

Geosci. Model Dev. Discuss., referee comment RC1  
<https://doi.org/10.5194/gmd-2021-140-RC1>, 2021  
© Author(s) 2021. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## **Comment on gmd-2021-140**

Anonymous Referee #1

---

Referee comment on "Computation of backwater effects in surface waters of lowland catchments including control structures – an efficient and re-usable method implemented in the hydrological open-source model Kalypso-NA (4.0)" by Sandra Hellmers and Peter Fröhle, Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-140-RC1>, 2021

---

The contribution is in line with the aims and scope of GMD. The paper represent a sufficiently substantial advance in modelling science? The consideration of backwater effects like realized is a novel aspect of modelling. The methods and assumptions are valid and clearly outlined. Nevertheless some additional remarks could be useful (see detailed comments in the supplement). Altogether a minor revision is recommended.

Please also note the supplement to this comment:

<https://gmd.copernicus.org/preprints/gmd-2021-140/gmd-2021-140-RC1-supplement.pdf>