

Hydrol. Earth Syst. Sci. Discuss., author comment AC2  
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## Reply on RC2

Stephen K. Adams et al.

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Author comment on "Advancing stream classification and hydrologic modeling of ungaged basins for environmental flow management in coastal southern California" by Stephen K. Adams et al., Hydrol. Earth Syst. Sci. Discuss.,  
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Thank you RC2 for your great review of our paper. We have accepted and responded to all your comments, which have improved our manuscript. We addressed your general feedback by augmenting our background literature related to ungaged catchments (revised lines 91-93; 94-96). For specific comments, we clarified "singular streamflow metrics" (revised line 76) and "network of models" (revised lines 85-86). We added transferring hydrologic index (revised line 87). We specified that we used "conceptual" models and not just process-based (revised line 76-77; 415-416). We ensured all equations use proper mathematical notation required by HESS. We provided more detail on why we chose 1 cfs as the threshold for a dry stream (revised line 155). We enhanced our description of "weighted classical (metric) multidimensional scaling (revised lines 166-167) and clustering indices (revised lines 168-169). We clarified our statement that "calibrated parameters inherently have greater uncertainty than directly calculated parameters" (revised lines 196-198). We also clarified "reciprocating model accuracy" (revised lines 193-194). We completely redeveloped Figure 2, which was also requested by RC1. We clarified "successful" model calibration (revised lines 336-337), which was also requested by RC1. Finally, we added DOIs to citations.