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## Why is managing sediment (dis)connectivity in fluvial systems so important?

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Globally, fluvial systems are under considerable and increasing threat from a plethora of anthropogenic stresses. These include different types of indirect (e.g. land cover/use or climate change) and direct human impacts (e.g. river engineering) that alter water and sediment dynamics. It is widely known that (dis)connectivity relationships in river and catchment systems determine the source, timing and rates of water and sediment flux and thus their geomorphic sensitivity and response to disturbance. However, most river and catchment management plans overlook the role of sediment (dis)connectivity. Here we use examples from different environmental settings with different sediment-related problems to show how understandings of sediment (dis)connectivity can inform catchment-based management. Specifically, we focus on concerns for river conservation and recovery, using examples from Austria, New Zealand and Australia. Moreover, we present questions for practitioners to appropriately contextualise (dis)connectivity concepts in system-specific place-based management applications.