

Interactive comment on “Hydraulic Shortcuts Increase the Connectivity of Arable Land Areas to Surface Waters” by Urs Schönenberger and Christian Stamm

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As pointed out by the editor, there is an error in one sentence of our answer to the Reviewer comment concerning L116-117 of the manuscript. In the following, we provide the corrected answer.

Reviewer comment: I am curious to why shortcuts that drain into surface waters or treatment plants are treated same by the model. If you are looking at pollutant transport, shouldn't there be a difference?

Corrected answer: We agree that there is a difference between these two processes.

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In waste water treatment plants pesticides are removed to a certain degree. However, during heavy rain events (i.e. the point in time when the largest pesticide loads are expected in shortcuts) rain water is often not reaching WWTPs but directed to surface waters through CSOs. CSOs have been reported to be an important pesticide transport pathway (Mutzner et al., 2020) and we expect the transport via CSO to be very similar to “normal” shortcuts. In addition, from our field studies we know transport via WWTPs/CSO is less important. Only 12% of the inlets mapped drain to WWTPs/CSO while 87% drain to surface waters (see L382-384). We therefore do not expect these differences to have a major influence on our results and decided to neglect them.

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