

Dear Nadav,

Many thanks for reviewing our paper and providing comments.

We have addressed your helpful comments, including (1) providing greater clarity over the data time periods, (2) clarifying which catchments tend to see decreasing flood flows, (3) adding references to the discussion and (4) changing Figure 3 to include gauge locations.

Below we list the comment made by yourself (in blue) and the changes made by us (in black). Any edits to the paper are shown in italics.

We hope that this revised manuscript is acceptable for publication. We appreciate your consideration of our manuscript and look forward to your response.

Best Wishes,

Rosanna Lane (on behalf of all co-authors)

### Editor Comments and Revisions

L22. Km<sup>2</sup> was highlighted.

We have corrected this to superscript.

L137. Data is available for which period?

The periods which data are available is discussed in Section 2.3 'Climate Model Data', L149. We have also added text in Section 2.4 'Hydrological Modelling' to clarify the time periods over which the model calibration and evaluation was conducted as follows:

*'Model parameters were calibrated over the period January 1991 to December 2000, and then evaluated over the period January 2001 to December 2010'.*

L164. What is defined as "future" period?

We have added text to clarify this

*'...therefore increasingly looking like a plausible future up to 2100.'*

L255. The same period was used for calibration and validation?

Thanks for spotting this. We have added text to Section 2.4 'Hydrological Modelling' to clarify the time periods over which the model calibration and evaluation was conducted as follows:

*'Model parameters were calibrated over the period January 1991 to December 2000, and then evaluated over the period January 2001 to December 2010'.*

L261. Why this period and not 2071 – 2100 as usually taken?

Unfortunately, we were limited by the time period provided by the RCM data which is 1981 – 2080.

L452. Are these larger or drier catchments comparing to the others?

We didn't find a trend between the size of the catchment and decreasing flood flows. However, these catchments are all located in the South-East of England where we experience much drier conditions. We have edited this sentence to better clarify this point as follows:

*'These catchments tend to be located in the southeast of England where we have drier conditions and large increases in PET – and therefore the impact of drier soils and increased storage deficits could have moderated the impact of increased heavy precipitation on river flows.'*

L525. This is for the climate, not for the hydrology. See Moraga et al 2021, 2022.

To support this paragraph, we have added the following reference:

*"Furthermore, a study comparing uncertainty sources for flow projections in the Mekong basin, found that the Soil and Water Assessment Tool (SWAT) parameters were the major source of uncertainty in the short term (2030s) but GCMs were the major source of uncertainty in the long term (2060s)."*

Unfortunately, I could not find a published online version of Moraga et al. 2022.

Figure 2. Do you have -100% change? Do you have 50% increase?

No, but we do get close to these values and thus the colour bars are capped at these values.

Figure 3. Can you mark the location of the gauges in figure and simply rename them as e.g. gauges 1-4.

Thanks for the suggestion. We have added a map with the location of the gauges and a text description of where the gauges are in GB.