We thank Dr. Perry for his positive and encouraging comments

Comment: I write this review on the assumption that the issues I have raised in relation to the companion paper are resolved. Primarily, those related to terminology, and as an example of the added clarity that "tighter" terminology would bring, I re-write below the abstract of this paper. Nothing appears to me to be lost in this version, but it is in my view a lot simpler and clearer than the original.

Response: We carefully revised this manuscript to make sure all the related changes in terminology that had been made to the companion paper are reflected in paper 2. We also used the suggested re-written abstract to revise the abstract, and we believe the updated abstract is indeed simpler and clearer. A few minor changes have been inserted.

Comment: I also find the use of the term "basin efficiency" to be unhelpful. In irrigation terminology, "efficiency" usually means the ratio of water consumed to water applied (or similar). Here we have a basin where consumption is about 7% more than the supply. Does this imply a basin efficiency of 107%? Is that good? What level of basin efficiency IS "good"? In fact, the useful information is already here in the paper because we have excellent statements of the sources and uses of water. Interpreting these nice facts into "efficiencies" is a major step backwards.

Response: the efficiency term that is used in WA+ is “classical irrigation efficiency” as described by (Seckler et al, 2003). It is the actual ET minus effective precipitation (i.e. incremental ET in WA+ terminology) divided by water withdrawn for irrigation purpose. The benefit of looking at “classical irrigation efficiency” at basin level is to see how effective a basin is in capturing return flows. It goes beyond looking at efficiency at farm or scheme level. Application of classical irrigation efficiency at an aggregate scale provides policy makers with a bigger picture on recapturing water flows. Following the strict definition of classical irrigation efficiency, incremental ET is always related to withdrawals, hence it cannot become more than 100%. We revised the paper to elaborate on these points and removed the term “basin efficiency” and refer to it as s “classical irrigation efficiency” at basin level.

Comment: As noted in reference to the other paper, I am also not persuaded that the blue/green partition of water adds anything to the discussion. The authors might review that issue and see what is lost by deleting this poetic approach.

Response: We addressed this issue by moving away from using “blue water” in the framework. The term was replaced by “exploitable water” throughout both papers.

Comment: It may be my reading, but an area where I am not clear is how the analysis treats rainfall on irrigated areas that (a) definitely contributes to crop T, (b) may contribute to crop T, and (c) does not contribute to crop T. is this a manageable variable?

Response: We took effective rainfall as ET from rainfall over irrigated areas and build the water account on this assumption. As defined in the revised version of paper 1, the accuracy dimension of this solution needs to be explored in future research.

References:

Seckler, D., Molden, D., and Sakthivadivel, R.: The concept of efficiency in water resources management and policy, in water Productivity in agriculture: Limits and opportunities for improvement, edited by:Kijne et al., pp. 37-52, Comprehensive assessment of water management in Agriculture. CABI Publishing in association with International Water Management Institute, UK, 2003.