2021/01/10

To: Mayor Chris Peabody and Brockton Council Members

From: Ray Hughes and Rick Kalte on behalf of Marl Lake Residents

Re: By-law to prohibit Wake Enhancing Boats and Hydroflight Devices

On behalf of the Marl Lake property owners we are asking Brockton Council to create a By-law that would prohibit the use of Wake Enhancing Boats (WEB) and Hydroflight Devices (HD) on any part of Marl Lake. This past summer, the Marl Lake Boating Committee reviewed the impact of WEB's and HD's and recommended that Marl Lake is not suitable for WEB's and HD's because of the environmental, ecological and property damage they inflict on small shallow mud bottom lakes. The committee also recommended that residents be surveyed to see if they would support the creation of a By-law by Brockton Council to prevent the use of WEB's and HD's on Marl Lake. All residents provided input and 51 of the 53 property owners surveyed, supported the proposed By-law. There is one single owner who voted no to approaching Council and one other owner who was undecided. No one residing at the Marl Lakes currently owns either a WEB or a HD.

As you may or may not know, a Hydroflight Device is an accessory that attaches to a PWC (jetski) to allow the rider(s) to attain vertical flight by sending powerful water jets deep into the water. Presently Hydroflight Devices would fall into the following categories (with brand names in brackets)

- 1. jetboards (Flyboard, Jetblade, X-Board, Jetdeck, etc.)
- 2. jetpacks (Zapata, X-Jets, Jetlev)
- 3. jetbikes (Jetovator, FlyBike).

Link http://www.hydroflight-sports.com/2017/07/hydroflight-devices.html

A Hydroflight Device sends high velocity vertical jet thrusts deep into the lake capable of lifting the rider 40+ feet in the air. The propulsion force extends deep into the lake bottom and would disturb years of sediment and contribute to algae blooms and water clarity/quality issues. Residents who use the lake water as a drinking water source are very concerned about water contamination issues that will result from the HD's disturbing the lake bottom. All residents are concerned about increased algae blooms and the negative impact the HD's will have on the recreational use of the water. We have recently introduced measures to improve the water quality at the Marl Lakes and these devices would be counterproductive.

Wake Enhancing Boats use rubber bladders or fixed tanks to fill with water to add ballast. These boats can also have surf gates (hydraulic flaps to increase and divert

wakes) and specialized hulls to increase wakes. These boats create monster waves 4-5 feet in height. The WEB's sit low in the water when filled with ballast and consequently, their large propellers dig trenches on the lake bottom 4 feet below the water surface. Marl Lake has a sand bar that is 4 feet below the water surface running down the middle of the first lake which would be destroyed by the boats. These boats are also capable of creating monster waves 4-5 feet in height. In addition to causing water quality issues, WEB's cause significant shoreline erosion and damage. Even if the wave is created in the middle of the lake, Marl Lake is so small that the energy from the wave would not dissipate by the time it reaches the shore. There would be significant damage to docks, fish and wildlife habitat and of course to the shoreline.

There are numerous scientific articles that outline the negative impact caused by Wake Enhancing Boats and Hydroflight Devices. One such study was undertaken at Coventry Lake. Coventry Lake is larger than the Marl Lakes but its depth and bottom type is almost identical to our lakes. The resident who headed the testing of Coventry Lake is a Limnologist and performed an excellent scientific testing on the effects of flyboarding on an inland lake. You can review the full report at the link below.

https://www.nasbla.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=adf56f61-261f-435a-322d-e1ea3c99eb47

Given the fragile nature of Marl Lake and the serious impact that WEB's and HD's would have on our water quality and properties, we are asking Brockton Council to approve the creation of a By-law that would prohibit the use of both Wake Enhancing Boats and Hydroflight Devices from the Marl Lakes. We understand that Council members may have some concerns about the enforcement of this By-law, however, we are confident that the creation of a By-law prior to any resident owning either a WEB or HD will be enough to discourage the future purchase of these recreational items. Furthermore, there is no public access to the Marl Lakes and the only way to launch a WEB or HD would be via a property owner. We are counting on your support!

Respectfully,

Ray Hughes, Chair of Marl Lake Boating Committee

Rick Kalte, President of Marl Lake Property Association