



February 6, 2019

Mr. Paul Foley | DRI Coordinator
Martha's Vineyard Commission
P.O. Box 1447
Oak Bluffs, MA 02557
foley@mvcommission.org

RE: DRI 682 Meeting House Place Subdivision

Dear Mr. Foley,

Great Pond Foundation (GPF) is dedicated to studying and preserving the health of Edgartown Great Pond. As such, development and habitat alteration of any sort within the Great Pond watershed are of concern to GPF. After over a decade of concerted conservation and restoration effort by our Foundation, the Town of Edgartown, the Martha's Vineyard Shellfish Group, other island non-profits, and numerous private citizens, the health of Edgartown Great Pond (EGP) has improved visually and quantifiably as is noted in [GPF's water quality report](#) and in the *Water Quality Monitoring Assessment of the Martha's Vineyard Island-Wide Estuaries and Salt Ponds Summary 2017* submitted to the Martha's Vineyard Commission. Maintaining this improved water quality and ecosystem health requires a dedication to protecting the delicate balance that currently exists.

Although EGP met the Massachusetts Estuary Project nitrogen target for the first time in 2017 (TN <0.5 mg/L), this limit was set for habitats that do not sustain eelgrass. In stark contrast to most New England coastal waters, Edgartown Great Pond has thriving and expanding eelgrass meadows. Eelgrass sequesters more carbon than tropical rainforests, stabilizes sediment against erosion, increases water clarity, generates oxygen, and provides habitat for shellfish and finfish. In order to protect this vital resource, the total nitrogen target should be further reduced below the current target.

Great Pond Foundation is concerned about any alterations to EGP and its watershed that may worsen current conditions and ultimately disturb the stability of the Pond ecosystem. When natural or vegetated areas around the Pond are cleared, there is an influx of nitrogen, albeit small, into the Pond through the groundwater. This was measured by Chris Neill of the Woods Hole Research Group and colleagues at the Nature Conservancy when a large portion of land on the southwest shore of EGP was cleared over a decade ago. The intact microbial/fungal/plant community of native habitats transforms nitrogen into inert nitrogen gas more effectively than human-alerted habitats. Alteration of natural habitats will result in an increase of nitrogen entering the watershed.

The proposed development includes 36 lots with 6300 ft² homes, plus garages. The amount of nitrogen generated by these large homes will result in a net increase of nitrogen into the watershed. Although the plan is to have these homes sewered, and thus the nitrogen downgraded to an average



effluent of 3 ppm, this is still additional nitrogen entering the Great Pond watershed and increasing the overall nitrogen load of EGP. In addition to wastewater, each of these homes will likely have lawns or gardens and landscaping of these areas could result in the influx of nitrogen, phosphorus, pesticides, herbicides, fungicides, and other harmful compounds into the watershed. An influx of nutrients can lead to eutrophication and result in algal blooms that harm the Pond ecosystem. All of the “cides” can be detrimental to the normal lifecycles of Pond organisms.

We hope that when you consider developments within the Great Pond watershed, you consider limiting or restricting the input of both nutrients and harmful compounds, as you have in previous decisions such as the Vineyard Golf Club development in 1999. We also ask that you consider the goal of not increasing, but rather decreasing the amount of nitrogen entering the watershed. There are existing homes within the watershed, that if sewered, would result in a reduction of net nitrogen loading in the watershed. Another thing to consider before building and sewerage new homes within the watershed, is the current capacity of the Edgartown Wasterwater Treatment Facility. It is important to consider how many more homes can be added before this capacity is reached, and to prioritize the sewerage of homes that would result in a reduction of nitrogen to the watershed. Freshwater is a limited resource and we hope that you consider the current demand and water budget carefully when reviewing proposed developments and habitat alterations. We appreciate the care with which the Martha’s Vineyard Commission conducts the DRI process, and we thank you for your time and consideration.

Respectfully yours,

A handwritten signature in cursive script that reads "Emily Reddington".

Emily Reddington | Executive Director