

Biogeosciences Discuss., referee comment RC1  
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## **Comment on bg-2021-276, line 68: Submerged drain subsurface irrigation (SDSI) systems**

Henk van Hardeveld (Referee)

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Referee comment on "Cutting peatland CO<sub>2</sub> emissions with water management practices" by Jim Boonman et al., Biogeosciences Discuss., <https://doi.org/10.5194/bg-2021-276-RC1>, 2021

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Throughout the years, these systems have been described in various ways. E.g., Querner et al. (2012) call them subsurface drains, Weideveld et al. (2021) call them subsoil irrigation and drainage systems, Hoogland et al. (2020; DOI:10.5194/piahs-382-747-2020) refer to them as drain infiltration, and Hoekstra et al. (2020; DOI: 10.5194/piahs-382-741-2020) favor pressurized drainage for a system similar to that on the Assendelft site. So why coin yet another name instead of using (parts of) a previous one, especially when the new name is less concise? Subsurface (and/or subsoil) seems superfluous: where else would the drains be? And submerged is not accurate all the times: a part of the appeal of these systems is that after a heavy rain shower, you can use them as conventional, non-submerged drains to more rapidly drain a field. Would (pressurized) drain irrigation systems not suffice?