Hydrol. Earth Syst. Sci. Discuss., 10, C7949–C7951, 2014 www.hydrol-earth-syst-sci-discuss.net/10/C7949/2014/

© Author(s) 2014. This work is distributed under the Creative Commons Attribute 3.0 License.



# Interactive comment on "Temporal and spatial changes of water quality and management strategies of Dianchi Lake in southwest China" by T. Zhang et al.

## T. Zhang et al.

zhangting08@ieecas.cn

Received and published: 20 February 2014

#### Dear reviewer:

I am very grateful to your comments for the manuscript. According with your advice, we amended the relevant part in manuscript which are marked in yellow. Response to the referee's comments was showed below.

#### Comment 1

However, my biggest concern of this manuscript is lack of innovation. Both the methodology and management strategies are not new. So what's the contribution of this study?

C7949

this should be indicated in introduction part.

# Reply

Thank you very much for your comments, and we have studied these comments carefully. Although the reviewer concerns that the methodology and management strategies are not new, we still consider this paper has a certain innovation. The most important innovation is that we have considered the current evolution status of Dianchi Lake which is an old age lake, and on this basis we gave some specific management strategies of Dianchi Lake through the analysis of these. Our research work could provide new ideas for lake pollution control strategies. What is more, the reviewer suggested that the innovation should be indicated in introduction part, and we have already added this part which is marked in yellow in the paper.

#### Comment 2

Besides, a thoroughly review of the water pollution control strategies should be conducted, not only for the Chinese rivers, but also for similar rivers all over the world.

#### Renly

We are very sorry for our negligence of a thoroughly review of the water pollution control strategies around our country and abroad. As the reviewer's suggestion, we have added Strategies for water pollution control abroad in part 4.2 which marked in yellow in the paper.

#### Comment 3

The study methodology part should be strengthen.

#### Reply

We have re-written this part according to the reviewer's suggestion. It is marked in yellow in the manuscript.

## Comment 4

Why you choose chlorophyll a as most important parameters as a indicator of eutrophication?

# Reply

Chlorophyll a concentration of phytoplankton in water can reflect the existing amount of algae and it can also be used as an important index of biomass. Its content marks the degree of eutrophication of water body. The higher the concentration of chlorophyll a is the poorer water quality and the higher degree of eutrophication is. So we choose chlorophyll a as most important parameters as an indicator of eutrophication.

We acknowledge the reviewer's comments and suggestions very much, which are valuable in improving the quality of our manuscript.

Please also note the supplement to this comment: http://www.hydrol-earth-syst-sci-discuss.net/10/C7949/2014/hessd-10-C7949-2014-supplement.pdf

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 15409, 2013.