Community Input Report, Spring/Summer 2021

Charles River Dam Advisory Committee

Town of Natick

12 August 2021

Introduction

This document provides a synthesis of community input collected in May and June of 2021 to inform the Town of Natick's Charles River Dam Advisory Committee. The Advisory Committee is tasked with developing recommendations for the future of the Charles River Dam in South Natick. Community input compiled and shared in this synthesis was collected through multiple channels: a May 17 Public Information Session, May 25 and 26 Community Input Sessions, an online community survey, written input from Natick middle school students, and other forms of written input.

This synthesis will be shared on the publicly-available project webpage. It is intended to guide and inform the work and deliberations of the Advisory Committee as they meet throughout the fall to develop recommendations for the Select Board on how to proceed with the future of the Charles River Dam in South Natick.

Additional information on the Charles River Dam Advisory Committee process as well as a description of how community outreach was conducted follow below. For more information on this process, including session materials and recordings, please visit natickma.gov/crdam.

This summary was developed by staff from the Consensus Building Institute (CBI), a nonprofit entity contracted by the Town of Natick to facilitate the Charles River Dam Advisory Committee process.

Raising Awareness about the Opportunity to Provide Input

The project team sought to engage as many residents as possible about the future of the dam and input opportunities.

In South Natick, flyers were distributed directly to approximately 400 homes in close proximity to the dam (spanning the area within Glen Rd, Farm Hill Rd, Morse Lane, and the Natick/Wellesley Town line). A large street banner was posted at the intersection of Union, Eliot and Washington in early May; and then hung in the South Natick Dam park through mid-July. In Natick Center, a large sign was posted on the Parks & Recreation bulletin board at the intersection of Central and Main St.

The Town proactively reached out to local news outlets and received coverage about the public engagement process, including mentions of meeting dates and times in the *Boston Globe*,

MetroWest Daily News, and *Natick Report*. Town social media accounts, including Town of Natick, Natick Public Works, Natick GIS, Natick Recreation and Parks, and Sustainable Natick posted about public information and input meetings multiple times. The posts were widely shared on popular Facebook pages/groups such as Natick Community and Government Chat, Natick Talks, and Natick Moms. Opportunities for engagement were also featured in Sustainability and Recreation and Parks e-newsletters.

In addition to these efforts, the Town worked with Natick Public Schools to connect with local science teachers. As a result, 7th and 8th grade students at Kennedy and Wilson Middle Schools spent time learning about rivers, reviewed the project, and hosted virtual Q&A sessions with the Advisory Committee. As part of an assignment, many students sent the Advisory Committee letters with recommendations and/or completed the public input survey.

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Session Summary

This meeting summary was prepared by the Consensus Building Institute (CBI), a nonprofit entity contracted by the Town of Natick to facilitate the Charles River Dam Advisory Committee process. This summary is not intended to be a session transcript. Rather, it focuses on the main points covered during the session.

SESSION IN BRIEF

The Town of Natick held a public information session regarding the future of the Charles River Dam in South Natick. Members of the public were invited to attend, listen to the presentation, and pose clarifying questions. This session was designed to build a shared level of understanding of the Charles River Dam and the decision before the Town among members of the community prior to the community input sessions later in May. One hundred fifty-one (151) members of the Natick community were in attendance. **Presentation slides and the recording from this meeting are available on the Town's webpage: http://natickma.gov/crdam**

NEXT STEPS

- Community input sessions, for members of the public to share their thoughts and discuss the future of the Charles River Dam in South Natick with their fellow community members, will take place virtually on Tuesday, May 25, from 6-8 PM ET and Wednesday, May 26, from 12-2 PM ET.
- In addition to the live community input sessions, members of the public will have the opportunity to share their thoughts, questions, and guidance with the Advisory Committee through an online survey, open from May 21 through June 20.

WELCOME & OVERVIEW

Robert Rooney, Interim Town Administrator, provided opening remarks, speaking to why Natick must now decide the future of the Charles River Dam. He highlighted that the Town has the opportunity to, through its appointed Charles River Dam Advisory Committee, take the time to collaboratively envision the future of this iconic area in South Natick. He noted that it will be important to explore what the Town and residents expect and want out of the resource that is the Charles River and what needs this area can serve for the community. Mr. Rooney presented a high-level overview of the decision-making process for this process, noting that the Advisory Committee will meet regularly throughout the fall to consider input shared by the community and information on the two options to develop a recommendation that will be made to the Select Board, who will determine how to proceed.

Ona Ferguson, Facilitator from the Consensus Building Institute (CBI), reviewed the agenda, the broader public engagement process for the Charles River Dam Advisory Committee process, and expectations for the information session, highlighting that this session was designed to provide information about the choice facing the Town of Natick regarding the future of Charles River Dam. She noted that, while this session will collect clarifying questions, two upcoming sessions will serve as opportunities for members of the public to share their thoughts and discuss the future of the

Charles River Dam in South Natick with their fellow community members. Community input sessions will take place virtually on Tuesday, May 25, from 6-8 PM ET and Wednesday, May 26, from 12-2 PM ET.

This session was recorded so that people who could not attend are able to hear the presentations about this important choice; the recording and slide deck are available on the Town's webpage: natickma.gov/crdam

PRESENTATION OF THE CHOICES

William McDowell, Natick Town Engineer, presented on the history of the Charles River Dam in South Natick and the two options that Natick must now choose between: repair and maintain the earthen dam or remove the concrete spillway. He highlighted that this "run of the river" dam was never constructed for flood control, but for recreational use, and that current regulatory requirements enforced by the Massachusetts Department of Conservation and Recreation's Office of Dam Safety necessitate that Natick address the mature trees and woody undergrowth present on the earthen dam, leading to the two options in front of the Town. Mr. McDowell's presentation included initial renderings of what the two options could look like and explored the engineering considerations behind both options as well as impacts related to flooding risk, ecology, finance, and community use. *Presentation slides are available to view and download here.*

CLARIFYING QUESTIONS & ANSWERS

Below are clarifying questions posed throughout Mr. McDowell's informational presentation, grouped by topic. Attendees' clarifying questions are **bolded**, responses Mr. McDowell are in plain text. Questions were collected through the Zoom Webinar Q&A tool, and more than 115 questions and comments were submitted. Due to time, not all questions were addressed verbally in the session; a complete report of all questions and comments posed can be found in the appendix.

Charles River Dam Context & Process

- **Is the earthen dam reinforced or does it have a foundation of masonry or rock?**
    - The original design of the dam showed that there was an impervious core, which would be a silt or clay material, which would not allow water to seep through. That was presented on the design plans. The Town has not done borings on the dam to discover whether that core was there, but there is no stone or masonry structure associated with this dam. It is essentially a trapezoid of earth compacted and extended out into the river; the mass of the earth is greater than the mass of the water pushing against it, and it holds it out. There is no specific structure to the dam; it is an earthen berm structure.
- **Do the trees posing a risk to the stability of the Dam have to do with the tree species or would that be the case regardless of the tree species?**
    - It is the tree root structure itself that causes this problem, so the type of species of tree would not make a difference in this particular case. Much of what is growing on the dam are white pines and hemlocks, which are somewhat notorious in being fairly softwooded and brittle, with one concern being that they can just break in the wind. They present an area with a lot of needles, and these trees don't lose their needles during the wintertime, which catches snow during Nor'easters and makes them susceptible to being blown over in high winds because of the additional weight of the wet snow on the pine tree itself. In this particular case, these trees are

a little bit more of a double risk than a deciduous tree. However, Massachusetts Department of Conservation and Recreation (DCR) does not differentiate between tree species as to whether or not a tree can or cannot be on the berm. There can't be trees on the berm.

- **I have always heard that tree roots prevent erosion. What will hold the earthen dam together if the trees are removed?**
    - Fundamentally, the earthen dam is held together by the earthen dam. It is the compacted structure and the mass and shape of the slopes of the up- and downstream embankments that give it its strength. It is a massively wide structure. The way the earthen dam slopes and the way the water is pushing against it is structured in such a way that most of the force is down, as opposed to lateral force on the dam. There is no specific magic to this. It's really just the trapezoidal shape of the berm itself. To protect erosion, we will discuss that when we go into the maintenance and repair option, exploring what we could do to prevent the upstream and downstream erosion over a long period of time. When we mention that there's been some erosive forces, that dam has been in place for 90 years now, and a certain amount of decay over time is expected. Once that area was regraded and reshaped, there would be an installation of riprap to prevent that sort of erosion from happening again in the near term. Over the long period of time, there would probably be a small amount of erosion again.
- **Could you further define "high hazard dam"?**
    - DCR considers two classifications: the height of the crest of the spillway above the downstream face or the mass of water impounded, and greater than 50-acre feet of water impounded is considered a high hazard dam. The Charles River Dam's spillway is not high, but the dam impounds 500-acre feet of water, or 160 million gallons held by the dam and the impoundment area. That is a massive amount of water and potential energy should the water break through the dam; it would travel in a direction that would be hard to move or stop. That mass of water and potential energy classifies the dam as a high hazard dam. The classification is not a reflection of that dam's operational status or construction, but just the mass of water or the height of the spillway. The classification represents the potential energy of the water being let out immediately or catastrophically and the resulting danger to downstream properties or loss of life. Classification as a high hazard dam necessitates inspections every two years, as opposed to every five years for low hazard dams.
- **Is the spillway itself in decent shape? Is there any concern with that element?**
    - No, the spillway was inspected two iterations ago where they did some diving. There is some work that needs to be done around the gates, that box area on the southern side of the lake where you can stand and look over the spillway needs some concrete work. The spillway itself is in great shape.
- **Could we put a new structure in front of the earthen dam to somehow protect the trees and keep the spillway? Or could we fill in the area behind the dam to make it stronger? Is there some sort of third option available to the Town that has yet to be explored?**
    - Fundamentally, no. If the Town is still calling the earthen portion a dam, then there cannot be any trees. If we were to add a wall in front of it, it is still a dam and cannot have trees. Same with if there is some sort of support material behind it. Another consideration is what that construction would entail to pursue an additional structure, and what the impacts would be to the area and environment. Those

proposed ideas would be considered extraordinary construction, whereas the two options presented are commonplace, typical operations to do around a dam. The Town feels confident in the numbers, materials, and techniques for the construction required to achieve either option and their ability to find an experienced contractor to do the work.

- **What is Natick doing to reach out to adjacent Towns?**
    - It is ultimately Natick's dam. We are consulting with neighboring Towns, including their Conservation Commissions and engineers, regarding the ecological impacts of lowering the impoundment area and of allowing the water to flow freely through to Wellesley. However, this is Natick's dam and Natick's process is driven by Natick's community. It is important to note that Natick's Town departments and staff are not invested in either option and will execute whichever option the Town selects.

