Interactive comment on “Sustainability characteristics of drinking water supply” by Jolijn van Engelenburg et al.

Anonymous Referee #2

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Sustainability characteristics of water supply were determined based on the analysis of three case studies in the Netherlands. From there general sustainability criteria were identified that can be used in to assess drinking water supply. The paper tackles an interesting subject and is well written. However, it need some adjustment before publication. General comments: - The title should include the fact that the study was based on three case studies in the Netherlands - The paper is rather long, the writing could be more concised and redundancies should be eliminated. - When general statements are done, they should be supported by literature - The methodology chapter is rather general, without a good description how sustainability characteristics and criteria were precisely determined. - In addition, the sustainability criteria should be better formulated in order to be able to judge compliance (or not) - When looking at the general
use of the criteria for judgement of water supply systems in the world, at least some criteria are missing, such as Non-revenue water/leakage (which is maybe not a question in the Netherlands, but internationally it is) for technical system; and cost-recovery, a good-billing system, transparency in water tariffs, equality in water billing, etc. for governance. These flaws can may be avoided by better (and more systematically) addressing previous bullets. - Description of cases should be part of methodology section. - Avoid repetition of results in the various tables. It is better to summarize at once and then describe in the various sections. - Discussion (with literature) should be part of “results” section and not of “conclusions” and conclusions should be concised. - Language, including tenses, should be checked: present tense for general statements and past tense for own findings and work. - Avoid word “issues”, but better “characteristics” “criteria” “aspects”, depending on own definition. Specific comments: - Line 40-44: delete (see general comments) - Line 48: delete and give summary of results - Line 56-57: too general, delete - Line 57-60: give reference - Line 64-67: could be shortened (little information), only references sufficient - Line 70-71: delete sentence - Line 84: delete sentence - Line 90-96: not much extra information (too general without references), so consider deleting. - Line 102-104: delete sentence - Line 127-130: not relevant information - Line 131: internal colleagues = staff - Line 135: how the authors came to the defined “sustainability characteristics”? - Line 142: can be = could potentially be - Line 144: Figure 1 does not give much extra information in relation to text so can be deleted. - Line 147 and onwards: Section 2.1 is too general with a few references. Could be shortened to in or two sentences as introduction. - Line 178 and onwards: could be more concised too, by at least deleting 178-182 - Line 210: Figure gives little extra information, so could be deleted. By the way, when it is not an own figure, a reference should be given. - Line 214: case selection should be more to the point - Line 215-219: general information without references, could be deleted. - Line 233-240: avoid redundant information (already explained elsewhere) - Line 246 and onwards: use Italic for the DPSIR elements - Line 246 and onwards: give references for the information that is given on the cases (e.g. line 247, 257, 259, 260-263, ...).
- Line 260-263: how this information is obtained/verified? - Line 274 and onwards: Is there a "case" or is it a "general" description. Now that is not clear.. Better, focus on the "Vitens case". - Line 343-352: redundant information, so delete. - Line 360: introduce JPM - Line 367: check table 4, e.g. what is difference between “raw water” and “surface water” or “groundwater”; “impact of abstraction” is redundant; “water quantity” = “water flows”. See also general comments. - Line 378-383: too speculative. Please stick to own findings (and discuss in relation to literature). - Line 390: this will also impact costs of investments and thus water tariff. - Line 396: delete sentence - Line 444 and 469: why is the existence of a WSP a sustainability criterium? - Line 476 and onwards: avoid repetitions with previous sections, see earlier comments. - Line 490-501: delete (see general comments) - Line 503-510: delete (see general comments) - Line 521-529: delete (see general comments)