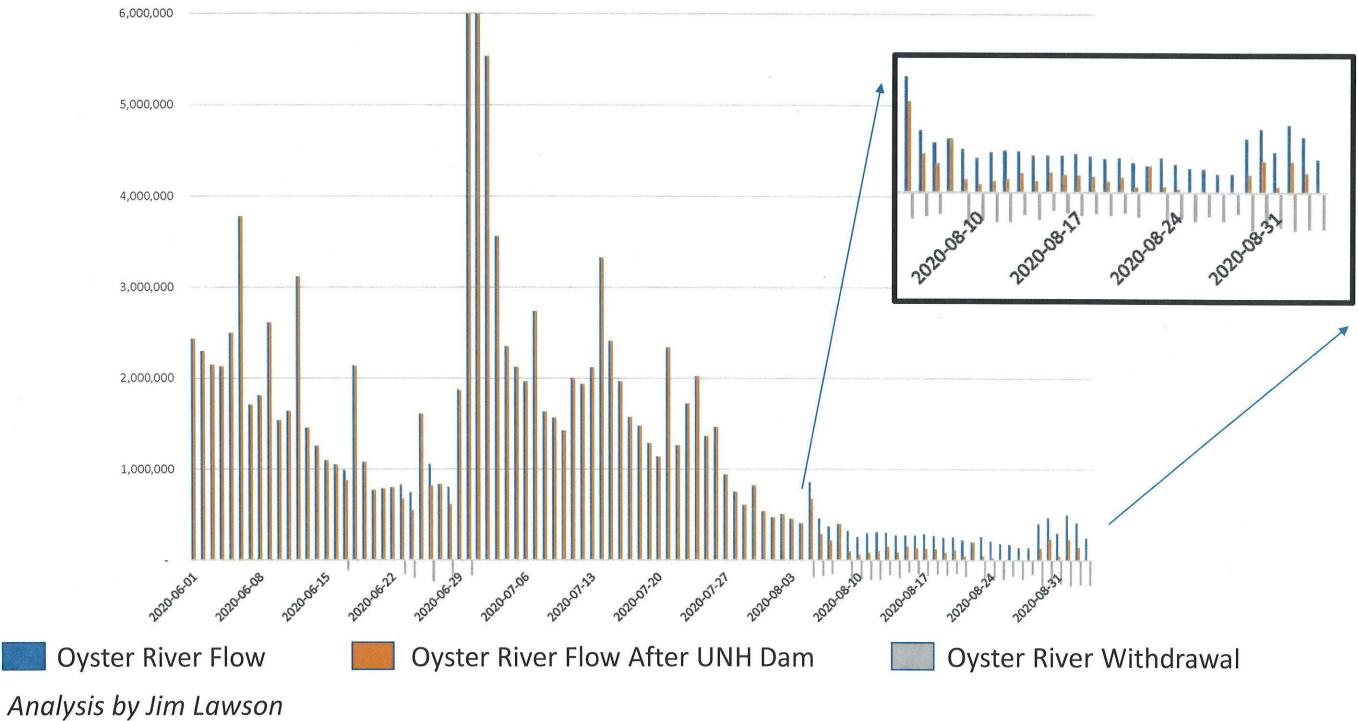
Oyster River

Durham, NH

Following dam removal VHB estimates 5.4 acres of water surface will remain of the current impoundment at median annual flow. Less in the summer and still less in drought conditions and when water is withdrawn from the upper reservoir. Perhaps as much as another 4-5 acres exist between Thompson Lane and the upper dam if those remaining 1.06 miles are assumed to maintain an average width of 30'-40' throughout, which is a generous estimate.

