

Your name	What (if any) conclusions does this report make that you think are especially relevant to the Task Force's analysis? If so, what questions?	Are there questions raised by the report that the Task Force should address in order to fill in knowledge or data gaps?	What other information about dredging does the Task Force need to have in order to evaluate dredging as an option?
Keith Hannon	The first two paragraphs on page 2 (of Section 1.0) summarize the consultant's conclusions about dredging and all of its associated benefits. Those statements and conclusions should be closely reviewed by TF members.	There appear to be other potential dredged material placement locations owned by the State or Town of Concord closer to the pond than the MCI minimum prison placement location (which was the recommended final placement location in the report). How feasible would it be to use those other sites not discussed in the 2018 report (which would drop the cost to dredge significantly)?	Updated estimate cost to dredge based on alternatives not analyzed in the 2018 report
Malcolm Bryant	<p>1. Dredging as described is the only alternative considered that will achieve the restoration goal of increasing pond depth. This in itself will achieve the goal of improving recreational activities on the pond, and improving fish and wildlife habitat.</p> <p>2. Hydraulic Dredging is the only practical approach</p> <p>3. Assuming weather conditions remain unchanged, the dredging will be effective for approximately 100 years (or more).</p> <p>4. Dredging places a high financial burden up front, but if annualized over the 100 years, appears a reasonable investment.</p>	<p>1. The report and subsequent discussions greatly underestimated the cost of dredging. What is the realistic cost of the proposed dredging plan in 2024.</p> <p>2. The 100 year benefits of dredging was predicated on weather patterns being unchanged, which we now know to be untrue. What is a realistic benefit period considering a) rising temperatures, and thus rising water temperatures, and b) significantly greater rainfall in total, and significantly more major storms and increased rainfall.</p>	<p>1. In the 1907 - 1910 map, Warners Pond had a water surface area of 79.56 acres (excluding the islands). In the 2017 report, the water area had shrunk to 48 acres (a 40% loss in 110 years, or an annual loss of approximately 0.28 acres per year). Assuming loss of open water continues at the historical rate, by the end of the 100 year period, the only open water would be the dredged area (approximately 20% of the current pond). Is this a fair assumption? If so, is it desirable to invest in dredging to maintain such a small pond?</p> <p>2. The report lists potential financial resources that could be drawn on to help finance dredging (but is pessimistic about accessing these resources) Are there new financial resources available that did not exist in 2017.</p> <p>3. The report did not mention PFAS. What is the PFAS concentration in the pond water? Currently, swimming is not restricted in water containing PFAS below the safe threshold level. However, the exposure standard has been lowered by an order of magnitude. Under these new standards, will swimming still considered to be safe?</p>
Liz Morrison-Howe	<p>That dredging is useful because it resets the pond, for me this gets to the difference between dredging w/ sediment removal vs. dredging with filling. (They give a 100 year estimate for the usefulness of the project - in the 2023 alternative analysis, the life span is estimated to be shorter - I assume that is because we're not fulling resetting?)</p> <p>That the other options to "alleviate some of the symptoms" will only be short term fixes without dredging. Does that help us focus some of our energy in determining what to evaluate?</p>	<p>The report gave a few sources to investigate as potential sources of funding - was that looked into at the the time? Brief glances at most of the suggestions seem to indicate that they are for restoration projects, which I don't think this is since it's an impounded section of the brook?</p> <p>In the time between 2018 and now, have there been any major stormwater management changes? (It is mentioned as a factor in <u>how long dredging would be a solution</u>)</p>	The report mentions that the sections of the pond that are not dredged will continue to infill. Do we have a sense of that rate? If we do a partial dredge, what do those non-dredged parts look like 20 - 50 years from now? Will cut the pond off from the downstream parts of the brook?
Bill Kemeza	1. The Dredged sediment could be used for shallow wetland benches for more biodiversity.	<p>1. Does MCI still not wish to have the sediment on their land?</p> <p>2. The high phosphorus load oil based on a model. Is this not real testing? have phosphorus been tested at the dam? below the dam?</p> <p>3. Much of the sediment seems to be deposited where Nashoba Brook enters the pond and the dredging is proposed for other spots. Would this sediment deposit in that area continue and is this desirable?</p>	