<u>Flood Risk & Impacts to Surrounding Area</u>

- **Are there implications for the Pleasant Street Bridge either having or removing the spillway?**
    - We had asked that question to our technical consultants, GZA. Their analysis looked at the interface between the footing of the bridge and where the river runs. GZA found that there may be some implications based on the speed of the water traveling through that area. They do not expect that this would be an issue, but it would be something to consider. There may need to be some work done near the footing of the bridge to armor it.
- **What conditions would cause flooding and has that ever happened to overtop the dam?**
    - There have been several instances where the river level has risen; it has not gotten beyond that park area and it has never topped over the crest of the dam itself, though it has gotten close. The danger if you go over the crest is that, as the water travels over the crest, it takes soil material with it, and that erosion feeds on itself and becomes a cascade. The dam was designed to pass a 500-year storm, a storm so severe that its likelihood of happening is 0.2%. We have had storms, not in excess of a 100-year storm since that time and certainly not in excess of the 500-year storm, but we have had periods of time, like in 2010, with significant rainfall where a lot of areas experienced flooding, but they have not overtopped the dam. Based on hydrological models we've created, we do not anticipate that, even with increased rainfall in the area, that the dam could not pass a 500-year storm event without cresting over the dam.
- **Who would own the land created, should the spillway be removed? What are anticipated impacts to abutting properties?**
    - If a river changes its course away from your property and gives you more property, it's called "reliction," as opposed to "accretion," where the river dumps material on your property. However, when the course of a river is changed by an act of man as opposed to an act of God, legal impacts to ownership are different. Looking through the deeds of abutting properties, those along the southern expanse of the river are primarily owned by the Town, with two other owners between the impoundment and footbridge which could experience reliction. There are 16 privately-owned properties between the dam and the footbridge on the northern side, and their deeds declare the properties bounded by the river. This generally means that the owner owns to the center line of the river, and that is a simplistic interpretation of

the deed. There may be special circumstances or clauses in deeds to consider. This is a question that the Town will have to investigate on a case-by-case basis based on the language of each deed.

Hydrological & Ecological Impacts

- **Which fish species will be affected by this decision?**
    - The species include shad and another form of herring.
- **Where would the sediment go if you remove the spillway?**
    - The first action the Town took to determine if removing the spillway was a feasible option was to perform sediment testing up- and downstream of the spillway. GZA (technical contractor) selected four locations upstream and two locations downstream at various distances from the spillway to analyze if there are any differences between the depth and constituency of the sediment to determine if there is anything that would preclude the Town from allowing that sediment to travel downstream. GZA found that the two constituencies of sediment were very similar and remarkably clean, so it was determined that sediment travel would not be an impediment to removing the spillway. As for what would happen to the sediment, in the spillway removal process, the gate valves would be open, dropping the water level as it moves through the gate valves at a faster rate bringing sediment with it. That sediment would flow down the downstream area and fill in among the rocks and gravel present. This sediment brought through the gate valves would not be measured in metric ton, but rather in pounds. Once the water level would drop below the gate valve elevation, the rest of the sediment in the area would remain on the river bottom where it currently resides. To sum up, there would be some scatter of sediment when the water level is originally lowered during spillway removal, but it would not be at a large scale.
- **How far up the river would there be a noticeable drop in water level?**
    - This particular part of the river was chosen for the construction of the dam based on the river bottom's ability to deliver water moving at a certain speed to keep the water moving. If the spillway was removed, the impoundment area would be the area where the water level would drop. Changes in the water level in the area above the impoundment area, slightly further west near the footbridge over the Charles River, would be insensible; you would not see any change in the river width based on the bottom of the flow and the water moving through that area. As part of their analysis, our geotechnical consultants, GZA, looked at the profile of the river bottom and the water running from rainfall and supplies in the watershed. They determined that it would be less than the distance to the footbridge where one would see the width of the river start to narrow down.
- **Should people be worried about sort of stagnant, muddy conditions, especially in the season when there is not such high river flow?**
    - When the water is originally dropped, there will be river mud on either side, which is actually high-quality soil material in a competitive environment (e.g., invasive species can appear and grow quickly). Based on experiences from other dam and river restorations, within two years, the exposed land is revegetated. In that first year, where the mud is exposed and seeds are cast, there are some control actions to prevent invasive species taking root. Within five years, we would see woody and shrubby undergrowth in the area, growing higher than the grasses.

CONCLUSION

Ona Ferguson, CBI Facilitator, closed the meeting with a recognition of the overwhelming engagement from the public and the many questions and comments posed. She noted that all questions will be captured and used to develop a plan for the questions and issues the Advisory Committee will address through its process. Ms. Ferguson invited all of those in attendance to join a community input session on May 25 or 26 and to share widely the opportunity for community members to share their opinions through the online survey, open through mid-June 2021. Ms. Ferguson and Robert Rooney, Interim Town Administrator, thanked participants for their time and participation and encouraged their future engagement in the Charles River Dam Advisory Committee process.

APPENDIX: Q&A REPORT

Please see the following complete Q&A record, with 118 total questions and comments, exported from the webinar platform:

- We are muted, correct?
- My son wants a link, can I send him mine?
- thanks very much, he's a fly fisherman & interested in stream conservation
- how is it not safe?
- what will the width of the river be IF the spillway is removed? especially at the location shown on the cover page?
- Is the dam part of the John Eliot Hist. District?
- Could the presenters please introduce themselves? Some of us may have missed that. Thanks!
- Please describe the extent of the spillway removal or whether the spillway will be breached. How much of the spillway will remain in the second option to remove the dam?
- If the dam is removed, what happens to the water??
- do any of you live down river from the dam
- why would you change the CONTROL OF THE RIVER
- Is the earthen dam reinforced or does it have a foundation of masonry or rock?
- Where were the weirs retained by the Speen family set?
- Is there some kind of natural falls or rapid under the mill pond, or is the river fairly placid naturally?
- Who was supposed to keep the trees from growing on the dam?
- What conditions would it take to produce enough water to raise so much higher than the spillway that it would actually mount over the earthen structure?
- easy way out without consideration for those living downriver
- Do the trees posing a risk to the stability of the Dam have to do with the tree species or would that be the case regardless of the tree species?
- How is it determined that the dam might fail? Underwater exploration?
- And, has there even been an event that has mounted enough water to get over the earthen structure?
- I have always heard that tree roots PREVENT erosion. What will hold the earthen dam together if the trees are removed?
- How deep is the river bottom under the mill pond? If the water were to be lowered, could a riparian ecosystem or marsh possibly regenerate?
- If the choice was made to not have it function as a dam, would it still have the picnic/benches area?
- Is it feasible to reinforce the dam with a structure in front of the earthen dam?
- Is Pleasant Street owned and operated by the Town? Would either alternative have implications for design/operation of the Pleasant Street bridge?
- Maybe we should hear the options and explanations and then do questions
- Are there flood gates in the spillway to control the water level?
- My last one :) why isn't there an option to fill int the hollow area behind the earthen dam. I.e. add more fill behind the existing dam (this question is probably for the next section)
- could a replacement dam be a solid structure across the whole width (both spillway and dam) such that the park & trees behind it do not cause a risk?
- Thank you.
- Very interesting.

- Could you define further- high hazard dam ?
- Does the private owner of the dam have a say in this?
- How many Towns own the dams in their Town.
- Whichever option is chosen, can you describe the permitting process that would need to take place to get necessary approvals to move forward?
- Have any images showing what the dam/spillway will look like as a riprap dam?
- Is the spillway itself in decent shape?
- how many Towns have high hazard dams.
- Does Spillway prevent free floating logs from ramming Pleasant Street Bridge?
- Since there were already trees when the dam was built, is their continued presence "grandfathered" as opposed to being subject to the regs saying no trees are allowed on the dam?
- Cheney bridge with 60 foot span would be next barrier when you let the water loose
- Yearly inspection costs if we repair dam?
- Yearly maintenance cost if we rebuild dam?
- would the roots be removed as well?
- WHERE IS THE TOE OF THE SLOPE?
- Is the island getting eliminated? Trees on the island?
- Would there be a canoe launch heading upriver?
- Could the Town put up gazebos or something on top of the dam?
- What species of fish are being negatively effected by the dam and how so?
- Can you speak to how increased precipitation/more frequent rain events would impact the repair alternative? Will climate change projections be considered in the design?
- are there climate change predictions regarding change of risk of the water keeping the dam
- "1. Is the existing spillway in good condition?
- 2. Has Natick asked Dover and Wellesley to help defer some of the costs of repairing the earthen dam?"
- Can you talk a little more about the cost and time for bi-annual inspections and maintenance that might be required over the next several decades? Also, any ecological benefits from removal.
- Not a question - but that river will become a mud pit trickle in the summer once the dame is gone. What a loss that will be
- Great explanations.
- How far upstream of current spillway (if it is removed) will water elevation have a noticeable drop?
- Who would own the newly created land if the dam is removed?
- What effects would removing the spillway have on the fish population?
- fish
- if upstream decreases, downstream has to increase?
- If the spillway is removed, will the Town of Natick manage the plant community that inhabits the newly exposed soil upstream of the spillway? If no management occurs, invasive species (Japanese Knotweed) could easily invade.
- Is there any impact on the Elm Bank aquifer with the removal of the spillway?
- What will happen to the streets below the dam--Water St, S. Lincoln St. River St., Schaller St.
- Considering the removal of the spillway, will the flow of the river be less or more in pace and height? What will the effect on the Pleasant Street bridge be? What is the present condition of the brige?

