## HARRINGTON CONSERVATION AREA

## The living museum



## **Dredging Clarification**

January 29, 2017

Rick Goldt UTRCA

Good morning Rick,

In reply to your email of Saturday the 28<sup>th</sup>, I will start by saying "Thank You" for sending along our requests to the EA team regarding the creation of the spillway to reduce stress and risk of failure of the dam, and the dredging proposal to improve water quality and fish habitat. We look forward to their response.

As for your specific request for clarity regarding the dredging proposal, the plan is to remove 382 cubic meters (500 cubic yards) by pumping it into a dewatering bag for later removal. The material pumped into the dewatering bag will mainly consist of sediment from the middle of the pond and to the north end (while keeping a safe distance from the dam) as this material is presumed to be lighter in nature. The dewatering bag is designed to handle approximately 382 meters of compacted material while leaving enough room to efficiently pump the water and sediment slurry to reach that level. The length of time required to dewater is unknown but is expected to take about three months. The cost of hauling the material away has not been calculated into the costs. Assuming the level of contamination is low (as expected) local farmers have expressed and interest in the material and will haul at their own expense (personal communications).

Also, included in the estimated proposal costs, we intend to create an island at the south end of the pond where sediment will be predominantly heavier and sandy. To view the pond now with the water lowered, an island has been created naturally. This shallow area is just below the surface during high water periods. We propose to add to this area in a similar configuration, only smaller, and create a permanent island feature using approximately 382 cubic meters (500 cubic yards) of sediment. Photographs of the area will be forwarded to you for clarification. Gravel and rip rap to secure the shoreline of the island will be required in some locations and is included in part.

To summarize, we propose to remove 500 cubic yards and redistribute an additional 500 cubic yards. The estimate includes all costs associated with the work except hauling of the material. Future dredging has not been included but, if deemed necessary, an additional 500 cubic yard bag could be filled and hauled away. Additional costs, but reduced, would apply.

The rocks placed by UTRCA for the purpose of controlling sediment entering the pond seem to have worked as the area is particularly silt laden. This sediment will be used to create part of the proposed island. In the future, it is hoped that minor sediment removal will only be necessary at this location, as originally intended, to keep the pond deeper and cooler. Hopefully the span between dredging will be somewhere between 5-10 years and should be at a manageable expense. Costs and expanse of that work will be addressed at that time and is not part of this proposal.

Hope that helps,
Feel free to contact me at any time if you have any other questions or concerns.

Sincerely, Gavin Houston