Paul Boehm	<p>Conclusion #1: "Dredging is a reliable approach for restoring ecological and aesthetic characteristics of a waterbody since it removes the nutrient-rich sediments that have accumulated over time". Relevant, but perhaps not valid. We know that nutrient inputs to the Pond from upstream sources will largely not be affected by dredging; and given the small amount of sediments to be dredged, is this statement really valid? Conclusion #2: "Ultimately, the goal of the restoration is to retain the pond's historic character as an open water amenity within the Town while also maintaining the site's value as an ecological resource". Is this still valid? Does "historical value" as an "open water amenity" outweigh ecological and recreational improvements? Conclusion #3: "...a large sediment load would be expected to move into the pond with every storm or high-water flow. This presents a challenge for any dredging project at the pond since it would not be a sound management approach to expend effort and create environmental impact to remove sediment that would quickly re-fill". I think that estimates of how long it would take for natural inputs to negate the effect of dredging may be unreliable. Positive impacts of dredging may be highly speculative. Conclusion #4: "The North and South dredge areas are suitable for dredging as they are not located within the main channel through the pond but are rather outside the path of the incoming sediments. Therefore, a dredging project targeting removal of sediment from these areas would be expected to last for many years while other areas within the pond continue to infill". Isn't this an admission that limited dredging will not have a lasting or sustainable beneficial impact on the ecology of the Pond as a whole?</p>	<p>1- Will the partial dredging of a small % of the Pond's sediments have a Pond-wide positive ecological impact? 2-Will the partial dredging of a small % of the Pond's sediments have a lasting (sustainable) positive ecological impact?</p>	<p>What is the actual beneficial impact of dredging a small % of Pond sediments on the Pond as a water body and as an ecological habitat?. Will limited dredging have only local benefits to those small areas dredged? It seems dredging of the entire Pond MAY be a good technical solution; BUT Is dredging of the entire Pond feasible? I think not from a fiscal perspective as costs would clearly exceed \$20 million</p>
Christine Denaro	<ul style="list-style-type: none"> - Dredging lasts for decades - Since WP is an impounded pond, dredging would remove the sediment and deepen the pond, which would prevent the growth of rooted plants - It would retain the historical character of the pond by keeping it intact - All sediment was found to be fairly clean, therefore there are no restrictions on its reuse - Dredging portions of the pond "will enhance the variability and complexity of the habitats within the pond system." "This complexity greatly improves fish, plant, and wildlife diversity." 	<ul style="list-style-type: none"> - Some of the dredged material was going to be used within the pond, could more of this material have stayed in and around the pond rather than having to move it? - Why was the prison farm chosen as the site for the dredged material? Were other locations explored? 	<ul style="list-style-type: none"> - We need to more fully understand the costs of dredging? - What are the costs of the different types of dredging and which one makes the most sense for WP? - Gerow Park and the Commonwealth Ave access point were both considered in this report, how will we address/consider these items moving forward? - Is there state funding/grants available to help with dredging? - I believe the permitting process is already completed, is it still good/up to date to proceed with dredging? - Would we have to go back to Town Meeting if we decided to proceed with dredging?
Jeff Collins	<p>1. "Since Warner's Pond is an impounded pond, the dredging program should be designed to not only remove the accumulated sediment, but also to deepen the pond to a depth that will preclude the growth of rooted plants from the areas of the pond that are envisioned to remain weed free. If dredging were only to remove the accumulated muck layer, the pond would soon accumulate a new layer of muck, although less thick, that would be sufficient to support the root systems for a number of aquatic weeds."</p> <p>Question: Dredging design includes removal of significant material below 'accumulated sediment', but study does not characterize that material. Might there be any complications in removing that material, e.g. is there bedrock?</p> <p>2. High sediment input "presents a challenge for any dredging project at the pond since it would not be a sound management approach to expend effort and create environmental impact to remove sediment that would quickly re-fill. The North and South dredge areas are suitable for dredging as they are not located within the main channel through the pond but are rather outside the path of the incoming sediments. Therefore, a dredging project targeting removal of sediment from these areas would be expected to last for many years while other areas within the pond continue to infill."</p> <p>Question: I question this assertion that sediment won't reaccumulate in the north and south dredge areas. Figure 2 shows sediment thickness suggesting sediment depths up to 5' in the north and south areas (N.B. the map includes strange 'discontinuities' within the proposed dredge areas).</p> <p>3. "ESS does not recommend dry dredging as the preferred approach"</p> <p>4. "Grant funding for this type of project is extremely limited and difficult to secure."</p>		<ol style="list-style-type: none"> 1. Are sediment tests still valid for permitting; do we need any more sampling? E.g. do they expire? 2. What are potential implications of high arsenic test on cost? "The implications of the one elevated arsenic sample will be determined through the 401 Water Quality Certification process". Requirement for landfill disposal of sediment would vastly increase dredging costs. When would we have this information? 3. Is DOC land still available for dewatering, for disposal? Did DOC ever formally approve these locations? Will things change given future changes in MCI ownership? 4. Need updated cost figures for dredging. 5. How many truck trips would be required for this plan?
Mark Howell	<p>My general conclusion is that dredging is a largely effective and configurable option for addressing specific pond management goals. The expense will always be a factor that will require careful cost benefit analysis. It strikes me that the task force could potentially weigh more than one dredging scenario among the possible solutions.</p>	<p>Not technically raised in the report, but more as a function of change to the project context. How does the possibility of controlling the MCI parcel impact the dredging options?</p>	<p>I think the task force may need to consider a range of desired results to understand if various levels of dredging may be viable solutions to achieve the results.</p>

Paul Boehm (additional comments)	<p>1-The report states: "However, dredging will not ultimately be the final solution to water quality issues within the pond and continued work to reduce nutrient loading from the pond's watershed is still recommended". This is highly relevant to the Task Force as it underscores that the limited dredging is little more than a "band aid" with respect to nutrient controls and eutrophication mitigation and any ecological improvement as a result are greatly overstated.</p> <p>2-Under "Recreational Improvements" the report states that "The Warner's Pond restoration project may help to alleviate recreational pressure on some of the other ponds in Town, which are already heavily utilized such as White Pond and Walden Pond. The area to be dredged should be swimmable, fishable and relatively weed free due to the water depths created by the dredge project". The very small recreational gain via additional open water is highly overstated. In addition, the beach mentioned as part of Gerow improvements will not proceed; so dredging will not result in any swimming improvements. FIGURE 8 is no longer relevant or accurate.</p>		
Jeffrey Quick	That alternative options for disposal should be looked at.	Not to my knowledge	Potentially retesting?