

Interactive comment on “Trends and future challenges of water resources in the Tigris–Euphrates Rivers basin in Iraq” by I. E. Issa et al.

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Referee #2 Dear Referee number 2 Thank you very much for your comments. Please note that some of your comments were also mentioned by referee number 1. We were happy to see these comments and we did alter the text of the paper. These comments definitely improved the paper and we are grateful to you. In this context please note the following:

1. Methods of trend analysis in this study are of limited reliability and innovation. All assumptions are not presented for the conducted analysis, including ones that might

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not be feasible. To start with, we did not see any other author using the technique we used in this analysis to estimate the water demand. Furthermore, please note that when water availability was calculated, monthly discharge data from the main gaging stations were used. When calculating the water demand, we used the annual water discharge figures in the main gaging station. The comparison of the values was done on these bases. We think this is one of the ways to deal with the problem and we did not say it is the best. Decision makers can take various methods and compare the results. In such a case, they will be aware of the positive points and drawbacks of each method. Then they can do the management planning of the water resources. Please note that we have done some changes in the text and we have done some comparison with other methods used. This will give a complete idea about the situation.

2. There is an issue of missing data. Conclusions of trend analysis were obtained from either short or long data series. But there might be a difference between confidence levels of these conclusions from the viewpoint of statistical analysis. We think that the sentences we wrote were not clear enough. There is no missing data and all the available records were used. In this way we had ensured a maximum confidence level. We have explained this in the new version of the text.

3. All existing techniques of trend analysis are not reviewed. A comparison between this study and previous related ones is not mentioned. The method we used in the trend analysis was obtained using the excel program. Now it was explained in the new text. We have not seen any paper using the same technique we have used in our work.

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/10/C7367/2014/hessd-10-C7367-2014-supplement.pdf>

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