

Responses to the referee #1:

We thank the referee for his/her well-considered review. We made revisions as follows:

Page 6262:

Line 7: deleted “in”

Line 9: “now” was changed to “2010”

Page 6263:

Line 3: inserted “average” between “The” and “annual”

Line 16: “discontinuity” was changed to “discontinuous”

Line 18: inserted “are” between “and” and “unable”

Page 6265:

Line 23: “are” was changed to “is”

Line 25: inserted “this has” between “and” and “caused”

Page 6266:

Line 16: “was” was changed to “were”

Page 6267:

Line 9: inserted “and” after (1986)

Line 12: “added” was changed to “mixed”

Lines 25 – 26: inserted “listing to” between “species” and “help”

Page 6268:

Line 8: “an” was changed to “the”

Line 13: “equations” was changed to “equation”

Line 20 – 21: the sentence was changed to “The core was composed of clayey and silty black sediment and showed no evidence of ...”

Page 6269:

Line 5: deleted “from”

Line 10: inserted “to” between “upward” and “the”

Line 11: deleted “that” and changed “began” to “beginning”

Line 17: “occasional” was changed to “occasionally”

Line 18: inserted “enough” between “common” and “to”

Line 21: “increase” was changed to “increasing”

Line 26: inserted “the” between “to” and “surface”

Page 6270:

Line 20-21: the sentence was changed to “the deposited diatom frustules living in the water.”

Page 6272:

Line 20: “relative” was changed to “relatively”

Page 6273:

Line 11-12: inserted “showed” between “and” and “relative”

Page 6274:

Line 13: the sentence was changed to “increased regularly since the mid-1970s corresponding to the period of ...”

Line 22: “seldom” was changed to “minimal”

Page 6275:

Line 22: “existed” was changed to “existing”

Line 23-24: the sentence was changed to “preserved only for a very brief period of time, and we were able to examine them a short time after the blooms had occurred”