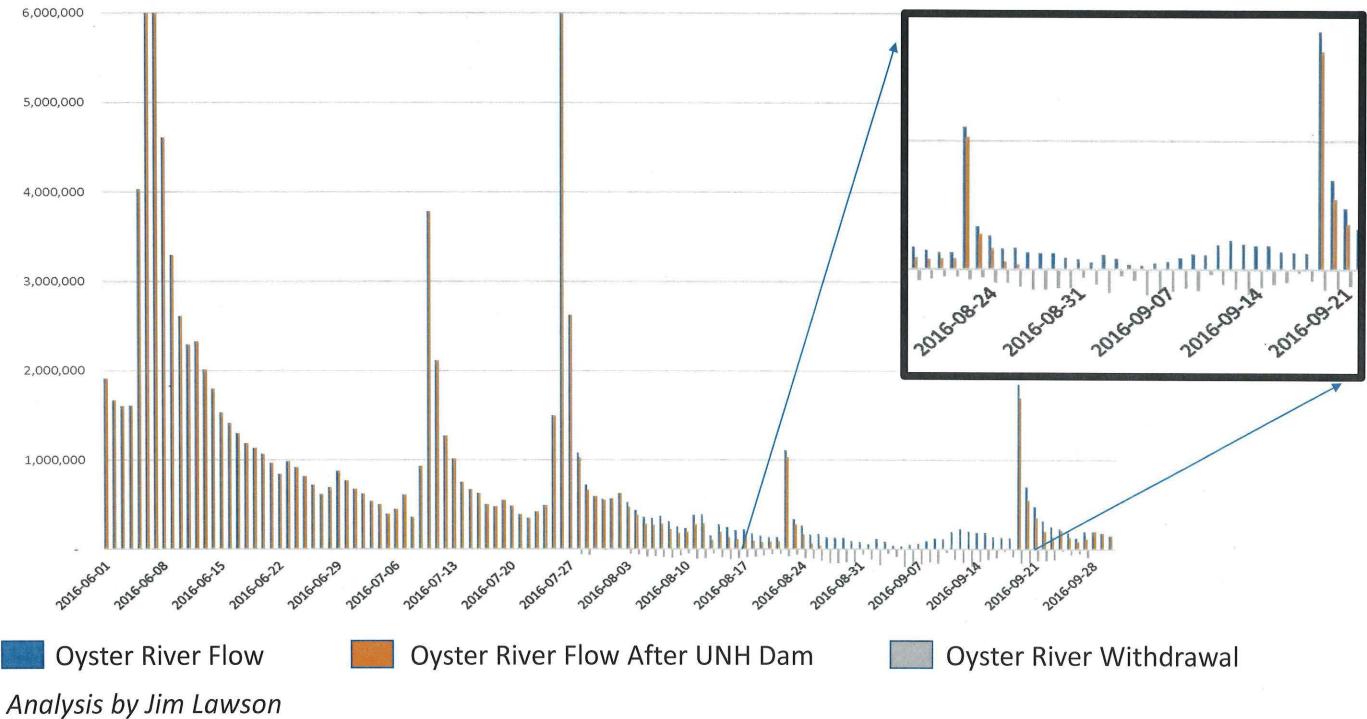
2020 Oyster River Flows & Withdrawal (gal/day)

Data Sources: USGS Gauge & Durham DPW Water Withdrawal Records



2016 Oyster River Flows & Withdrawal (gal/day)

Data Sources: USGS Gauge & Durham DPW Water Withdrawal Records



From:Todd SeligSent:Monday, September 13, 2021 9:21 AMTo:April Talon; Richard ReineSubject:FW: Schidlovsky - Mill Pond Dam removal - feedback from Michael Schidlovsky

Dear April and Rich,

For your general information.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

From: Michael Schidlovsky <mschidlovsky@comcast.net>
Date: Sunday, September 12, 2021 at 10:11 AM
To: Durham Town Council <council@ci.durham.nh.us>
Subject: Schidlovsky - Mill Pond Dam removal.
Resent-From: <council@ci.durham.nh.us>

Dear Kitty and Town Council,

I hope that you have had a good summer and all is well in your world.

My understanding is that the Durham Town Council will be doing final deliberations and possibly making decisions tomorrow about the future of the Mill Pond Dam. As you know, our home has been on the back waters of the Mill Pond for over 30 years and I have a deep knowledge and interest in the wildlife that has become dependent on the pond for it's survival.

