

Research Paper/

Title: Must be less than 100 characters and spaces

Note: Including the most pertinent keywords in the title is a good idea – 75% of search engines focus on title and abstract.

Hendrik M. Haitjema <example first author and corresponding author. Note: First author does not have to be the corresponding author>

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Conflict of interest: None.

Key words: These should be selected with Internet searches in mind. For case studies make sure to include the area of the study here.

1 **Article Impact Statement:** *The Article Impact Statement (<140 characters + spaces)*

2 *means to promote the article rather than offer an abstract with factual information.*

3 (The sentence in italics above is exactly 140 characters and spaces!)

4

5 **Abstract** <example section heading type: bold 14 point>

6 The abstract is a single paragraph of no more than 250 words. It should include the

7 scientific contribution or research hypothesis in your paper, the primary methods

8 or approach, and a brief summary of the conclusions. Only a Research Paper,

9 Methods Note, Review Paper, Case Study Paper, and Rapid Communication in

10 *Groundwater* have an abstract. Note: 75% of search engines focus on the Title and
11 Abstract, hence make sure to include your keywords here!

12

13 **Introduction** <example section heading type: bold 14 point>

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16 successfully write .doc or .docx files (MS Word files). The font size of the entire
17 manuscript should be 12 point, but section titles are to be given a larger font or be
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22 Additionally, the entire manuscript should be provided with line numbers that run
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32 searches and make your paper *better cited!* Make sure that the Title and the

33 Abstract combined include all of your relevant keywords – 75% of search engines
34 scan only title and abstract.

35

36 **Content of introduction** <example subsection heading type: bold 12 point>

37 Use this Introduction to:

- 38 1. Provide background information on the topic of your paper.
- 39 2. Clearly define the scientific contribution or hypothesis to be tested in this
40 paper.
- 41 3. Optionally end with a brief overview of how your paper is organized, hence
42 what the reader may expect in the various sections (2 or 3 sentences).

43 It is critically important that you define the contribution of your paper early on in
44 the Abstract, in the Introduction, and in the Conclusions. After you submit your
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46 information to help decide whether or not to decline your manuscript without
47 further review (~30% of the manuscripts are declined outright) or whether to
48 assign your manuscript to an Executive Editor for peer review. The essence of your
49 paper is its *scientific contribution* (or however you want to define its value to the
50 readers of *Groundwater*) and it must appear front and center in the Abstract,
51 Introduction, and Conclusions of your manuscript!

52

53 Your review of the literature should be comprehensive, but *relevant*. Excessive self-
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55 publishing in the journal *Groundwater* and that omitting to cite truly relevant

56 publications in *Groundwater* is, of course, an affront to the readers and editors of the
57 journal. Citations in the text are by author(s) name and year (e.g., Jones 1999) or
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60 comma after the name! Also note that a semi-colon separates multiple citations
61 between parentheses.

62

63 **Research method**

64 In this section you present how you went about testing your research hypothesis or
65 how you went about collecting the data that you analyzed. It may also be a section in
66 which you present the mathematical model or equations used to arrive at your
67 results and conclusions. Do not elaborate on standard procedures (reference the
68 literature instead), but focus on what is uniquely different in your methodology.

69

70 **On the length of your manuscript**

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79 finished manuscript is 10,000 or more and you have also some figures and tables,
80 the published paper will likely exceed 15 published pages. Keep in mind that a
81 shorter paper, closer to 10 pages or less, will be better read!

82

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84 **Analysis or Results**

85 In this section you present the analysis or analyses you conducted on the data you
86 collected in the field, in the laboratory, or from the literature. Alternatively, this
87 may be the section in which you provide the results of your mathematical modeling
88 or calculations.

89

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114 For instance, the hydraulic conductivity $k=30$ ft/day (9.144 m/day) has been
115 obtained using a pumping test. These conversions are not needed in tables or
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117

118 **Discussion**

119 This section may or may not be relevant to your work, but it is often good to provide
120 a synthesis of your research results clearly outlining the strengths and weaknesses
121 of your work prior to drawing your final conclusions. This is also the place to
122 compare your results with previous findings, *hence substantiating your contribution*
123 to the field of groundwater science and engineering.

124

125 **Summary or Conclusions**

126 Clearly restate your research hypothesis or research objective and then succinctly
127 present your findings. Depending on the nature of your work and the content of the
128 previous section you may be *summarizing* your findings here or presenting your
129 *conclusions* for the first time. Either way, the reader should get the gist of your
130 paper by reading only the abstract and this final section - many do just that! Make
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132 information not already presented elsewhere in the paper.

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222

223

224 **References**

225 The journal *Groundwater* changed the spelling of its name from *Ground Water* to
226 *Groundwater* in January of 2013. References to papers in *Groundwater* that precede
227 this date may use either spelling.

228 Papers that have been published online in Early View, but not yet in a particular
229 volume and issue, may be referenced by their DOI number, see the fictitious 2014
230 paper below. Note, all references below are, of course, entirely fictitious papers.

231

232 Jones, J. 1999. On some topic in hydrology. *Ground Water* 37, no.2: 170 – 177.

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