

To: Wendell Conservation Commission

From: Tristram Seidler, Ph.D.

Extension Associate Professor of Biology

Curator, University of Massachusetts Herbarium

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Date: March 9, 2025

Dear Conservation Committee,

I write today in support of the request by Drs. Beth Jacobs' and Adam Porter's proposal to modify the existing Bowen's Pond Dam Removal, Osgood Brook Restoration Project, to allow for the implementation of Beaver Dam Analogs (BDAs).

As a botanist and ecologist, I have a record of research on invasive plants in Massachusetts. I worked for Native Plant Trust, New England's primary plant conservation organization, before moving to the University of Massachusetts. I have consulted on invasive plant management in Massachusetts. Finally, I am a former resident of Wendell (2004 – 2013), served on the Conservation Commission, and have witnessed the spread of invasive plants over the past twenty years in the Town of Wendell and surrounding areas.

One of the primary truisms concerning invasive plants is that it is important to ally with natural processes in invasive plant mitigation whenever possible, rather than having to rely solely on direct methods of human intervention. Glossy buckthorn is a poster child for this idea. Direct intervention to control glossy buckthorn, to be truly effective, involves cutting each stem to 6" from the ground, and then fastening a stout black plastic bag over each stem, and making sure it stays in place for a minimum of two years. Any new stems coming up in the area would need to be similarly processed for the treatment to be effective. The advantage of this approach is that it does not require the use of herbicides, which would anyway be incompatible with fisheries management. It is, however, an extremely labor-intensive approach, that, while it can succeed in the early stages of invasion, will likely fail when there are thousands of stems already present.

While Appendix G of the Bowen's Pond Dam Removal, Osgood Brook Restoration Project has some laudable goals and approaches, it fails to consider the aggressive nature of buckthorn incursion, which is at its most rapid when new habitat is opened to invasion adjacent to an existing buckthorn population.

BDAs perform several functions that take advantage of natural processes that run counter to buckthorn invasion potential:

- 1) BDAs prevent the total exposure of acres of fertile pond bottomland, making it less susceptible to invasive woody plant incursion.
- 2) BDAs encourage natural beaver activity, which in turn works against the spread of buckthorn by maintaining a patchwork of inundated zones.
- 3) BDAs are among the most natural interventions that can be used to mitigate plant invasions in a dam removal or wetland modification scenario.

I strongly recommend that the Conservation Commission consider this modification of Appendix G of the Bowen's Pond Dam Removal, Osgood Brook Restoration Project, to recover the waterway while preventing or slowing the incursion of invasive glossy buckthorn.

Best wishes,

A handwritten signature in cursive script, appearing to read "Tristram Seidler", is shown within a light gray rectangular box.

Tristram Seidler, Ph.D.

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