Earlier this year I wrote the Town Council to express the concerns I have about the tragic impact dam removal would have on the ~400 year old ecosystem that has been encouraged to develop and thrive behind the dam. This summer has confirmed my concerns as I have on numerous occassions taken canoe rides and walks around the pond. I won't get rehash my earlier letter except to say that removal of the dam will most certainly and permanently destroy a very rich ecosystem and, needlessly kill or force relocation of a lot of natures creatures that have become dependent on it. It seems so hypocritical to even consider this destruction when we as a Town profess to be so "environmentally conscious". It was not a mistake to dam the Oyster River 400 years ago. Some say that structurally, it now presents a real danger. That is not true. The mistake that was made is that over the years, we have not paid attention to or held accountable the people and institutions who have been contributing and allowing pollution and silt to slowly fill the pond and retain behind the dam.

This summer, I made it my mission to walk all of the streams that feed the Mill Pond to their sources (I did not walk the entire Oyster River). I would like to use College Brook as the best example of what our lack of attention and accountability has resulted. That brook has been absolutely abused as more and more upstream developments and pavements has been carelessly drained into it carrying all types of pollutants. There are numerous places as the brook originates in the general area of UNH cow/horse/agri watershed land and passes through UNH where I saw appaling examples of pollution, erosion and litter. I stood at the mouth of College Brook where it empties into the Mill Pond during the most recent rain storm. That to me was the biggest "aha!" moment.

I am not a scientist but when I saw the difference of the color of the storm water coming out of College Brook compared to the Mill Pond, I know for sure that College Brook is a serious, unmitigated source of "stuff". I guess I really shouldn't have been surprised as I recall that somewhere in this process of debating the dam removal a UNH professor who has been studying the brook called it "one of the most polluted streams in NH" (may not be the exact quote)!!

Kitty, I am appealing to you and the Council to make a commitment to the dam by leaving it in place. The Mill Pond and everything behind the dam and below it has stood for 400 years and frankly, if nothing was done, it would continue to naturally fall apart but would probably stand for another 400 years. Again, the dam presents no danger to anyone. After 400 years, we should just pretend it is a natural waterfall.

What we do need to do is focus on what we (the Town) have in most recent years seemingly ignored. Remove the pollution we have allowed to collect in the Mill Pond. Before we do that, we must find and hold responsible the individuals or institutions that have and continue to contribute to the problem. Those parties must be forced to correct the problems we have allowed to grow in the feeder streams and brooks to the Pond, specifically College Brook which to me seems like the most obvious and biggest contributor to the Mill Pond "problems".

The Mill Pond Dam and the ecosystem behind it are a treasure for the Town in so many, many ways. Let's be practical and truly responsible in the decisions that are about to be made. In my mind, removing the dam will be a short-sighted environmental catastrophe and ignores our true responsibilities. It simply sends the real problem "down the road/river".

Thank you and the Council for all your work on the behalf of the Town residents. I wish the best in your deliberations and decision making.

Respectfully, Mike

Michael Schidlovsky

100 Newmarket Rd.

Durham, NH 03824 603-397-7987 mschidlovsky@comcast.net

From:	DAVID STRONG <luckychuck@comcast.net></luckychuck@comcast.net>
Sent:	Monday, September 13, 2021 9:37 AM
То:	Durham Town Council; external forward for kmarple; Dinny Waters; Al Howland; external
	forward for jlawson; external forward for stobias; Sally Needell; external forward for cwelsh; external forward for wburton
Cc:	Todd Selig; April Talon; Larry Brickner-Wood; Charlotte Hitchcock; Michael Behrendt; Jen Berry; Graf, Joan; Jaques, Mary Margaret; Karo, Doug; Langley, Pamela; Lee, Jennifer; Ley,
	Pat; Lord, Dick; Mackie, Janet (DHA); Sandberg, Nancy (DHA); Smith, Marjorie
Subject:	DHA Statement on Mill Pond Dam - 9/13/2021
Attachments:	DHA - Mill Pond Dam Statement - September 13, 2021 - FINAL.pdf; NH State.pdf

Attached is the Durham Historic Association's statement dated September 13, 2021 regarding the Mill Pond dam, pond, and historic surroundings.

