

## Anonymous Referee #3

Received and published: 22 May 2018

### General Comments:

I have prepared a concise review which you can find in attachment (annotated PDF). Overall, it is an interesting paper and topic but it lacks a proper presentation of the data (ERI) and methodology (inversion, model quality, ground-truth validation) in order to be published. I would therefore recommend moderate to major revisions.

**Author Response:** Thank you for the thorough review and constructive comments. Numerous details about the research methodology (inversion criteria, handling of underwater survey sections, model quality, survey setup) will be added to the revised manuscript as suggested. Additionally, the time-lapse profiles will include the topography used in the background ERI profiles. The time-lapse resistivity profiles will be presented using ratios of relative change to improve interpretability. Details about the laboratory testing of soil samples will be added to validate the geophysical interpretations. A detailed discussion will be added to better explain the geophysical interpretations as they relate to hydrologic processes.

Please also note the supplement to this comment:

### Specific Comments:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2018-133/hess-2018-133-RC3-supplement.pdf>