

[Indicators of river system hydromorphological character and dynamics: understanding current conditions and guiding sustainable river management \(González del Tánago et al 2016\) \[1\]](#)

A set of multi-scale, process-based hydromorphological indicators of river character and dynamics has been developed to support river management and restoration activities. Indicators are selected to represent key hydromorphological processes at each spatial scale, i.e., catchment, landscape unit, river segment, river reach. Their evaluation allows identification of the cascade of these processes through the spatial units and the historical changes in their propagation as a consequence of natural or human induced hydromorphological changes.

The approach is deliberately open-ended so that it can be adapted to local environmental conditions and management, and it can make the most effective use of available data sets. The indicators support assessments of the current condition of the river and its catchment; past changes within the catchment and their impacts on river reaches. Therefore, they represent a sound foundation for assessing the way the catchment to reach scale units and the geomorphic units within reaches may respond to future natural changes or human interventions. The procedure is illustrated using the example of the river Frome (UK).

Keywords: Indicators, Hydromorphology, Fluvial processes, River assessment, River management, Scale

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