

Interactive comment on “Reframing hydrology education to solve coupled human and environmental problems” by E. G. King et al.

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We are grateful for the constructive comments of both reviewers. Here we summarize their key queries and suggestions (Q), and provide responses (R), which indicate where the manuscript has been updated to incorporate their insights.

Reviewer 1: Q1. Strengthen connection to current efforts to promote socio-hydrology. R1. We thank the referee for pointing out the omission of such articles as Wagener et al. 2010 and Sivapalan 2012, which both provide strong rationales for the inclusion of coupled human dynamics. We have updated the manuscript to indicate that our arguments support this ongoing movement in hydrology.

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Q2. Provide more concrete, pictorial representations of the examples. R2. We agree with the reviewer that pictures are worth many words in illustrating ideas, and indeed we experimented with versions of Figure 3 that included pictures for each linked component. However, we found the diagrams became too busy, so we opted for figures that diagrammatically illustrated the general principles we sought to emphasize. We feel that building a reference base of concrete examples will be an important objective as we move forward in facilitating the adoption of more holistic approaches to hydrology education.

Q3. Contextualize work relative to other contributions to the special issue. R3. We have added text to relate the idea of the wide dynamic perspective to innovations in decision-making games and the ecohydrology paradigm, described in articles by McClain et al., Hoekstra, Rusca et al., and Siebert and Vis in this special issue. The coupled human-environment perspective in an umbrella paradigm that shows how hydrology, ecology, and the social theories regarding public goods and common pool resources are all dynamically linked.

Q4. How to motivate students to get excited about issues beyond their geographic and career scope. How to incorporate perspective into texts, activities, etc. R4. We discuss student engagement in a new paragraph at the end of the Kenya example, which addresses both students' curiosity in topics far from their potential careers and ways to adapt the field study example to a local context. We have closed the paper with a statement that argues in general terms that tomorrow's hydrologists will benefit from inclusion of wide-dynamic thinking via instruction and inclusion in texts.

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