Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2017-300-AC1, 2017 © Author(s) 2017. This work is distributed under the Creative Commons Attribution 3.0 License.



Interactive comment on "Sustaining the Ogallala Aquifer: From the Wells to People, A Holistic CNH Model" by Joseph A. Aistrup et al.

Joseph A. Aistrup et al.

steward@ksu.edu

Received and published: 1 September 2017

We concur with comment 1/19, and we will revise accordingly

2/14 The High Plains Aquifer is used for the Ogallala Aquifer deposits and some of the related units, but High Plains is more universally used. We will specifically state this in the revised manuscript.

2/10 We can add McGuire cites easily.

2/19 Adding Groundwater Management District #3 to abstract is a good idea. Also providing a better sense of the generalizability of our study to the aquifer is a good suggestion that we can easily do.

C1

- 3. We are willing create or obtain a new Figure 1, or revise figure 1 based on the editorial policies of HESS.
- 4. Figure 2, we will add a cone of depression.
- 5. We concur. We believe Hornbeck and Foster's study should be worked into the text.
- 6/14: We will look at the piece by Foster et al (2015) within the context of our water model.
- 9/12: We will cite McQuire.
- 9/17: We concur.
- 9/26: Yes, we will revise.

12/20: Yes, an individual irrigator is interested in how much water is in their particular well(s) to support their crop in their fields. Yet, it is important for overall management and prediction of net benefit to society through groundwater extractions to integrate the volume of water over a study region. For our study, we decided to integrate to a common scale that is consistent across all model components. And, a scale important for predicting crop production and the capacity to sustain the important rural communities into the future. We will make sure this is clear in the revision.

13/9: We will cite Hornbeck and Keskin

13/15: Our statistics are correct.

13/20: Yes.

We agree to add some language about the limitations of projections that are 100 years into the future.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2017-300, 2017.