- If possible, please describe again the original reason for the dam's construction.
- How many dams exist downstream of the South Natick Dam? Are there plans to remove those dams? If not, then restoration of anadromous fish via the removal of the S. Natick Dam is moot!
- Why do fish take priority over people? Town would have no liability if my property were damaged?
- Who would own newly exposed land
- What would the impact be on Broadmore Sanctuary if the spillway was removed?
- Who owns the new land exposed by the removal
- Is there a hydro power option?
- How far upstream does the impoundment go?
- Would water quality and clarity change with the removal of the dam?
- If you remove the spillway and leave the trees on the earthen dam - will those trees continue erosion of the earthen dam and will it essentially break apart- and if so, what does that do to downstream (debris)?
- Under the removal option, how far upstream will the water level remain lowered?
- Is it possible that removing the spillway might actually improve local flood protection, once wetland habitat and natural riparian buffers are reestablished post-removal?
- yes I have seen fish not able to get over the dam
- Please address the 60 foot Cheney Bridge and its effect on the Charles.
- About 1 mile above the dam at the Dover/Natick line, the river is only 1-2 feet deep. Would this become a stagnant area of mud impeding summer canoeing?
- Where would the sediment go?
- Do the estimated costs for the removal option include disposal costs for the concrete of the spillway and associated debris?
- Dam repair could be a wonderful picnic area and area for canoe entry and recreation
- please point out funding source comparison
- What fish species are likely to go upriver and can they do that even tho there are dams downstream?
- How is the recreational value affected by the options?
- This is an excellent presentation. Profound thanks to all of you involved!
- If the spillway is removed, How far up River will the level go down?
- Would there be an opportunity to generate electricity if the spillway remains?
- Will the plants, animals/fish etc benefit from removing the spillway?
- If the spillway were removed, would there be any impact to the aquifer?
- I canoe the Taunton River and there are zero dams. Beautiful and designated as a National Wildlife river. The Taunton River is the longest undammed coastal river in New England
- I think the property to the east that had access to this water power once was recently sold. does the owner have any say or position on this?
- What is the problem e are trying to solve by the earthen dam approach? The spillway approach, especially since it is in good shape?
- Alewife is the other fish
- Why is it necessary to remove the trees in the earthen approach?
- Thank you for presentation. To last slide "community impact" please add loss of esthetics if dam restored e.g. increased view of cars and traffic, lack of reflection from trees and increased reflection of ugly stone. Drone view highlights more grass than would be seen from ground level
- Can you elaborate on the vegetation that will grow in the upper stream area IF the spillway were to be removed? Will the vegetation become similar to a swamp and draw mosquitos?

- The recommendation seems to suggest the removal of the spillway approach as least cost, least impact, most new benefits achieved. However, this analysis does not account for the esthetic value of the spillway.
- What is the change in rivers momentum when the spillway is removed and the river becomes a straight shot versus a 90 degree North then 90 degree East as it is now?
- who "owns" the Dover Dam which is downstream between Dover Mill St and Needham?
- Will any homes that are not now in the national flood plain end up in the flood plain and thus require insurance by law?
- Has there been any consideration of some kind of compensation to riverside property owners for loss of river view and access?
- The view that I associate is from the north bank looking across the spillway to the dam. Do we have that to compare the before and after for the maintenance option?
- how about mosquitos
- Do home owners on the river currently need flood insurance ?
- Does either option affect the above question ?
- Is this a money issue for Natick or an environmental issue? In other words, if the cost was the same, what would be recommended?
- Excellent presentation.
- How will this decision be adjudicated?
- Re. Question about putting the reinforcement in the center of the eathen berm, even if you can't keep the trees, could you still put in the middle and hide the ugly stones? So it looks like a natural bank, even if it has no trees
- this has been. a very informative presentation - thank you!
- Please please consider the aesthetics of both options equally. Understanding that the spillway provides a beautiful scenery, please consider the beauty and ecological value of the no spillway option in the same way.
- "Please could we have another artist rendition from the ground level, not from drone level which shows unrealistic amount of grass and minimizes stone reflections in the water and the traffic.
- Thank you excellent presentation"
- Will new information be presented during the input sessions?
- Will the recording be posted?
- Thank you.
- Good job! Thank you!
- Excellent - thank you!

May 25-26 Community Input Sessions Summary

Charles River Dam Advisory Committee
May 25 and 26, 2021 (Virtual)
Summary

This summary was prepared by the Consensus Building Institute (CBI), a nonprofit entity contracted by the Town of Natick to facilitate the Charles River Dam Advisory Committee process. This summary is not intended to be a session transcript. Rather, it focuses on the main points covered during the two Community Input Sessions.

SESSIONS IN BRIEF

The Town of Natick held two (2) community input sessions on the decision before the Town regarding the future of the Charles River Dam in South Natick. Members of the public were invited to attend, listen to a brief review of the May 17 Public Information Session presentation, and share their thoughts, comments, and concerns in small groups. On May 25, 102 Natick community members attended, and 49 community members attended on May 26. **More information about this process and presentation slides and recordings from previous sessions are available on the Town's webpage: http://natickma.gov/crdam**

NEXT STEPS

- In addition to these live community input sessions, members of the public have the opportunity to share their thoughts, questions, and guidance with the Advisory Committee through an online survey, open from May 21 through June 20, 2021.
- The facilitation and planning team will be compiling and synthesizing all community input received through the May 25-26 sessions, the online survey, and questions shared during the May 17 Public Information Session into a public report.

WELCOME & OVERVIEW

Ona Ferguson, Facilitator from the Consensus Building Institute (CBI), opened the community input sessions, welcoming participants and reviewing the agenda, the broader Charles River Dam Advisory Committee process and timeline, and expectations for the community input sessions. She highlighted the opportunity for Natick community members to also share their input via an online survey, open from May 21 through June 20, 2021, and available on the Town's webpage: http://natickma.gov/crdam.

Participants responded to a quick, anonymous poll about their relationship to Natick and whether they had viewed, live or asynchronously, the May 17 Public Information Session.

	May 25	**May 26**
Relationship to Natick	• 89% were Natick residents • 11% were not residents but work or spend regular time in Natick	• 87% were Natick residents • 13% were not residents but work or spend regular time in Natick
Viewed May 17 Public Information	• 65% attended the May 17 Public Info Session live	• 37% attended the May 17 Public Info Session live

Session	• 15% watched the session recording • 21% neither attended nor watched the session	• 33% watched the session recording • 30% neither attended nor watched the session

REVIEW OF THE CHOICES

Prior to breaking into discussion groups, William McDowell, Town Engineer, provided an abbreviated version of the presentation shared at the May 17 Public Information Session. He reviewed the history of the Charles River Dam in South Natick, the regulatory constraints on the Town to make a decision on the future of the dam, and the two options that Natick must now choose between: repair and maintain the earthen dam or remove the concrete spillway. Mr. McDowell's presentation included comparative renderings of what the two options might look like and explored the engineering considerations behind both options as well as impacts related to flooding risk, ecology, finance, and community use. *Complete presentation slides from the May 17 Public Information Session are available to view and download here.*

LISTENING SESSIONS

Following the overview presentation, participants in each session were randomly organized into small, facilitated breakout groups to reflect on the following questions:

- What do you hope will happen in this part of South Natick and why?
- What do you see as important pros and cons of the two options?
- What else would you need to know in order to feel confident making a recommendation?

Discussion groups surfaced myriad questions and guidance for the Charles River Dam Advisory Committee to consider in developing recommendations for the future of the Charles River Dam. Key discussion threads included:

Impacts to the history and culture of an iconic attraction:

- The Charles River Dam is an iconic area of Natick. Many have personal ties and memories of that area including engagements, proms, weddings, family outings, and general recreation.
- Participants expressed different perspectives on how to best preserve the iconic nature of the area despite the aesthetic changes that come with either option. Some suggested pursuing the spillway removal option to allow the trees to remain, while others advocated for the restoration and maintenance of the earthen dam to preserve the spillway. One participant recommended the Town think of ways to preserve and honor the history of the dam if the spillway is removed (e.g., an art installation of water moving to represent the motion of the spillway or something auditory to represent the waterfall).
- Some named the importance of considering Indigenous perspectives about the history and potential future for the area.

Looking beyond Natick:

- Participants highlighted that decisions made in Natick about the dam would impact other Towns along the river. Many questioned whether removing the concrete spillway would create notable ecological benefits if there are still dams in other parts of the Charles River.
- Multiple participants requested case studies from other Towns that pursued dam removal to build a better understanding of what to expect under the spillway removal option.

- Participants from nearby Dover raised questions about potential impacts to groundwater, noting that Dover is on wells and has existing concerns about well viability.

Decision-making process considerations:

- Many participants shared frustration or confusion regarding the Town's options, questioning why this issue is just being raised now when there have always been trees on the dam, why change is truly necessary, and why the two options presented are the only potential solutions.
- One participant asked if the Town could consult with an additional outside engineering firm prior to making a decision.
- One asked if the Town had explored the low-head hydroelectric potential of the dam.

Hydrological impacts:

- While some shared an understanding from the May 17 Public Information Session that, under the spillway removal option, changes to flow, speed and depth of the river would not be sensible beyond the footbridge, many expressed a desire to better understand how both options could impact the flow and depth of the Charles River, up and downstream from the dam.
- Several people expressed concern about how either option would impact the pattern of a narrower, shallower river in the summer.
- Some questioned how changes to this area of the river could affect the nearby canal.

Ecological impacts:

- Many participants shared their desire to return the river to a more "natural" state through the spillway removal option, some citing benefits like habitat restoration (e.g., fish passage) and sediment distribution.
- Participants requested greater clarity about the phases of the spillway removal and restoration option, wanting a better understanding of what it could look, smell, and sound like. Concerns were raised about preventing invasive vegetative growth on the new land exposed by the shifting river and about the potential for increased mosquitos. One asked, "If the spillway was removed, how much of the restoration of the wetland would be active versus passive?"
- Some raised concerns about lack of shade and warmer water due to tree removal under the repair and maintenance option, with one asking if removing the trees could lead to warmer water and increased algal growth and potential toxicity/bacterial concerns.
- Regarding fish habitat, participants questioned whether either option would change the abundance of fish, or how spillway removal would truly improve fish passage and migration given that there are other dams in other parts of the river. Regarding bird habitats, participants asked how spillway removal could impact nesting of ducks and swans and how removal of the trees under the repair and maintenance option could impact birds nesting in the trees.
- A few asked how removing the spillway would impact potential erosion of the earthen dam.

Climate change and flooding considerations:

- Some participants raised questions about how climate change could impact this area, noting that increasing storm frequency and intensity should be factored into considerations of liability for repairing and maintaining the earthen dam. One participant asked about potential impacts of storm surges from the spillway removal option.

- Many participants said that they learned from the presentation (and often to their surprise) that the dam had not and does not serve as a flood control structure. For others, flood risk concerns remained an important topic. For example, one participant recommended that the Town learn from its history, referencing the book *Natick (Images of America)*, which shows images of the Town prior to the creation of the dam. These images sparked discussion about water levels, river flow prior to damming, impacts to the water level should the spillway be removed. Participants named the importance of better understanding impacts to downstream properties under both options, especially the potential for flooding.

Recreation and community use impacts:

- Participants highlighted the opportunity this process creates for the Town to consider how to comprehensively plan and improve the recreational and community uses of the entire area (e.g., considerations of a river walk, boat launch, skating rink, basketball court, etc.).
- Some participants highlighted the importance of preserving the "waterfall" element and associated sounds currently created by the spillway.