Also attached is a letter dated September 10, 2021 from Nadine Miller of the New Hampshire Division of Historical Resources, which expresses their support for keeping the dam in keeping with Section 106 of the National Historic Preservation Act. Her letter complements our statement.

Respectfully,

David Strong DHA President Dated: September 13, 2021

To: Durham Town Council

Cc: Todd Selig, April Talon, Durham Historic District Commission/Heritage Commission, Durham Conservation Commission, Jennie Berry

As the Durham Town Council weighs the options for the Mill Pond dam, the Durham Historic Association wishes to express its concern that a great deal more is at stake for the people of Durham than the loss of an historic 1913 dam.

As the oldest historical society in New Hampshire, the DHA has been a guardian of Durham's history since 1851 and as such it is important to remember the long arc of Durham's history in this area. The site of the natural falls of the Oyster River at the head of the tide was the perfect place for Thomas Beard and Valentine Hill to build the first mill dam on the Oyster River in 1649 by a grant from the selectmen of Dover. Since the earliest settlement of our town to the present day there has always been a dam, a mill pond, and a bridge, surrounded by the homes and the businesses of the community.

Walking or driving through Durham as you cross the Oyster River bridge you see and hear the water from the mill pond flowing over the dam into the Oyster River heading downstream surrounded by the gently sloping land upon which sit new and historic houses. The relationship of these visual and auditory elements in the landscape that Durham residents hold dear is what is at stake. Removal of the dam would result in a dramatic alteration of the river, the elimination of the mill pond, and the loss of the historic landscape that has existed for three hundred and seventy-two years.

The citations below demonstrate all the ways the Mill Pond dam area has been valued and given recognition by the community, the state, and the federal government:

- 1. The inclusion of the dam, pond, and adjacent historic homes in the Durham Historic District certified on the National Register of Historic Places since 1980.
- 2. The listing of the Mill Pond Dam on the New Hampshire State Register of Historic Places in 2013. NHDHR's "Statement of Significance: The site of Durham's earliest mills dating from 1648, providing waterpower for local industry for 300 years. The existing concrete dam has been in place since 1913. The dam provides the historic impoundment."
- 3. Six gifts of land and money for the preservation of the Mill Pond, the Dam and the Mill Pond Parks for the benefit of townspeople and the public from generous Durham residents over many years:
 - a) The donation of the dam and other secured rights by Edith Onderdonk prior to 1913 dam construction.
 - b) The Dorothy Wilcox gift of \$67,000.
 - c) The Milne Park parcel on Mill Pond Rd. in 2006.
 - d) The Runlett parcel that is the triangle of town owned land at the north bridge abutment in 1912.
 - e) The Community Church donation of all the land on the north shore of the Mill Pond between 1980 and 1992.
 - f) The La Taille de USA (Dennis Meadows) parcel on the south shore in 2018.

- 4. The support of the 2013 Town Council Resolution to retain the Mill Pond Dam for the duration of its useful life.
- 5. The recognition of the scenic and historic prominence of this area on a major gateway into Durham and its cultural significance as described in the Town of Durham Master Plan 2015.
- 6. The destination status of this area on the Mills Scenic Byways, an official State of New Hampshire Scenic and Cultural Byway.
- 7. The significance of the dam to New Hampshire history in the essay entitled New Hampshire's Water Power Legacy by Dr. James Garvin: <u>http://www.james-garvin.com/images/Dam_Preservation_Handout2.pdf</u>
- 8. The status of the Mill Pond Dam as an Engineering Landmark recorded on the New Hampshire Register of Historic Places.

For all of the above reasons the Durham Historic Association opposes the removal of the Mill Pond Dam and urges the Durham Town Council to save the Mill Pond Dam and its environs. We respectfully request that should the Council opt for removal of the dam that the people of Durham have the opportunity to vote on a warrant article deciding the future of the dam.

