

Interactive comment on “Thermal management of an urban groundwater body” by J. Epting and P. Huggenberger

J. Epting and P. Huggenberger

jannis.epting@unibas.ch

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We commented and proposed changes to the specific considerations of the reviewer, especially concerning obvious mistakes (see supplement). We also tried to comment some of the general statements; however, to our opinion some of them are too vague.

The results of the groundwater temperature investigations, including the monitoring and modeling part that took place in the area of Basel are intended to be published within two publications with different emphases.

In contrast to the HESS-D paper another paper, which is currently under review for Journal of Hydrology, focuses on: a technical description and the setup of the heat-

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transport model; deriving a natural state of the investigated groundwater body; evaluating the various influences on the urban thermal groundwater regime and discussing possible impacts of climate change.

This paper focuses on describing the current status and potential future thermal groundwater management of an urban groundwater body, by: revealing the state of the (undeniably) currently mismanaged groundwater body (degree of current impact) and exploring the future potential for thermal groundwater use (cooling and heating) for different regions of the groundwater body. As for most cities (the Basel case is not unique), currently no concept exist which leads to the mismanagement. The use of “wasted energy” is promising and could be part of sustainable development strategies in urban areas.

We could provide the submitted manuscript to the editor and the reviewer. However, as the manuscript is not published yet, it should not be available for a broader audience. We included some of the supplementary information in the comments below. This supplementary information could also be included in the final revised paper (editor decision).

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/9/C2935/2012/hessd-9-C2935-2012-supplement.pdf>

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