Biogeosciences

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Discussions

Interactive comment on "Estimating net anthropogenic nitrogen inputs (NANI) in the Lake Dianchi Basin of China" *by* W. Gao et al.

Anonymous Referee #1

Received and published: 14 April 2014

General comments,

This paper focused on the estimation of NANI in Lake Dianchi Basin in China using two different weighing methods such as land area and land uses. The analysis between NANI and riverine N exports provided interesting insights to understand the anthropogenic N behavior in the basin with different land-use and human activities. I found that the overall manuscripts are well described and acceptable as an original article although some minor revisions are needed prior to the final acceptance as listed below.

In abstract and conclusion, you mentioned the negative intercept of Fig 5 implying the consequences of massive pollution controls in those watersheds. The negative intercept actually suggested the existences of the threshold values of NANI for the watershed N retention around 10000 kg/m2/y, but I couldn't find any other strong evi-

dences to indicate the role of pollution control on riverine N export in those watersheds. I recommend deleting those discussions on the influence of pollution control.

Specific comments - Page 4128 Line 12 "three significant figures" is unclear in this sentence. Reword. - Page 4130 Line 2 Insert "(NNFI)" after the "Net food and feed N import" because you used NNFI in page 4131 line 24. - Page 4131 Line 24 If you indicate watershed 15 here, add 12 as well. The NANI of watershed 12 is comparable those of 15 in Table 2. - Page 4137 Line 10-11 You described that "results of both methods showed strong linear relationship with riverine N export", but the linear relationship using area-weighting was weak relation and insignificant (p=0.06) in Fig. 5(a). You cannot conclude that both methods showed the strong linear relationship.

Interactive comment on Biogeosciences Discuss., 11, 4123, 2014.