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Brian Howes
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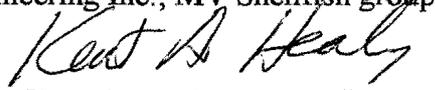
Dear Mr. Howes:

I reviewed the final Massachusetts Estuaries Project (MEP) report of May 2013, on the Nitrogen entering The Tisbury Great Pond/Black Point Pond system in Chilmark and West Tisbury, MA. My statements in the March 1, 2013 letter that I wrote to Roland Samimy of your staff, after reviewing the January 2013 draft of the report, are still appropriate, have not been addressed in the final report and can be summarized as follows.

1. Using 2.4 feet per year of rain recharge to the Tisbury Great Pond watershed instead of the 1.5 feet per year that has been used by hydrologists (Strahler 1972, Spiegel 1971, Wilson & DaCosta 1980) skews all of the data and invalidates the hydrologic budget calculations used to predict nutrient input and discharges from The Pond.
2. The assumption that the nitrogen discharged from waste water treatment systems is unchanged by many years and feet of flowing in the groundwater prior to entering the pond, is not supported by any MEP tests and is in contrast to measurements by Wilcox 1995 of the nitrogen in the groundwater entering The Pond.
3. The input to the RM4 computer model, used by Applied Coastal Research and Engineering Inc., omits the ocean water that flows in through the barrier beach (Urish 1977) during pond filling, which can equal the stream inflow. The model cannot be valid if it requires, to balance the water budget, a flow out through the beach that is twice the flow that has been measured (Healy 2009).

The Towns of Chilmark and West Tisbury as well as several Massachusetts State agencies will be responsible for any processes that are initiated to improve the health of The Pond. Any proposal to reduce the nitrogen in Tisbury Great Pond must be based on long term measurements and appropriate calculations.

copy: W. Wilcox; Brian Dudley MA DEP; Chilmark Conservation, Board of Selectmen and Shellfish agent; West Tisbury Conservation, Board of Selectmen and Shellfish agent; Applied Coastal Research and Engineering Inc.; MV Shellfish group.


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