

## Friends of Green Hill Pond

To Preserve and Protect Green Hill Pond

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## 2020 Update on Bacteria Levels in Green Hill Pond

The Rhode Island Department of Environmental Management (DEM) recently shared its 2020 update on bacteria levels in Green Hill Pond with Friends of Green Hill Pond. We reformatted DEM's raw data into an <u>easy-to-read aerial map</u> along with our takeaways noted below.

As has been the case since 1994, the 2020 update shows that overall water quality in Green Hill Pond does not meet the criteria for safe consumption of shellfish due to elevated bacteria levels. However, behind this general assessment is a more complicated but encouraging story:

- Bacteria levels in many areas of Green Hill Pond meet all or partial state standards TODAY. Bacteria levels are not uniform throughout the Pond. In fact, two stations (15 & 18, noted in green on the map) meet or nearly meet all shellfishing standards today, including the station located in the center of the Pond. In addition, seven more stations, noted in yellow, meet the average (or Geomean) standard for bacteria levels today. So, we have water quality challenges but the situation is far from hopeless.
- Stormwater runoff is clearly the biggest problem. The highest levels of bacteria are found on the northern/northeast side of the Pond, near where two freshwater tributaries empty into the Pond. A 2006 DEM study measured bacteria levels in the tributaries during wet conditions that were 10 times those found during dry conditions. So, addressing the stormwater runoff from these tributaries is critical. In fact, as DEM put it, "if the tributaries meet water quality standards, it is DEM's judgement that the Pond will support designated uses" (like shellfishing). Finally, seven other stations elsewhere in the Pond, noted in yellow, fail the peak reading (90<sup>th</sup> Percentile) standard. That standard is associated with recent rain events. This again points to the importance of stormwater control and filtering, not just around the tributaries but throughout the watershed.

The 2020 DEM update gives us both hope and inspiration. It confirms the critical importance of the stormwater project. With federal, municipal, and private funding from our donors, that project is underway and being led by South Kingstown with our participation. We won't know the magnitude of the impact on water quality this project will have until the assessment is done, designs are finished, construction is completed, and the new stormwater controls and bio-filters are operational—a process that will take years. However, it is clear we are working on the right problem to address one of the major challenges facing the Pond.

We look forward to sharing regular progress reports as 2021 unfolds. Thank you for your continuing strong interest and support.

For the Pond.

Dennis Bowman President