Assessing geomorphic river sensitivity
by Sana Khan* & Kirstie Fryirs

Contemporary river forms and processes can be heavily influenced by the legacies of anthropogenic disturbances to river systems. Knowledge of the historical range of river adjustment can be used to develop an understanding of a river’s ‘expected’ character and behaviour.

Here we present an approach to assess and quantify reach scale behavioural sensitivity, defined as the ease with which geomorphic units and associated water, sediment and vegetation interactions adjust within the expected behavioural regime.

1. River characterisation
2. Track geomorphic adjustment (Identify geomorphic forms of adjustment and change)
3. Calculate Behavioural Sensitivity
4. Distribution of Behavioural Sensitivity classes across the catchment

Assessing geomorphic river sensitivity in Richmond Catchment, NSW, Australia

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For more details

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An approach for assessing geomorphic river sensitivity across a catchment based on analysis of historical capacity for adjustment

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