

Interactive comment on “Adaptation of water resource systems to an uncertain future” by C. L. Walsh et al.

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We would like to thank the referee for their positive comments and their suggestion of recent papers that will better frame this work. The papers listed are based around the use of robustness analysis for water systems to enable better decision making. Whereas we do make reference to some example literature in this field e.g. Groves et al. 2008, Lempert & Groves 2010, Matrosov et al. 2013, Borgomeo, we do feel that referring to some of these more recent papers in this arena such as Whateley et al. 2014 and Steinschneider et al 2015 in the introduction would be valuable. In particular those studies by Beh et al, 2015a, 2015b and Paton et al 2013, 2014; Zeff et al. 2014 and Haasnoot et al 2014 would contribute and strengthen the penultimate paragraph of the discussion section that debates costs, benefits and trade-offs of adaptation measures.

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In their case study on Adelaide’s southern water supply system, Beh et al 2015a,b and Paton et al. 2014 demonstrate a multi-objective evolutionary algorithm framework to consider the trade-offs between reducing greenhouse house emissions while planning sustainable urban water supply systems. Applied to North Carolina Zeff et al. 2014 investigated how more flexible and adaptable water supply portfolios can be implemented alongside financial mitigation tools to reduce trade-offs between fluctuations of revenues and costs of implementing new solutions. Haasnoot et al 2014 demonstrate the development of adaptation pathways whereby environment and policy responses are analysed through time to develop an ensemble of plausible futures to support decision making under uncertainty. These citations would be included if invited to prepare a final manuscript.

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