Respectfully Yours,

The DHA Executive Board:

David Strong, President Janet Mackie, Vice President Doug Karo, Recording Secretary Marjorie Smith, Treasurer Nancy Sandberg, Museum Curator/Director Joan Graf, Director Mary Margaret Jaques, Director Pam Langley, Director Jennifer Lee, Director Dick Lord, Director



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

 State of New Hampshire, Department of Natural and Cultural Resources

 19 Pillsbury Street, Concord, NH 03301-3570

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 FA

 www.nh.gov/nhdhr
 preservat

Resources 603-271-3483 603-271-3558 FAX 603-271-3433 preservation@dncr.nh.gov

September 10, 2021

Katherine Marple, Chair Durham Town Council 8 Newmarket Rd. Durham, NH 03824

Re: Oyster River Dam at Mill Pond, Durham, NH

Dear Ms. Marple:

I am writing as a follow-up to our February, 2021 letter in support of the Oyster River Dam in Durham, NH. Consultation under "Section 106" of the National Historic Preservation Act hasn't officially been initiated by the Lead Federal Agency. However, the consultant team has kept the DHR informed on all phases of early project planning and we understand that the Town will be making a decision on Monday, September 13, 2021 as to whether or not the dam will be rehabilitated or removed.

Many factors go into decision making at the local level and the DHR is aware that a variety of studies were conducted regarding the Oyster River Dam. The dam is a contributing feature of the National Register listed historic district and is significant individually as well. The Oyster River Dam is New Hampshire's earliest known example of an Ambersen-type dam, a design that relies on a series of evenly-spaced concrete buttresses anchored in the bed of the river to support a watertight slanted concrete slab upstream. There are only six other similar dams remaining in New Hampshire. The dam is also a key environmental feature in this part of Durham, establishing a beautiful backdrop to recreational opportunities to residents and visitors alike.

The removal of the Oyster River dam will destroy this historic property and forever change the historic district's setting. Avoidance is the best option under Section 106 of the National Historic Preservation Act and we urge the Town to choose this alternative during upcoming deliberations.

Sincerely,

Nadine Miller

Nadine Miller Deputy State Historic Preservation Officer

From:Todd SeligSent:Monday, September 13, 2021 12:18 PMTo:April Talon; Richard ReineSubject:FW: The Dam on the Oyster River - feedback from Mike Pazdon

Dear April and Rich,

For your information.

Todd

Todd I. Selig, Administrator Town of Durham, NH a: 8 Newmarket Rd., Durham, NH 03824 USA t: 603.868.5571 | m: 603.817.0720 | w: <u>www.ci.durham.nh.us</u> He/him/his pronouns

Everyone can tackle climate change. How can you reduce your carbon footprint?

From: Michael Pazdon <mpazdon@comcast.net>
Date: Monday, September 13, 2021 at 11:58 AM
To: Todd Selig <tselig@ci.durham.nh.us>, Durham Town Council <council@ci.durham.nh.us>
Subject: The Dam
Resent-From: <council@ci.durham.nh.us>

Please read these comments into the public record for tonight's meeting.

The decision on what to do with the Mill Pond Dam should follow the following logic.

As written in last weeks Updates, holding the budget to 2021 expenditures is a council goal. Any expense used on retaining the Dam would not be a good choice for the Council as they should follow their own goals. Removal of the dam can be partially funded from outside agencies which can help to minimize the cost.

Prominent environmental groups, The Nature Conservancy, US Fish and Wildlife, NH Fish and Game and the DES would like the dam removed.

The historical recognition for Durham is the Oyster River, not the dam that was built 50 years after water power was replaced with steam.

You can get most old things on the Historic Register, it has no bearing on the value of the item.

Recreation would be increased, as boating could go upstream from the town landing. Now, there is no parking for access to the Mill Pond anyway.

We have an ice rink in town that allows skating regardless of weather or safety or someone clearing the ice.

There has been a concerted effort to restore the Great Bay estuary, this would be part of the effort.

I mentioned to Councilor Lawson some time ago that a partial removal would satisfy keeping some of the historical part of the dam and allow fish to return to the Oyster River. I am not sure, but it seems this was not investigated. As well, the shallow section by the road side could be restored and access established to the river bank to extend the Milne Sanctuary area. I know of at least one organization that would help with invasive species and plantings.

This would also provide a buffer for the run off from the road and help to minimize the impact on the river.

I volunteer to help with obtaining funding and restoration efforts for removal.