Interactive comment on "Values in water management" *by* Erik Mostert

Anonymous Referee #2

The article attempts to tackle an important topic of values as a basic component of culture in socio-hydrology. It gives some details on the social origin and character of values and their relationship between water management behavior. The author explained the difficulty of measuring values such as societal values and individual values and how to incorporate them in socio-hydrology and proposed to start the analysis in the intermediate level of groups and organizations instead of treating society as lump or individual level.

However, I am struggling to find the main outcome of this article. It claims to provide a comprehensive theory of values in water management which originates from both social psychological and political science literature but what I see is, at best, a biased narrative based on author's own knowledge. And that too is not extensive. The paper is not an exhaustive review of the theories of values and norms that are out there. I would therefore suggest that the paper be rejected on its claim of being an exhaustive

review unless the author at least provides a credible synthesis of theories of value out there.

The author explains the behavioral changes through different theories (VBN, rational choice) but it would be nice to explore other theories for the completeness (i.e; warm glow effect, altruism, the theory of planned behavior, double and triple loop learning etc.). It will provide how each theory treats the values in different contexts. I am pretty sure it will not only enhance the knowledge of socio-hydrologists who are often from engineering background but will also provide an unbiased view of diverse theories of value.

It will also be interesting to highlight the contemporary issues (with example) arising from value system such as path dependency and lock-ins. In addition, it is unwise to suggest that socio-hydrology and water management community is totally unaware of empirical frameworks based on values and norms. See for example some papers in WRR special issue on socio-hydrology and elsewhere (e.g. RANAS framework, health belief models etc.) where authors have used empirical models that were populated by social surveys to learn about values and norms underlying context specific water related behavior. To suggest that measuring values is difficult and not point readers to researchers who have successfully measured context specific values is misguided and should be corrected with major revisions.

I would therefore suggest the author to modify this article in full earnest based on extensive literature review on values by expanding the focus on the origin of values and theories based on comments above. The author should also provide literature review based synthesis of empirical models that learn about values and norms underlying water behavior using social survey, including its strength and weaknesses. Relationships between culture and observed phenomena and emergent crises such as lock-ins such as extensive groundwater pumping is also desirable, otherwise why should one be even interested in values.