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Hydrology and Earth System Sciences
Discussions

Interactive comment on "Fresh groundwater resources in a large sand replenishment" *by* S. Huizer et al.

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We would like to thank the Referee for the comments, which are highly appreciated.

"This paper describes groundwater modelling of the impact on freshwater resources of a local sand nourishment development off the coast of the Netherlands, called the 'Sand Engine'. The modelling effort includes morphological changes of the 'Sand Engine' caused by wind, currents and tides. The model is loosely calibrated and then used as a predictive tool under different climate scenarios. The paper is very well written and the quality of the figures is very high. Modelling freshwater resources within a moving sand island is interesting and novel. There is an appropriate amount of background detail provided. The technical aspects of the work appear to be sound and the limitations of the modelling effort are well detailed. The conclusion that local sand re-

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Discussion paper

plenishments can provide both coastal protection and increasing freshwater availability is important and of general interest."

Referee#3 did not submit general or specific comments.

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