Abutting land/landowner considerations:

- Multiple participants cited concerns about how this decision could impact property values and experiences of those living along the river. Regarding the spillway removal option, one participant noted, "The land or swamp that is going to grow outside of my backyard will attract mosquitos and smell like mud and ruin my experience of living on the river. That's why we bought the home, that's the attraction of living here." Another raised the question of noise impacts to abutters from traffic and the park should the trees be removed through the repair and maintenance of the earthen dam option.
- Under the spillway removal and river restoration option, participants asked who would own the newly created land, and what that would mean for recreation and restoration activities. One asked about how easements, or river access, could be impacted by the removal of the spillway.
- Multiple participants highlighted that the Advisory Committee should convene abutting property owners to directly hear their thoughts on the decision facing the Town. The Bacon Free Library and the Historical Society were also named as important voices.

Risk, liability, and financial considerations:

- Many commented that the spillway removal option appeared to be less costly to the Town in the short and long term, including considerations of financial liability to the Town. Some asked for a better understanding of what the costs of liability and risk are to the Town now and how those could change moving forward, should the earthen dam be repaired and maintained.
- Participants requested greater clarity into how cost estimates were reached for both options – what the estimates entail (e.g., design, permitting, construction, etc.) and the potential sources of funding to subsidize the costs. Participants asked about additional funding sources, like federal and other grant monies, the Town could consider for covering the cost of this decision. One specifically suggested pursuing state funds from the Department of Conservation and Recreation.
- Many raised the importance of understanding the potential costs of creating and maintaining new public recreation land in this area, not just the costs of construction and maintenance of either option regarding the dam.

Due to high attendance at the May 25 session, an online poll was used to capture participants' thoughts following small group discussions. Participants were asked to share additional information the Advisory Committee should consider regarding flooding, financial, ecological, and community use impacts. The results of that poll are shared in the appendix, below.

NEXT STEPS

Ona Ferguson, CBI Facilitator, closed the sessions with a brief review of the next steps in the Charles River Dam Advisory Committee process, noting that the facilitation team would compile and synthesize the community input shared in both the May 25 and 26 sessions and the online survey. She highlighted that this community input, as well as the questions asked in the May 17 Public Information Session, will be used to shape the work plan of the Advisory Committee, as it works to address knowledge gaps, engage with experts and stakeholders, and develop recommendations for how the Town should proceed with the future of the Charles River Dam in South Natick. She invited those in attendance to share widely the opportunity for community members to share their opinions through the online survey, open through June 20, 2021. Ms. Ferguson thanked participants for their engagement and input, encouraged their future engagement in the Charles River Dam Advisory Committee process and closed the meeting.

APPENDIX: MAY 25 ONLINE POLLING RESULTS

What is important about Flooding Impacts? What additional information should the Advisory Committee consider?		
Responses	**Upvotes**	**Downvotes**
Given the large significant dams down stream, how would removing the spill way restore river ecology?	9	1
We need additional engineering solutions that provide other options to keep the dam without clear cutting the trees.	5	6
For spillway removal option, would the dried up river area function as a flood plain and provide some flood control.	4	0
I like the elimination of risk of failure of the dam (by removing it).	4	1
Flooding will only worsen the tremendous cost of restoring the earthen dam.	4	2
With a 6 foot decline in river height, how many feet of wetland would be added upstream on the banks of the river?	3	0
What would be the impact to Millbrook / canal area?	3	0
The risk needs to be QUANTIFIED as opposed to a subjective assessment.	3	2
how far upstream do we believe water level will be compromised?	2	1
At Conservation Commission meetings, Bill mentioned that the dam gates are currently broken, but if repaired could provide some flood control. i.e. impoundment area could be lowered before big rain, then allowed to fill up during the rain. How much flood control would this provide?	2	3
Can the Town add to the earthen dam, on the up stream side to mitigate the issue of tree roots?	1	1
Does Elm Bank/Mass Hort have any role in this decision given the close proximity? Any impact on Elm Bank?	1	1
Will removal reduce or increase velocity of the river? Will this effect ground water ? Well s like elm bank?	0	0
Do the cost estimates include all of the landscaping funding?	0	0
What is important about Ecological Impacts? What additional information should the Advisory Committee consider?		
Responses	**Upvotes**	**Downvotes**
Are there ecological advantages to the impoundment area that will be eliminated with a removal of the dam?	5	1
If the trees are removed there be additional sound and pariticle pollution that are currently buffered by the trees.	2	0

Will the Town hire a construction firm that has experienced with dams or will the Town do the engineering? For either option, should we not hire a firm with the expertise to do the work?	2	1
How well do modern fish ladders work?	1	3
Restoring the river would benefit more species than we are aware of. Exposed areas under the breached Knight Carpet Factory Dam in Saxonville (the marsh near the north entrance of the Cochituate Rail Trail) has become an incredibly diverse natural area, despite its industrial history and development	0	0
I would like to see a professional assessment of the ecological impacts especially in regards to fish..	0	1
Will the Town hire a construction firm that has experienced with dams or will the Town do the engineering? For either option, should we not hire a firm with the expertise to do the work?	0	0

What is important about Financial Impacts? What additional information should the Advisory Committee consider?

Responses	Upvotes	Downvotes
Removing the dam is more financially responsible for the Town.	6	4
Does the cost of the removal include any landscape restoration?	6	1
What is the chance of a catastrophic dam failure? Is there insurance for this?	5	0
Consider the Present Value of $1.2 million in 90 years.	5	0
The NY Regis dam removal carefully timed the draw down and spillway removal to give the decades long dormant seeds maximum growing season. Is that something we should consider if we go for dam removal?	4	0
Has the PCB levels in the sediment been addressed if spillway was to be removed?	4	0
If there is a grassy area, then how is there a $0 cost?	1	0

What is important about Community Use Impacts? What additional information should the Advisory Committee consider?

Responses	Upvotes	Downvotes
If we repair the dam, please could we add loss of beauty to this list? I was told "It will not be pretty, it is going to be like the side of a highway" The traffic is a lot closer to the river than people realize, and one underestimates the loss of reflections that make this area so beautiful.	10	1
If the earthen dam were cleared, there would be no shaded recreational areas. I think this is important during the summer.	6	0
Boating access is important to me. We should maintain a boat put-in. Ugliness of seeing traffic and parking if trees are removed is also a big concern to me. The daily traffic on the bridge is really bad in afternoons, especially during baseball season!	4	0

Is more study required/possible to determine water depth in lost pond area and canoe navigability? … Will it be possible to launch canoes?	4	0
What can be planted on the new dam if we remove trees? Will it just be grass or can there be gardens, flowers, etc?	2	0
We need assurances that the half mile above the dam will be passable by canoes and kayaks and not blocked by rocks, cascades, and shallow areas. The 100 yards downstream of the Pleasant St. bridge is too shallow to pass currently, and I assume that would stay the case.	2	0
Can the Town add land upstream of the earthen dam? Is that an option? Would it mitigate the tree root issue?	1	0
Will the newly lowered section be white water (or for what portion of year)? Rocks sound nice but they are dangerous for inexperienced canoeists. This is part of the most natural part of the River from Medfield to Elm Bank. It is a gateway 'drug' for introducing conservation to greater Boston.	1	0
Can a video rendering be made so people can have a better understanding of what the area will look like and sound like for both options?	1	1
Would the riprap eliminate the ability to take a canoe/kayak in or out of the river by the earthen dam?	1	0

Community Survey Synthesis

In addition to the May 25-26 Community Input Sessions, members of the public had the opportunity to share their thoughts, questions, and guidance with the Advisory Committee through an online survey that was open from May 21 through June 20, 2021. The following is a high-level synthesis of the survey responses received. In total, 455 individuals responded to the survey, and the below synthesis indicates the number of responses per question.

DEMOGRAPHIC INFORMATION

Q: What is your relationship to Natick?

Of the 455 individuals who responded to the survey, 455 responded to this question.

Response	% of Respondents	# of Respondents
I'm a Natick resident.	88.13%	401
I'm not a Natick resident; I work or regularly spend time in Natick.	7.69%	35
I'm not a Natick resident; I do not work or regularly spend time in Natick	0.44%	2
Other (please specify)	3.74%	17

Q: If you are a Natick resident, in which precinct do you reside?

Of the 455 individuals who responded to the survey, 388 responded to this question.

Precinct	% of Respondents	# of Respondents
1	1.03%	4
2	4.64%	18
3	4.38%	17
4	7.99%	31
5	10.31%	40
6	7.99%	31
7	8.76%	34
8	8.25%	32
9	10.82%	42
10	35.82%	139

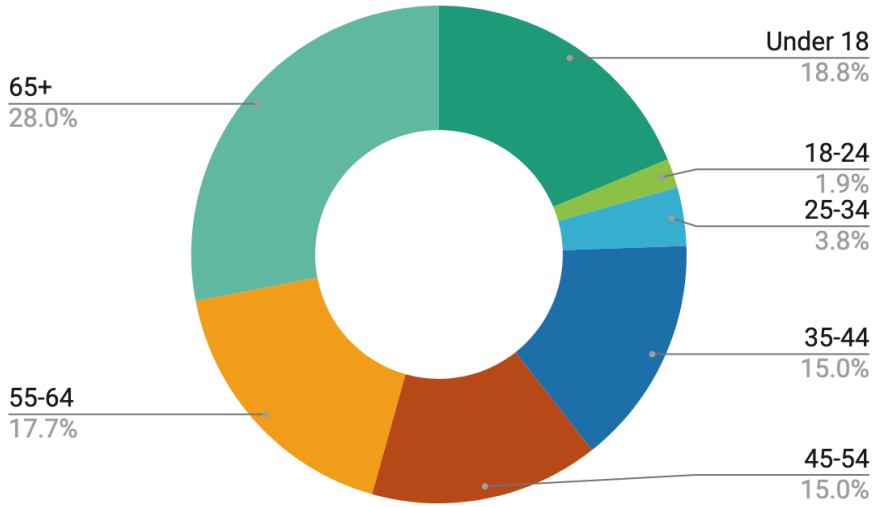
Q: If you are not a Natick resident, what Town do you call home?

Of the 455 individuals who responded to the survey, 32 responded to this question.

Town or State	# of Respondents	Town or State	# of Respondents
Dover, MA	13	Needham, MA	1
Wellesley, MA	3	New Hampshire	1
Holliston, MA	2	Sharon, MA	1
Ashland, MA	1	Sherborn, MA	1
Brookline, MA	1	Upton, MA	1
Cambridge, MA	1	Waltham, MA	1
Florida	1	Wayland, MA	1
Hudson, MA	1	Wrentham, MA	1
Maspee, MA	1		

Q: What is your age?

