Interactive comment on “Household water use and conservation models using Monte Carlo techniques” by R. Cahill et al.

Anonymous Referee #3

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I have reviewed a previous version of this article in another journal. A lot of the comments (from me and other reviewers) have been taken into account. However, there are still some issues left.

There are a lot of references to Mr. Cahill’s master thesis (but why force readers to search and pay for references to locate key information. Note: a pdf version of the thesis costs $37 on ProQuest). I feel that this is not a appropriate reference. At least in this paper a summary of

* the parameter probability functions (pg 4875, ln 20)

* relations between water use and parameters (pg 4876, ln 15 and pg 4878, ln 17)
* cost functions (pg 4879, In 5)
* inputs of optimization model (pg 4881, In 4)

should be added.

*** other comments:

* pg 4870, In 23: "many water utilities", there are only two references
* pg 4871, In 7: another good South African reference is Jacobs and Haarhof 2004
* pg 4871, In 25: in fact the model could include outdoor use, the thing is that in the Netherlands outdoor use is very small compared to US, Australia, etc.

* figure 3: I would suggest to put the indoor use on a different y-scale then the outdoor use. That way it is easier to judge the results if only indoor use were present. The conclusions may be different then (see also pg 4877, In 3).

* table 3: winter and summer scenarios are equal, why not just name them winter 1-3 and summer 1-3 in stead of 1-6?

* pg 4879, In 23 and further: nice!

* pg 4880, In 20-25: I do not understand this part.

* pg 4883, In 6-8: which actions are you talking of?

* pg 4883, In 13-16: could you add an example?

* pg 4885, In 12: hassle costs were for short term changes only. Fig 5 shows long term changes.

* pg 4886, In 15 a.f.: can you quantify this? Why should we bother?

* some typos and reference formats need to be taken care of.

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