

Dear editor:

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

Comment 1

In the abstract, you mentioned three lakes including Caohai, Waihai, and Dianchi lakes. Comparatively, you only mentioned Dianchi in the manuscript title. Thus, readers may feel confused about these three lakes since most of them are not familiar with them. You need to add one short sentence in the abstract to clarify relationships among those three lakes. Also, corresponding detailed clarification needs to be added in the main text.

Reply

We are very sorry for our negligence making readers confused to read this part, and we have added relevant clarification in **Abstract** and main text.

Page 1 Line 13-16: Dianchi Lake is divided into two parts, Caohai Lake and Waihai Lake, by a manmade dike. Caohai Lake lies at the north of Dianchi Lake, while Waihai Lake is the main water body of Dianchi Lake and accounts for 96.7% of the whole area of the lake.

And corresponding detailed clarification has been added in the main text.

Page 5 Line 6-9: Dianchi Lake is divided into two parts, Caohai Lake and Waihai Lake, by a manmade dike. Caohai Lake lies at the north of

Dianchi Lake, while Waihai Lake is the main water body of Dianchi Lake and accounts for 96.7% of the whole area of the lake.

Comment 2

Your references need to be updated. Please try to cite more papers published in HESS.

Reply

We have already cited 5 relevant papers published in the manuscript marked in yellow in Reference.

Comment 3

Since S.R. Wang is listed as the coauthor of your paper, it is not necessary to mention his name in the Acknowledgements.

Reply

We have removed this part in Acknowledgements.

Comment 4

Since monitoring is the main part of your work presented in this paper, please strengthen this part. I guess more details should be better. For example, justification is needed for your monitoring plans.

Reply

Thank you very much for your comments, and we have studied these

comments carefully. We have rewritten this part in **2.Material and methods.**

Page 5 Line 16-19: We have analyzed the water quality parameters in order to investigate the temporal and spatial changes of water quality in Dianchi Lake. Data for lake water quality from 2005-2012 were provided by the Center for Environmental Monitoring in Kunming, Yunnan Province.

Page 6 Line 3-7: The sampling depth at each point was 0.5 meters below the water surface, and the monitoring frequency was once a month. The sampling, preservation, transportation, and analysis of the water samples were performed following standard methods (State Environment Protection Bureau of China 2002).

Comment 5

In page 8, you mentioned “Spatial CA produced a dendrogram with two groups (Fig. 4). Cluster A comprised sites 1–2, and cluster B contained sites 8–10. Group B was further divided into two clusters: sites 8–10 in cluster B and the other sites in cluster C”. This sentence is confusing to readers. Firstly, all data were grouped in to groups A and B. Group A contained sites 1 and 2. Group B contained sites 8 to 10. Then, the original Group B was further divided into two groups, i.e., groups B and

C. You stated that Cluster B contained sites 8 to 10. This is the same with the original Group B. Also, which site was included in Group C? Moreover, please keep consistency in listing your results. For example, it is confusing for readers since you used both group and cluster here.

Reply

We are very sorry for this mistake. Cluster A comprised sites 1-2, and cluster B contained sites 3-10. Cluster B was further divided into two groups: sites 8-10 in group B and the other sites (3-7) in group C. So as the editor questioned, group C contained sites 3-7. And we have rewritten this part as follows.

Page 8 Line 27-Page 9 Line 1-11: Spatial CA produced a dendrogram with two groups (Fig.4). Cluster A comprised sites 1-2, and cluster B contained sites 3-10. Cluster B was further divided into two groups: sites 8-10 in group B and the other sites (3-7) in group C. All classifications had varied significance levels because the sites within the groups had similar natural backgrounds and were likely affected by similar pollution sources. Sites 1-2 in cluster A were located in Caohai Lake and were primarily impacted by industrial wastewater, agricultural runoff, and municipal sewage, which corresponded to areas with relatively high pollution. The other sites in cluster B were located in Waihai Lake, with sites 3-7 located in the northern part of Waihai Lake and sites 8-10 located in the southern part of the lake. Clusters A (sites 1-2) and B (sites

3–10) corresponded to relatively high and low polluted regions, respectively. These results suggest that pollution control treatments should be assessed in each region.

Comment 6

Title of 4.1 needs to be revised. “Reason analysis” is not proper here. Also, remove “Overview” in the title of 4.2. As I know, it is rare to put overview in the discussion part. What is the difference between the titles of 4.2 and 4.2.2.? I suggest you reconsider all of the subtitles in 4. Discussion.

Reply

We have already renamed the subtitles in **4. Discussion.**

Page 11 Line 6: 4. 2 Water pollution control strategies round the country and abroad

Page 11 Line 7: 4.2.1 Strategies for water pollution control abroad

Page 12 Line 14: 4.2.2 Strategies for water pollution control in Dianchi Lake

The difference between 4.2 and 4.2.2 is that part 4.2 contains two parts which are water pollution control strategies in our country and foreign countries. But 4.2.2 is only the strategies in our country especially in Dianchi Lake.

Comment 7

Also, please add one short paragraph to match this research to the topic of the special issue.

Reply

We have added relevant paragraphs in **Abstract, Introduction** and **Conclusions** in the paper.

Page2 Line 18-19: And the management strategies would be a contribution to the management of water conflicts between human and ecosystems in similar lakes.

Page4 Line 24-25: And also the results could be a contribution to the management of water conflicts between human and ecosystems.

Page 17 Line 2-6: Water conflict between human and ecosystem is a key issue for sustainable water resources management. Especially in recent years, due to population growth and economic development, problems of water pollution are getting worse. So proper management strategies of water conflicts between human and ecosystems in these lakes are needed.

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