

Memo

To: Julie VanderWiere, Charter Township of Texas
From: Steven M. Rice, CWB, GEI Consultants of Michigan, P.C.
CC: Thomas Wheat, P.E., Prein & Newhof, Thomas Clement, Aquatic/Wetland Biologist,
GEI Consultants of Michigan, P.C.
Date: July 9, 2019
Re: Veligers Sampling-Bentwood Trail

Introduction: On July 2, 2019, GEI collected water samples from the outflow pipe into Bass Lake for analysis of the presence of zebra mussel veligers.

Sample Collection Methods: Water samples were collected the afternoon of July 2, 2019, from the Crooked Lake pump discharge along Bentwood Trail and sampled for zebra mussel veligers. Two separate samples (Sample #1 and #2) were collected from the pipe discharge using an 80-micron plankton sampling net. Approximately 120 gallons (454 liters) of water was filtered through the plankton sampling net and the contents were then rinsed into a 1-liter sample bottle using a hand-pump misting bottle and pump discharge water. Samples were then preserved utilizing a 70% ethyl alcohol mixture and delivered to the lab for evaluation.

Sample Analysis Methods: For each sample, ten 1-ml Sedgwick Rafter cells were filled, settled, and counted at 100x magnification on an Olympus BX43 compound microscope equipped with an Olympus U-ANT circular polarizer.

Results: No veligers were observed in either Sample #1 or #2 (Table 1).

Conclusions: Based on the results, it is GEI's opinion that the pump filter is functioning as intended and there are likely no issues with pumping water from one lake to another.

Attachments:

- Phyco Tech, Inc sample results