Of the 455 individuals who responded to the survey, 368 responded to this question.



Q: Did you attend the May 17th public information session?

Of the 455 individuals who responded to the survey, 383 responded to this question.

Response	% of Respondents	# of Respondents
Yes, I attended live.	21.67%	83

I did not attend live, but I have watched the session recording.	34.46%	132
No, I did not attend or watch the session recording.	43.86%	168

THOUGHTS ON THE TOWN'S OPTIONS

Q: What does this area of South Natick mean to you? What is important about this place?

Of the 455 individuals who responded to the survey, 339 responded to this question.

It is clear from the survey responses that this area of South Natick is very important to the community. Many individuals noted that the dam and spillway are well-known and iconic landmarks in the Town. For many residents, this area of South Natick represents the character and values of the Town of Natick. Located near the Bacon Free Library, Elm Bank, and several other local establishments, the dam is a popular attraction and respite for a diverse range of residents and visitors. While this area is important to many people for different reasons, natural beauty, history, serenity, and community were some of the most important aspects of the dam among survey respondents.

- **Natural Beauty:** The beautiful nature and scenery near the dam was mentioned more than anything else about the area (114 times). Many people shared that they enjoy the picturesque views near the dam, whether they are driving by, walking through, or spending time in the park. Several individuals noted that the location is charming and a popular place to take wedding, family, and graduation photos. The views of the river, trees, spillway, wildlife, and people were all mentioned as beautiful things about the area.
- **History:** Second most mentioned in survey responses was the historic significance of the area, river, and dam (62 times). Several responses emphasized the importance of the area as it is ancestral land for Indigenous people, where Massachusett, Nipmuc and Natick Praying Indians lived and continue to live. Other responses mentioned the history of the Town as a settlement and the dam's origin and use for milling.
- **Sense of Home:** Fifty-five (55) responses mentioned that this area of South Natick is where they grew up and/or currently live. Many people have lived near the area for a very long time and have happy memories of the river, dam, and park. Several individuals shared that they have spent a lot of time in the area with family members. For many residents, this area is where they call home.
- **Serenity:** Fifty-four (54) responses discussed how the area is a place where they find serenity, relaxation, peace, and calm. Several people noted how the sound of the water drowns out noise from nearby roadways which helps create a sense of peace and quiet. Several people mentioned that the peace and quiet allows people to enjoy sitting, walking, meditation, and yoga on a regular basis.
- **Nature and Wildlife:** In addition to the aesthetics and ambiance that people find in the area, the opportunity to connect with the natural environment is an important aspect of

the area. Forty-one (41) individuals mentioned the importance of connecting with nature and seeing wildlife in the park and in the river. Experiencing the changing seasons and seeing herons, fish, birds, and other wildlife are some of the things people love about the area.

- **River Access and Recreation:** Thirty-six (36) survey respondents discussed the importance of river access and recreation. Several mentioned that the area provides an important access point to the river for recreational purposes. In addition to being an access point, many mentioned that the area is also a destination in and of itself for people kayaking, canoeing, and fishing.
- **Gathering Place:** Many of the survey responses highlighted the importance of the area as a community gathering place. People who spend time in the park are often with friends and family. Group activities like taking walks, fishing in the river, and picnicking in the park are incredibly important and meaningful for some. Other individuals feel like the area provides an opportunity to see neighbors and other people which cultivates a strong sense of community.

Q: Do you have any specific thoughts or questions related to the Repair & Maintain the Earthen Dam Option? What are the pros and cons of this option?

Of the 455 individuals who responded to the survey, 267 responded to this question.

Survey respondents shared many thoughts and questions related to pros and cons of the Repair & Maintain the Earthen Dam Option. The following lists include the most common survey responses:

Pros of the Repair & Maintain the Earthen Dam Option:

- Maintains the sights and sounds of the spillway
- Maintains beautiful, relaxing, and charming aesthetic of the area
- Improves and preserves the historic and iconic structure
- Maintains the pond above the dam
- Reduces risk of dam failure
- Will continue to be a popular fishing attraction
- Allows for the creation of a new open space park with opportunities for recreation, picnicking, community events, and fishing

Cons of the Repair & Maintain the Earthen Dam Option:

- Significantly higher initial costs as well as ongoing maintenance costs
- Requires eliminating the tree canopy and removing all existing trees on the earthen dam
- The Town maintains liability for future repairs
- Requires unsightly riprap that prohibits people and wildlife from approaching the river's edge
- Boaters still need to get out of their boats and walk around the dam
- Continues to disrupt the river ecosystem and impede fish migration
- Does not eliminate flood risks

- The new park could increase traffic in the area of Pleasant Street
- Increased water temperatures
- Greater likelihood of toxic algae growing

Questions regarding the Repair & Maintain the Earthen Dam Option:

- Could a boat launch be integrated into the riprap?
- Could the dam be retrofitted as a small-scale hydroelectric facility?
- Will you add native plants to the new park to offset the lost carbon sink effects of the trees?
- Does any entity have rights to the raceway that was built to divert water from upstream of the dam to 22 Pleasant St. Property? Could this be a source of litigation?
- Why has the Town of Natick ignored dam maintenance for decades?
- What is the root structure of the existing trees?
- Why isn't limited tree planting possible?
- Is the dam part of the John Eliot historic district?
- Would a partial lowering of the spillway (e.g.,. 1 foot) reduce the risk of flooding?
- Why were the trees allowed to grow for so many years if they were not allowed?

Q: Do you have any specific thoughts or questions related to the Remove the Concrete Spillway & Restore the River Option? What are the pros and cons of this option?

Of the 455 individuals who responded to the survey, 275 responded to this question.

Survey respondents shared many thoughts and questions related to pros and cons of the Remove the Concrete Spillway & Restore the River Option. The following lists include the most common survey responses:

Pros of the Remove the Concrete Spillway & Restore the River Option:

- Substitutes natural beauty for man-made beauty, which many found appealing
- Preserves the existing trees and the character of the earthen dam, and maintaining trees would maintain their shade cover and carbon sequestration benefits
- Creates opportunities for ecological restoration and improvements to natural habitat for animals, plants, birds, and fish, including removing a barrier to fish migration
- Avoids riprap construction along the river present in the Repair & Maintain the Earthen Dam Option
- Eliminates the Town's liability for ownership and maintenance of a dam structure and eliminates the risk of catastrophic dam failure
- Increases the width of the floodplain, which could help increase resilience of the area to storms and flooding
- Reduces the likelihood of future algae blooms during warm weather when low water is standing behind the spillway
- Appears less costly in both the short and long term to taxpayers
- Reduces the need for portage, creating 41 miles of connected river

- Creates the opportunity for more parkland along the riverside and opportunities for nature-based observation and recreation

Cons of the Remove the Concrete Spillway & Restore the River Option:

- Changes the character of South Natick by altering an important landmark and part of Town history, potentially impacting tourism
- Cannot really restore the river or "rewild" it, as the Charles River has been permanently altered by human development, pollution, and the presence of other dams up and downriver
- Results in the Town losing the impoundment area (the pond-like area), the waterfall, and the resulting soundscape/ambiance
- Creates potential for newly exposed land to become muddy banks or grassy swamp-like land. Concerns raised about the smell and aesthetics of the newly exposed land, especially for abutting property owners. Without proper maintenance, newly exposed land could be overrun by invasive species
- Creates a potential tax burden for upstream landowners through newly exposed land as well as other potential legal complications for the Town
- Raises concerns about how narrow the river will become and how deep the water will flow, especially during low water or drought conditions
- Raises concerns about potential need to armor or reinforce the Pleasant St. Bridge to withstand unimpeded river flow
- Creates potential loss of south side access, per existing renderings

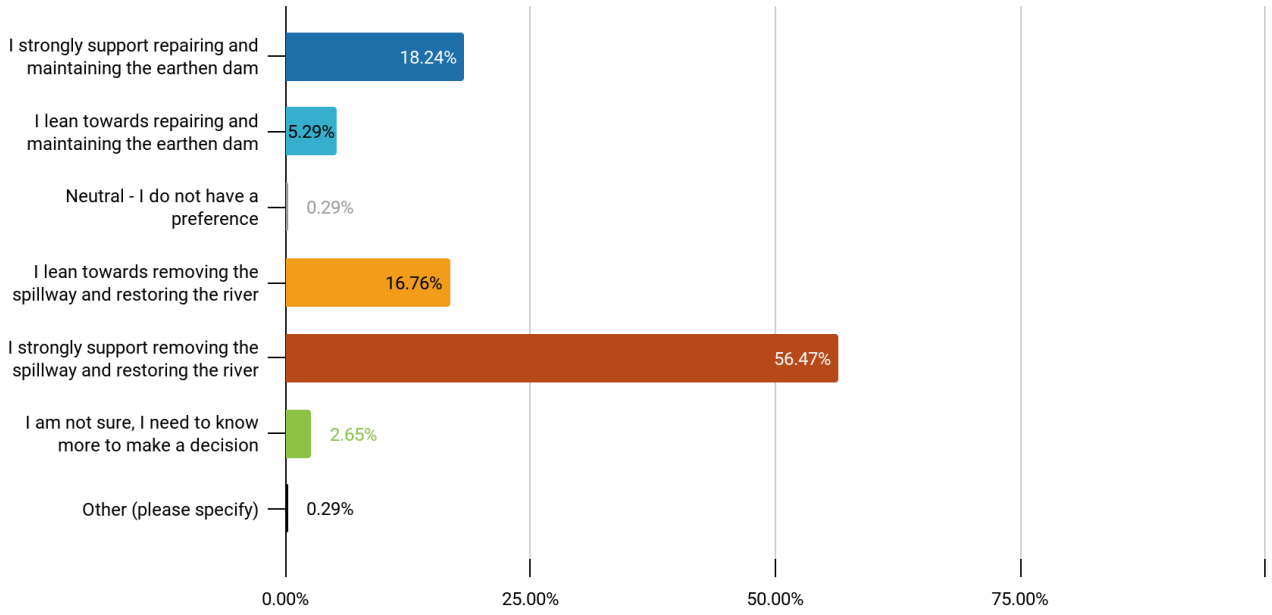
Questions regarding the Remove the Concrete Spillway & Restore the River Option:

- How would this option impact the flow of the Charles River and the deposition of sediment? Are there really no flooding impacts? There are residents who believe that the threat of river flooding will increase without the spillway. Should residents on either side of the dam be concerned about significant changes in flow?
- What will the conditions be outside of the windows of abutters?
- Will there be sufficient depth to allow for recreation activities (e.g., small craft navigation)?
- Have abutters been consulted? How could the restoration process impact their river access and property values?
- Have Indigenous representatives been engaged on this decision?
- Could the existing spillway be decommissioned in a way that makes it a unique recreational resource? What could spillway removal mean for the recreational area on the south side of the dam? Could we arrange for a riverside walking path on the newly reclaimed land? How will removing the spillway impact access to fishing areas and the water level at those sites?
- Greater clarity is needed on the restoration process for the newly uncovered land. Would the land be topped off with stones, sand, etc.? Would this process be done at the best time to repopulate the land with original, dormant species? What native species will be introduced and how will that effort be managed and funded? Could the Native Plant Trust in Framingham be a resource for revegetating?

