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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Impacts of the emergency operation of the South-to-North Water Diversion Project's eastern route on flooding and drainage in the water-receiving area: An empirical case from China" *by* Kun Wang et al.

Anonymous Referee #1

Received and published: 17 October 2018

The effect of interbasin water diversion and flood management in a large lake basin is a very important and hot topic. In this study, authors constructed a flooding and waterlogging simulation model for assessing the effects of the South-to-North Water Diversion Project's eastern route on flooding and drainage Nansi Lake, a water-receiving area of the water diversion project in China. The issue discussed in this paper is meaningful. I would like to recommend its publication after solved the following problems. 1. Please kindly polish the language. some sentence too long, for example "Therefore, simulations of the flood and waterlogging process in the lakeside areas under the condition of

emergency water diversion by the SNWDP and analyses of the impacts of emergency water diversions on flood and waterlogging drainage characteristics and the scheduling of flood control and drainage projects must be performed to strengthen the scientific scheduling of water diversion projects and flood control projects in water-receiving regions. " and there are grammatically mistakes. I would like to recommend that authors used short sentences to replace too long sentence like this one.

2. The abstract can be more informative by highlighting the significance and novel contribution of this research. Moreover, key findings of this paper must be included in the abstract.

3. Please check the reference style according to journal requirements. In addition, please avoid multiple references. It is not recommended to cite over three references in one sentence.

4. The figures 3 and 5 are very beautiful. But it is a little confusing. Authors need to introduce the directions more clearly.

5. In the introduction, authors need to make the innovations (i.e., the research gap this paper fills) more clear.

6. In the lines 20-25, authors demonstrate three key issues that they aim to solve. Authors need to give answers to these questions in the conclusions.

7. Line 41: Wrong format of the citation to Bisht et al. 2016.

8. Line 24-25, page 10 "Considering emergency water diversion occurs during the flood season is scenario 2", while the ER-SNWDP doesn't work during the simulation in scenario 2 according to the table 2? Please modify table 2.

9. Line 25, page 11 the eastern portion of NL is mountainous?

10. Line 6-7, page 13. Text descriptions of both Figure a and Figure b are reversed. Please correction.

11. Line 25, page13. Should it be figure 8(c) instead of figure 8(b)?

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