

**From:** Vic Bierman [<mailto:vbierman@limno.com>]

**Sent:** Thursday, March 16, 2017 10:20 AM

**To:** John Hall

**Subject:** Clarification on Relationship Between Nitrogen and Eelgrass in Great Bay Estuary

Hello John,

I am writing to clarify my statement on the role of nitrogen in the presence/absence of eelgrass in Great Bay Estuary in our Joint Report of the Peer Review Panel (Bierman et al. 2014). On Page 18, I stated that nitrogen is an important factor, and went on to state that it is one of the primary factors, not the sole primary factor. I formed these statements in response to the two specific elements of Charge Question 1b.

By these responses, I was simply observing that nitrogen is an important factor that must be considered, not that the available data and studies confirmed a scientifically defensible relationship between nitrogen and adverse impacts on eelgrass.

Specifically, I concur with the following statements by my colleague, Dr. Kenworthy:

“There is no basis for a scientifically defensible linkage between nitrogen impairment and eelgrass impairment presented in the report.” This statement is on Page 19 of our Joint Report and the linkage to which he refers is implied in the DES reports of 2008 and 2009.

“As suggested above, the preliminary analysis using the more current eelgrass cover data affirms scientifically defensible DES concerns for eelgrass declines in the Great Bay Estuary; however, by no means does this infer a direct relationship with nitrogen impairment as suggested by the original assessment ... ” This statement is on Page 20 and the original assessment to which he refers is the DES report of 2008.

I hope this clarification resolves the matter at hand.

Regards,  
Vic

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