- Could such a restoration project include a cultural component that heightens attention to the history of Indigenous populations and recognizes their continued presence in the region? This could take the form of additional signage, etc. in partnership with the Historical Society.
- What is the estimated sound level of the river? Could part of the loss of losing the waterfall be mitigated by installing rock riffles and planting native species along the smaller river bed to foster an attractive natural habitat?
- There is interest in seeing a more detailed financial comparison of both options as well as exploring how much of this work could be funded from state and federal grants and whether additional grant funds are potentially available for an ecological restoration project that improves river access up and/or downstream. Questions raised about how to fund the restoration and maintenance of newly exposed land.
- Who would handle the implementation of either option? How would contractor expertise be assessed?
- Why are there only two options being considered? Is there an opportunity for consulting a secondary engineering firm?

Q: Given what you know today, if you had to make the choice for the Town, which statement resonates the most for you?

Of the 455 individuals who responded to the survey, 340 responded to this question.



Response	% of Total Respondents	# of Total Respondents
I strongly support repairing and maintaining the earthen dam	18.24%	62
I lean towards repairing and maintaining the earthen dam	5.29%	18
Neutral - I do not have a preference	0.29%	1
I lean towards removing the spillway and restoring the river	16.76%	57
I strongly support removing the spillway and restoring the river	56.47%	192
I am not sure, I need to know more to make a decision	2.65%	9
Other (please specify)	0.29%	1

The above trends are fairly consistent when filtering responses by residents living in Natick, those who viewed the May 17 Public Information Session (live or recorded) prior to responding, or those under or over 35 years of age. A quick breakdown of responses by some of the different types of respondents is below.

	Location of Respondents		May 17 Public Info Session		Age	
Response	# living in Natick	# not living in Natick	# who viewed the Session	# who did not view the Session	# under 35 years old	# over 35 years old
Total # of respondents	*308*	*19*	*196*	*144*	*83*	*249*
I strongly support repairing and maintaining the earthen dam	56	5	37	25	4	57
I lean towards repairing and maintaining the earthen dam	16	1	10	8	1	17
Neutral - I do not have a preference	1	0	0	1	1	0
I lean towards removing the spillway and restoring the river	52	2	25	32	16	40
I strongly support removing the spillway and restoring the river	175	9	116	76	60	127
I am not sure, I need to know more to make a decision	7	2	7	2	1	7
Other (please specify)	1	0	1	0	0	1

THOUGHTS ON THE DECISION-MAKING PROCESS

Q: Do you have any suggestions or concerns regarding this decision-making process?

Of the 455 individuals who responded to the survey, 161 responded to this question.

Seventy-one (71) individuals responded that they had no concerns or suggestions. Several of those respondents shared that they were pleased with the process and grateful for the variety of opportunities for public involvement.

Several key themes emerged from the suggestions that were shared about the decision-making process:

- Sixteen (16) responses advocated that the decision-making process continue to be transparent and provide residents with many opportunities for education and community input.
- Eight (8) responses proposed making the decision by popular vote. Others recommended that the final decision should be made by the Town committees involved in the Advisory Committee or the Select Board.
- Seven (7) responses suggested that the Town further evaluate the potential impacts of both options to fish, wildlife, nearby property, roads, and structures.
- Seven (7) responses suggested increasing public outreach and finding new ways of getting residents involved (e.g., posting informational signs near the dam to ensure that all residents are aware of the process and are given the chance to share their input).
- Several responses suggested that the decision be fact-based and focused on the future environmental and economic benefits of both options.
- Other suggestions included the following:
    - Present more information about the financial costs of the alternatives
    - Evaluate more than two alternatives
    - Hire outside civil engineering consultants
    - Wait to finalize any plans unless amenities are included and agreed upon
    - Engage Natick's Indigenous residents in the decision-making process
    - Create a memorial or some sort of other tourist attraction that makes the river look better if the spillway is removed
    - Provide safe and convenient launching areas for canoes, kayaks and paddleboards on the Charles River

Among the concerns that were raised, the following were the most common:

- Four (4) respondents mentioned their concern that the decision has already been made by the Town and that residents do not actually have a voice in what they see as a biased process.
- Four (4) respondents expressed concern that emotional sentiments will outweigh facts and what is best for the future of the area.
- Three (3) responses included concerns with the Town's ability to maintain Town property and infrastructure.

Q: Do you have any advice for the Advisory Committee as they embark on this process?

Of the 455 individuals who responded to the survey, 158 responded to this question.

While many individuals responded with advice and suggestions that echoed their responses to Question #13, the responses included a wide range of suggestions and considerations for the Advisory Committee. Fifty-one (51) individuals had no advice for the Advisory Committee.

Ensure a Transparent and Balanced Public Engagement Process:

- Seventeen (17) responses included advice and suggestions related to the decision-making process.
- Respondents asked Advisory Committee members to consider and ensure transparency, frequent communication, outreach to abutters, consideration of residents' input, widespread education, equity, and increased publicity of the process.
- Five (5) individuals requested a public vote to determine the final decision.
- Four (4) others expressed hope that Advisory Committee members would keep an open mind as they evaluated public input and the alternatives for the dam.

Consider Financial Costs:

- Ten (10) responses advocated for strong consideration of the financial costs that this project would have to the Town, including future and hidden costs.

Think Long Term:

- Seven (7) responses included requests that the Advisory Committee keep the long-term future of the Town and river at the forefront.

Find Case Studies:

- Four (4) people suggested the Advisory Committee research and present comparison case studies of river restoration projects in other Towns that have tourism around non-motorized boat access points.

Additional suggestions were shared by one or two individuals including:

- Explore additional alternatives and conduct additional research
- Gather and present more information about the costs
- Evaluate more alternatives
- Beware of misinformation and provide more education around the existing issues with the dam
- Build historical monuments in the area commemorating the history of dams in Natick
- Do whatever is best for the natural environment
- Develop renderings to show the public what the proposed future would look like for each alternative
- Seek federal funding

Several responses shared their preference between the two alternatives being considered.

APPENDIX: COMMUNITY SURVEY QUESTIONS

A Little Bit About You

- Your Name (optional):
- *What is your relationship to Natick? *Response options:*
    - I'm a Natick resident.
    - I'm not a Natick resident; I work or regularly spend time in Natick.
    - I'm not a Natick resident; I do not work or regularly spend time in Natick
    - Other (please specify)
- *Based on responses to the above, respondents were filtered to one of the following questions:*
    - * In which Natick precinct do you reside?
    - * What town do you call home?
- Your Age: *Response Options*
- What does this area of South Natick mean to you? What is important about this place?
- How did you learn about this survey and/or public engagement sessions?
- * Did you attend the May 17th public information session? *Response options:*
    - Yes, I attended live.
    - I did not attend live, but I have watched the session recording.
    - No, I did not attend or watch the session recording.

What Are Your Thoughts on the Town's Options?

- Do you have any specific thoughts or questions related to the Repair & Maintain the Earthen Dam Option? What are the pros and cons of this option?
- Do you have any specific thoughts or questions related to the Remove the Concrete Spillway & Restore the River Option? What are the pros and cons of this option?
- * Given what you know today, if you had to make the choice for the town, which statement resonates the most for you? *Response options:*
    - I strongly support repairing and maintaining the earthen dam
    - I lean towards repairing and maintaining the earthen dam
    - Neutral - I do not have a preference
    - I lean towards removing the spillway and restoring the river
    - I strongly support removing the spillway and restoring the river
    - I am not sure, I need to know more to make a decision
    - Other (please specify)
- Can you please explain your reasoning?

What Are Your Thoughts on the Decision-Making Process?

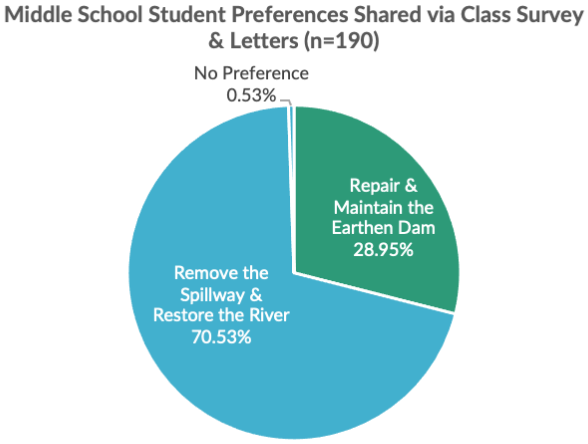
- Do you have any suggestions or concerns regarding this decision-making process?
- Do you have any advice for the Advisory Committee as they embark on this process?
- Do you have any additional thoughts to share?

Natick Middle School Student Input

As part of the public engagement process, the Town worked with Natick Public Schools to connect with local science teachers. As a result, 7th and 8th grade students at Kennedy and Wilson Middle Schools spent time learning about rivers, reviewed the project, and hosted virtual Q&A sessions with the Advisory Committee. As part of an assignment, many students sent the Advisory Committee letters with recommendations and/or completed the public input survey. Over 200 middle school students from four different classes shared their thoughts on the future of the South Natick Dam and Charles River in various forms:

- The first class of students submitted their input using the public survey and their responses are included in the survey question summaries.
- Sixty-nine (69) students from another 8th grade class shared their input using a different survey set up by the class teacher.
- One hundred twenty-two (121) students from two other classes provided feedback via written comment letters addressed to the Charles River Dam Advisory Committee.

Many students indicated that they had spent several weeks conducting research about the future of the South Natick Charles River Dam and submitted several paragraphs of written comments. All but one of the 190 students who shared feedback via a class survey and comment letters indicated a preference for the two options being considered, repairing and maintaining the earthen dam vs. removing the spillway and restoring the river.



One hundred thirty-four (134) students would like to see the spillway removed and the river restored. Several common reasons emerged from their comments:

- The cost to remove the dam is significantly lower than other alternatives.
- Restoring the river would improve the environment and save the trees currently on the dam.
- Removing the dam would benefit wildlife that live in the trees as well as the fish in the river.
- Restoring the river would be better for people in kayaks and canoes.

