

Interactive comment on “Reduction Evaluation and Management of Agricultural Non-Point Source Pollutant Loading in the Huntai River Watershed in Northeast China” by YiCheng Fu et al.

Anonymous Referee #2

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First I don't think the manuscript is novel enough for this journal. Second, the buffers simulated are not realistic so I don't see the benefit of simulating scenarios that are not possible. Third, the model has some fundamental flaws. See below for more details. I didn't review much past the model set up and results. If these are set up incorrectly the results are not worthwhile.

Line 13: change rainfall runoff to precipitation Line 62: specify version. The number of equations changes from version to version. Line 71: GDP is not relevant Line 72: What do you mean by urbanization rate? Looking at Figure 2, it looks like there are a few reservoirs within the watershed. You can't model a watershed with dams unless

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you use the reservoir outflow as an input into SWAT. How was this handled? Remove the “The” from each item in the legend. The land use and soil legends are too small. Lines 146-147: Does a 1 km and 5 km buffer sound reasonable and realistic? To me it does not. Line 158: For such a large waters, the number of subbasins and HRUs is quite small especially for the large number of landuses and soil types. Line 178: This is incorrect. It is based on land use, soil type and slope. Line 182: You state that with a threshold of 0, there are 184 HRUs just like you stated in line 158. Then you go on to state that you used a threshold of 5%, 8% and 15%. This would decrease the number of HRUs. Line 189: What about min and max temp? Line 190: What were the results of the crop irrigation time? This varies greatly across a watershed. Line 243: This is too many land uses. You would have many more HRUs. Line 255: What do you mean you simulated rainfall? In line 253 you stated that you had rainfall data from 76 stations. Line 286: These are both downstream of reservoirs Line 362: How many samples do you have from each site? Did you use Loadest or some other program to estimate the loads for days where you didn't have data? How did you compare simulated to monthly concentrations?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2018-339>, 2018.

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