## Dear Prof. Fogg,

Thank you very much for thoroughly reviewing this manuscript and helping us to find ways to improve its quality. We have deleted some parts and modified the 'Uncertainty' section according to your suggestions and have addressed the comments. The modified text is in color. We hope you will be satisfied with our revision.

Sincerely, Hossein Hashemi, on behalf of the authors

## **Comments:**

• You already discuss emission scenario variability earlier in the Discussion, so I do not think you need this paragraph at all.

This paragraph was deleted.

• OK, but how might this have affected your results and conclusions?

Uncertainty in adaptation of the projected scenarios to the studied area, i.e. the delta-change approach. Studies (e.g. Hay et al., 2000; Kay et al., 2009) have shown that the delta-change approach is likely to under-estimate the range of uncertainty simulated from GCMs as it is based on changes to the mean climate. In addition, the delta-change approach does not capture changes on drivers of extreme events and on precipitation distribution within storm events, resulting in uncertainty in the magnitude of surface runoff in the future projections. However, this typical source of uncertainty related to the delta-change approach is not expected to have a large impact on the results as the process-based GW model used, simulates flood recharge based on the assigned flood period and not on the magnitude of the flood. Thus, we acknowledge that the approach gives less information on the range and variation of climate change effects but on the other hand still gives a relevant estimation of change in mean values. Consequently, for our results, the main conclusions regarding climate change on mean GW levels are more certain than the variation around the mean.