- Removing the dam would reduce the risks of dam failure and severe flooding.

Fifty-five (55) preferred to repair and maintain the earthen dam. Many shared similar reasons to explain their preference:

- The dam is historic and represents the long history of Natick.
- The dam is very important to many people in the community.
- The spillway and views are beautiful.
- Many people have happy memories of the area, and it is a nice place to spend time.
- Removing the trees on the dam would create a nice field with more sunlight.
- Fishing in the pond is important.

Overall, the comments and suggestions from students were thoughtful and focused on the future that they would like to see for the area. The quotes below represent some of the major viewpoints shared by Natick middle schoolers:

"The South Natick Dam on the Charles River should be removed because it will help the environment, reduce costs, and get rid of all the risks. Without the dam, fish can be more safe, trees can keep growing, and we can enjoy the natural beauty of the scenery. It should always be the first priority to make sure our environment is safe. By using less money on this project we can also focus on other things we can renovate and use money to make those things happen. Using money wisely is also important here. Renovative the dam won't greatly impact the river in a good way, so why spend a million bucks on it? And lastly, by getting rid of the risks we will be ensuring people who live close to the river a better and safer place to live."

"The upsides of removing the dam outweigh the downsides. Some good reasons for removing the dam are to allow access for local wildlife, saving 60 trees on the bank, and removing the risk of dam failure and catastrophe. Also while looking at photoshopped pictures of no dam, we realized the spot still looks nice and it wouldn't make that much less visually appealing. In addition to all this, the removal of the dam would be much less expensive, and would remove all costs of maintenance. These are some of the reasons that we think the town should remove the spillway."

"I believe that we should restore the dam because it is historical and it is an area where people calm down and relax. The dam is an historical part of South Natick. It has been there forever and even though it costs more money to fix it, I believe that we should restore it. The dam is also an area where some people go to relax. If the dam was removed then it wouldn't have the same effect of relaxation on people. Even though it does cost more it is very important to the people of South Natick."

"Do whatever you want, but if you remove the dam, then I would suggest preserving the dam either on display in a nearby museum, or on display in the new park. As long as the memory and history is preserved, then I am content with whatever outcome is selected."

Additional Written Comments & Letters Received

In addition to participation in the May 17 Public Information Session, May 25-26 Community Input Sessions, and the online community survey, staff also received additional written comments and letters to share with the Advisory Committee. Please see the below table for a compilation of additional written comments received over email during this round of community engagement. (Comments have been anonymized.) Following the table, two letters directed to the Advisory Committee are included as attachments.

Date	Comment
May 3	I have some questions that I expect will be covered anyway, but in case not: 1. We are neighbors down-river from the dam. What is the estimated risk of flooding to us under both options for the dam (repair vs decommission presumably) short and long-term, and in the event nothing at all were done and trees began to fall on the berm, compromising the integrity of the dam? 2. What are the environmental considerations for each option for the dam? Is there a recommendation for the best environmental outcome for the dam? 3. What is the projected cost of each option? 4. What will happen to the land that will be exposed if the dam is decommissioned? Who will own it? What are possible uses? 5. If the land opened up next to the property of what is now a riverside resident will not belong to them, is there some compensation possible for their loss of river frontage, and a way for them to continue to have river access? 6. When will the full report, which has not apparently been released to the Charles River Dam Advisory Committee, be made available to them and to the public?
May 10	Here is an artists rendition of what the area will look like. The Youtube could be shortened but it is pretty bleak. It would be good if it could be shared. Someone picnicking on the opposite side to the the wooded dam area would be seeing this. https://youtu.be/Mtu7bFnfZhA   
May 17	Meeting information indicates that there are two options, repair or breach the dam. Is it possible to also consider improving the dam and surrounding area for future generations?

May 17	My name is XXX and live at XXX which directly abuts the river above the dam. I am unable to attend tonight's meetings due to work travel, but XXX will attend. Many of these questions may likely be answered during the informational presentation and I will review the recorded presentation when available. A major concern is any loss of the pond area above the dam turning the area into a swamp like state which will eventually fill with vegetation and obscure the scenery present today. It will also develop foul odor and breed more mosquitoes. People will also be able to walk behind houses where the water has receded reducing privacy. The dam is one of if not the most beautiful places in Natick, a draw to countless visitors annually and it would be a shame to change its current beauty. Questions for consideration: 1. In place of trees removed, may flower gardens and select growths be utilized to provide ascetics while not threatening the dam structure? 2. Why are there only 2 options? What other options were considered and eliminated? 3. Given President Biden's plan to fund infrastructure across the nation and with agreement from politicians from all sides that roads, bridges and dams are infrastructure, is there an option to delay this effort to see if federal funding can be obtained to develop a better solution for Natick? 4. Have there been any efforts considered to effect diversion of high waters below the dam to protect life and property and can you elaborate? 5. Does the new repair change the current flow rate or allow for changes in flow rate to manage high water flow? 6. Do flooding concerns extend beyond the Water street area? 6. If repairs/modifications reduce Mill pond in size or volume, what effect does it have on abutters and their ability to utilize any land formerly under water?
May 18	while reading the community news section of the boston globe recently, i saw the note ref your river dam question & requesting imput. even tough i'm from out of Town, i enjoy a regularly flowing river in place of a dammed river. several Town around me in the past few years, have decided to remove some dams, and the results are very nice, a lot more pleasant than a stopped up river, andover has taken out the dam by the post office for example. so, i [even i'm out of Town] vote to remove the dam
May 20	I have some questions and comments about the proposed dam removal, couldn't find a way to submit these to the Committee directly so I'm routing them through you. 1. How far upriver does the current impoundment reach? 2. If the dam is removed, what are the predicted water level changes at various points in the upriver impoundment - say, at Bridge Street.

	3. Has the Committee considered adding a fish ladder/passage to the existing structure (in the retain-the-dam option)? 4. Does the restoration plan include planting native plants on the newly exposed riverbanks, or simply hoping for natural re-colonization? I would also strongly urge that a formalized canoe landing be included in the final plan.
May 21	I am a resident of the Phillips Pond community which abuts the Charles River in South Natick.. We are a community of 27 homes. How will the removal and /or repair of the dam change the river and /or embankments where we are? Our community is very concerned.
May 25	I am considering the two options for the dam, and while breaching the dam seems more cost effective, I would like to see some monument, maps, and informational kiosks put up in the Charles River Park explaining the historical significance of Dams and Mills in Natick, the story behind the creation of the 1938 dam, and artists renderings of the Charles River in 1900, today, and 100 years in the future. The kiosks could also serve as an explanation as to why the Town decided to remove the dam. I'm afraid that without something supplemental like this, breaching the dam would be a net loss for the community. Could my compromise suggestion be considered?
May 25	If the spillway is removed then the river will return to its original water level, which was estimated to be 6 feet lower than current level. Will lowering the water have any impact on the water table upstream ? Particular interest are the homes and Towns that draw well water from Charles River..
May 25	Lived in so natick off and on for years. The dam if it isn't too costly would so be worth saving part of the charm fascinating , great to listen too I know it's about cost !! A big consideration !!!!! There must be a way I would think that totally removing and have it be a flowing river would be very costly also
May 25	Thank you for taking questions for tonight. At the last presentation, I wanted to confirm that the engineers were emphatically stating that removing the dam would only affect the river depth up to the foot bridge. We live about a mile up on the natick/dover line where the river is only 2-3 feet deep in the summer. Would removal really not lower this area more?
May 26	How will a project to fix or remove the South Natick dam affect the river and its embankment along Phillips Pond expanse?
May 26	• Why are there only the two options for the dam situation of repairing or removing? Why aren't there other options such as to repair and improve like perhaps adding a kayak ramp? • Why are there so many non-Natick residents on the committee? • How is it that the dam has not been maintained adequately with the result we are faced with removing the dam rather than just repairing as a normal course of Town business. When other Town property is damaged or worn, like roads or buildings, they are repaired not discarded. What organization in Town is responsible for maintaining the dam?

	• What has the Town done to publicize these dam discussion meetings? • why is the Town meeting not involved in the process?
May 26	1) You have shown a presentation, what the river would look like upstream with its narrowing on removal of the spillway. I have not seen any presentation as to what the river would look like downstream especially to where the 60 foot wide Cheney Bridge would come into play at the Massachusetts Horticulture property and the resultant back up of the river onto residents' properties. Do you have those drawings to answer the concerns we have? 2) It has been said by the Town engineer, "If the spillway is removed, the Town of Natick would no longer have any responsibility for downstream effects ". Why should the Town be off the hook for causing damage to people's property? Would the Town be able to handle multiple lawsuits due to presenting a plan that failed in its execution? 3) Would the Town engineer, select board, and Town meeting members be also liable for endangering people and their property?
May 29	Thank you for your time and effort on the South Natick Dam project. So far, I have been impressed with the approach, content and outreach to the community. After giving the project some thought, I have some questions and comment. <u>Alternative Options</u> The community was presented with two options. There was no explanation as to the genesis of these options, and no discussion of alternatives. This may have been helpful. It seems to me (and a number of others that I have spoken to in the neighborhood) there maybe other viable, cheaper and perhaps preferable alternatives. For example, i) back filing the earthen dam with structural fill. This would involve filling in the swampy area between the earthen dam and Pleasant Street. The earthen dam, would then cease to be an earthen dam, removing the risk of dam failure. ii) adding fill to the up river side of the earthen dam to a sufficient degree to mitigate dam failure risk. This could create a new park area, on net new land of sufficient size in front of the dam. These solutions may allow the Town of keep both the trees and the spillway, retaining the aesthetic nature of the existing area that we have all grown so attached to. Have these alternatives been explored, or can they be explored in the near future? <u>Restoring the River</u> I would gently critique the presentation of spill way removal as “Restoring the River”. The Charles River has been permanently and unalterably changed by human development and pollution. There are many down stream dams that will never conceivably be removed. The largest of which is the Charles River locks underneath

	the Zakim Bridge / I-93. Without this structure the Charles River in Boston that we know today would be a tidal mud flat. There are numerous other significant dam structures at WaterTown and Waltham just to name a few. While I am a supporter of dam removal in areas with meaningful environmental upside (I am a monthly financial contributor to the Wild Salmon Center that advocates for the removal of dams and culverts in the Pacific Northwest) removing the South Natick Dam, it seems, would have negligible environmental benefits. It would not be restoring the river, simply restoring one small section of the Charles. I appreciate you have a significant challenge on your hands, potentially permanently altering a uniquely beautiful area of Natick and that many of us will have strong feelings on the subject. I thank you for the collaborative process you have undertaken.
June 12	Would it be possible to add frontage to the up stream side of the earthen dam, in sufficient quantity to resolve the issue? There is a significant body of water on the upstream side. I would imagine some part could be filled in to create either a wet land, or net new shore line without trees (park land for example). In sufficient quantity, the earthen dam would cease to be an earthen dam, and would simply become part of a much larger river bank. Could this be considered as alternative? It would allow us to keep both the spill way, and the trees that have become such an iconic part of south Natick.
June 15	I think the moderator said an info sheet/summary/recap would be sent out to the participants. Am I correct? When will that be sent?
June 18	Thank you for your informative discussion of the South Natick dam yesterday. You mentioned that removing the spillway would drop the upstream water level by six feet. I am puzzled, since there seem to be differences of opinion regarding the spillway height: waymarking.com The spillway, visible from Mill Street, is concrete and is approximately 80 feet long and 8 feet high and is slightly curved inward. https://www.natickhistoricalsociety.org/south-natick-dam The new dam—135 feet long, 20 feet wide, and 12 feet high Would not dropping the upstream water level by six feet also raise the downstream water level slightly? If so, by how much? Would not this increase the chance of flooding the ends of River, S. Lincoln and Water Streets?

