Interactive comment on "Technical Note: A hydrological routing scheme for the Ecosystem Demography model (ED2+R)" *by* F. F. Pereira et al.

Anonymous Referee #1

In this contribution, Pereira and co-authors propose an update to the surface water structure of the Ecosystem Demography (ED2) model, throughout the implementation of a river routing scheme. The model was successfully applied in the Tapajós River Basin, a major tributary of the Amazon River. In general, the approach for model calibration/validation is standard and demonstrated a significant improvement between observed and simulated river discharge. In my opinion, although the results are easy to understand, the manuscript requires substantial scientific structuring and improvement if it is to be considered further. The model development itself is not a compelling motivation without a clear scientific question in the background. The paper should advance understanding of hydrological processes and report novel findings. Moreover, the discussion should be closely linked to the recent literature on topics related to large-scale (i) river routing model developments and (ii) inland waters

importance. I included specific and technical comments in a separated PDF file as to improve this interesting paper.

Please also note the supplement to this comment:
http://www.hydrol-earth-syst-sci-discuss.net/hess-2016-114/hess-2016-114-RC1-supplement.pdf