

The potential effect of re-snagging on hydraulic habitat

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Abstract Within riverine ecosystems, physical diversity facilitates biodiversity. In particular, large wood within river channels influences the distribution of hydraulic patches and their character, within the river landscape. We surveyed 30 reaches along the Barwon–Darling River in southeastern Australia to describe their hydraulic character, before and after the reintroduction of large wood (re-snagging). We found considerable hydraulic diversity within the reaches, but there was little difference between reach types (control, reference or re-snagged) and survey times. No significant differences were observed between the re-snagged reaches at the two survey times when all reaches were considered together, although differences were identified in some individual hydraulic patch variables. These results may be due to the low-flow conditions during and between survey runs. Successive surveys at a range of flow levels, both before and after the occurrence of larger flow events (which may encourage scour around re-introduced large wood), will be required to clarify this.

Key words large wood; acoustic doppler profiler; Barwon-Darling River; hydraulic diversity