	 If the spillway is removed would there still be enough depth of water for small craft navigation?
June 29	The following questions concern the plan to remove more than 60 trees at the Charles River Dam: • Why has so little attention been paid to removing 60 mature trees – an act of deforestation? And why is the valuable role that trees play in the health of our environment, and in our own health, not a core consideration of any remediation plan? Their ecological benefits for humans and wildlife cannot be overstated, nor can the long-term consequences of removing them. Additionally, mature trees mitigate soil erosion and flooding. Who is studying the epic flooding that removing these 60 trees would cause? • If we can develop a vaccine for Covid-19 in record time, why can't we ask innovative and future thinking experts to come up with more ecologically sound scenarios that focus on preservation and not removal? • With this being the hottest June on record, why has the removal of such a massive number of trees in this time of worsening climate change been recommended when we know just how harmful this is? Trees provide cooling shade and as our planet becomes hotter we will rely on their cooling effects more and more. Even a plan to cut 25 trees will still be extremely detrimental and make the landscape hotter as temperatures rise. Acting boldly to preserve the trees we already have should be our priority and our mandate. • Have tree preservation experts been consulted? The call to plant trees is a noble one, but it will take 100 to 200 years for any newly planted trees to reach the stature of the existing trees on site. Tree experts know that planting large specimens to compensate for size is not recommended because root systems need to begin small and grow slowly in order to anchor trees into the ground and thus, withstand storms and provide strong wind screening. Have study participants consulted with experts from the National Arbor Day Foundation? If not, why not? • Are decisions being made based on "what if" fear factors? What conflicting and hidden agendas are guiding these decisions and how will fair, wise and prudent decisions be made? Are officials focused on making long-term beneficial environmental decisions or are they more concerned with how their administrations will be regarded in the future? In planning for and averting natural disaster scenarios it is worth remembering that, even with the best intentions, we can inadvertently create other natural disasters. While liability issues are concerning, what about the liability of removing mature trees when other solutions can be implemented? What about the liability facing our children's future if we don't protect our trees? • Who is studying the impact on wildlife that will suffer profoundly from the loss of 60 trees? Wildlife are constantly being displaced as we take their homes to build ours, their habitat forever destroyed. Where can they go? Trees provide habitat, shelter and places to nest and raise young. Many endangered and threatened species will only nest in the cavities of trees. We must also remember that taking down mature trees destroys biodiversity.

	• Why are the "emotional and sentimental" concerns surrounding the scenic and natural features of the Charles River Dam and Spillway being downplayed? These reactions are normal and are defined as SOLASTALGIA, the emotional distress people experience when landscapes they feel connected to become unrecognizable through environmental destruction and change. We should feel an emotional connection to nature, and we must in order to take the necessary and urgent actions to preserve it. Recreational areas, parks and national forests have been set aside for posterity for their natural beauty and important wildlife habitats. The ecology and beauty of the Charles River Dam and Spillway should be regarded as serious and valid in the study. • Are we open to and willing to "go back to the drawing board" and come up with new plans? Even a plan to cut 25 trees will still be extremely detrimental and make the landscape hotter as temperatures rise. Conscientious planners seriously concerned with the long-term consequences of deforestation will not hesitate to go back to the drawing board. How many other plans can they study that do not involve removing trees?

Dover Conservation Commission
5 Springdale Avenue, P.O. Box 250
Dover, MA 02030

Memorandum

To: **Town of Natick Charles River Dam Advisory Committee**
From: **Dover Conservation Commission**
Date: **May 14, 2021**
Re: **Questions Regarding the Charles River Dam Project**

The Commission appreciates the opportunity to participate in the public information process for this project and are forwarding the questions outlined below about the dam removal scenario that the Town of Natick is in the process of evaluating. The Town of Dover has an extensive amount of riverfront floodplain and protected wetland resource areas on both public conservation land and on private residential properties along the Charles River both upstream and downstream of the existing 87-year-old South Natick Dam and we would appreciate your response to the following questions in order to better understand the project's impacts:

1. What are the projected impacts on the floodplains and flood control capacity of both upstream and downstream properties bordering the river under the dam removal scenario and what studies have been completed to accurately identify all flooding risks and potential impacts on riverfront properties?

2. What are the projected impacts on the river's flow rate both upstream and downstream under the dam removal scenario? How will these impacts affect water quality including temperature changes and increased vulnerability to algae blooms?

3. What are the projected impacts on the river's wetland resource areas (i.e. banks, wet meadows, etc.), wildlife and habitat under the dam removal scenario?

4. What are the projected impacts on the river's water levels under the dam removal scenario?

5. Have the above impacts been evaluated to take into account more frequent and heavier rainstorms and increased flooding as well as extended droughts due to climate change?

6. It appears that removal of the dam will result in several ecological benefits including the re-establishment of natural wetland habitats and flood plains while improving fish passage and making the river more climate resilient. Have these results been identified and confirmed in the Town of Natick's studies for removal of the dam?

7. Please confirm that the Town of Natick's recent sediment testing results indicated that there are no chemicals or compounds in the riverbed soil currently held back by the dam and as a result, if natural river flow were to be restored by removal of the dam that no contaminated soil will move downstream.

cc: Dover Board of Health; Dover Water Study Committee;Select Board, C.Dwelly, Town Adm., M. Angieri, Town Eng., C.Starling, Planning, W. Avallone, Building Insp., F. Zemel, Well Agent

Natick Dam Pedestrian Bridge Proposal
Instead of Either/Or, What If?

Jamie Magee, August 2021

There are two options being discussed for the dam, and both sides have a good argument as to their preference.

One is to bring the dam into compliance..."Rehabilitating the dam would involve the removal of all trees and woody vegetation, re-grading earthen embankment slopes, installing riprap slope protection, repairing the concrete spillway and retaining walls and replacing the currently inoperable low-level outlet gate structure."

This would keep the spillway and falls, but change the view from the Mill Stone side and the feel on the dam side. The cost to the town is estimated to be $1.25 million with future inspection costs (and further liability) for 100 years.

The other is to restore the river by removing the spillway. This would maintain the trees on the earthen dam, but the view would change as the spillway would be gone and the river would drop 6", which would create new banks along the river along both sides all the way up to the red Sargent bridge, but more dramatically next to the falls where water builds up would empty and slowly fill in with vegetation and soil. In terms of views, water traffic would be able to pass through, with views of the craft from the park and views from the river of South Natick. The cost to the town is estimated to be $680,000.

That is my nutshell view of the two options. The "keep the dam" side considers the view and looking at the falls a tradition; the "restore the river" side sees the natural habitat restoration, with its cost savings, as a more prudent option, where the land park across the river would remain with it's majestic trees. Fish and recreational river riders would be able to pass through South Natick without obstruction.

When I was growing up in Ann Arbor, we endured the construction of Gallup Park. It was pretty ugly for a few years… earth pushed around, new road crossings built. (They even killed invasive carp one day, which was a stunning thing for an elementary student to see.) Today, Gallup Park is seen as an great amenity. With either proposal for South Natick, that construction scene will be a part of the change. The question for both sides is, what will it look like afterwards?

And to that end, I remember an especially nice feature of Gallup Park: A pedestrian bridge near a generally wooded area along the river. Reminiscing about that bridge and others I have seen, I had an idea: Why not replace the spillway with an iconic pedestrian bridge, one that mimics the ornamental (and private) Sargent bridge up the stream?

As I contemplated the idea more, I realized that while the current view is great, the pedestrian situation is not the best. Currently, those who visit the dam view the spillway from either side. You can hang under the trees, fish and enjoy the view along with the Bacon Library; or you can look at the river and falls from the Mill Stones, benches and lawn. Some people might pause to view the falls on the bridge, but if they stand on the narrow cement strip side facing the falls, it's quite dangerous. Those who come from the other side on foot need to cross the busy street to get on the sidewalk side...and then cross the street again to get back on the side where they can enter though the trees and reach the river. Adding a bridge removes these impediments to fully enjoying the the park and the river.

The loss of the spillways falls is the loss of something special. The falls themselves are a connection in all of our lives and to the years of memories we have of glimpsing them as we drive by, walk by, cycle by, or stay and linger with its soothing natural sound and stunning beauty from either side.

But if keeping the falls will result in changes… and removing the falls will result in changes… why not, instead of just maintaining part of the old view (which happens with either proposal), we create a new connection to the river, one where we could not just perch on either side, but where we could cross a bridge safely and gaze at the other iconic stone bridge just down the river, or towards the restored Charles, with the river flowing underneath?

A pedestrian bridge will also connect the parks of South Natick, so that there will be a continuum between Shaw Park, the grounds of the Bacon Free Library, the Mill Stone park and earthen dam park across the river. And just as the Sargent bridge iis a favorite for boaters, riding through South Natick under another bridge with the view of its historic buildings and parks will be especially beautiful. This amenity, I believe, could unite us and benefit both sides of this dilemma equally, much as it stands to benefit both sides of the river.

I wanted to urgently propose this idea be considered immediately. It's important that we take that leap now and incorporate such a bridge into this project. Why? There is going to be construction either way. We have committees discussing options and seeking permits and funding, we have the engineers developing plans. It would certainly be less costly to construct at this time, when, if the spillway is taken down, we will have a crane in the river already. The town has recently added two well received pedestrian bridges along the rail trail, and the addition of another on the Charles River would be an achievement we could all be proud of.

Jamie Magee
Natick, Massachusetts
8/6/2021