Interactive comment on "Modelling freshwater quality scenarios with ecosystem-based adaptation in the headwaters of the Cantareira system, Brazil" *by* Denise Taffarello et al.

Anonymous Referee #2

Received and published: 6 November 2017

General comments It is an interesting topic that the freshwater quality in different developing scenarios have been simulated using the spatially semi-distributed SWAT mode. But it is more likely one case study in the Cantareira system, Brazil. And an essential improvement should be done further. Specific comments 1. The hypothesis of the research is not clear, and is it "the conversation practices impact hydrological services?"; 2. What is the EbA, and the authors should give the readers more detailed definition. 3. In addition, the paper is so long, and the authors should condense the whole text, as well as the figures and tables. 4. The authors considered the land use scenarios only, but not the climate hydrological factors. 5. The authors should explain the reason why nitrate, TP, and sediments have been select to assess greyWF. 6. Page 11,

C1

Lines295-297, "..., WPL[x,t] exceeds 100%, environmental standards are violated...", it is so subjective. What's your basis? 7. Lines 321, in equation (3), maybe, it is a mistake about the "WPL[x,t]", is it "WPLreference" 8. The authors should separate the results and discussion. Some sentences, for example lines 343-345;349-354;357-360; and so on, should be put into Discussion. The independent discussion could further clearly tell the readers your finding. 9. in Section 3.6, the authors do not depict the results from Figure 17. 10. delete the references from the conclusions. 11. Table 1 should be moved to Supplemental information, or part of Table 1 should be merged in to Table 2. 12. Table 8 should be moved in to Supplemental information. 13. Fig.4, explain the meaning of the lines in the figure. 14. Fig.5, the sentence "Time (horizontal axis) is represented by month/year" is meaningless; further, to provide the meaning of the uncertainty bars and sample numbers. 15. Fig.6, what are the meaning of the "size of circles" and the numbers?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2017-474, 2017.