New Zealand’s braided rivers: How are they changing, why, and what happens next?

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# ABSTRACT

New Zealand’s braided rivers are highly valued natural landscapes that support high biodiversity and provide vital habitat for many native species. A key aspect of braided river natural character is their ability to frequently rework their bed, preserving habitat quality and diversity. These dynamics are fundamentally controlled by flow regime, sediment supply and the degree of lateral confinement and vegetation cover.

The disjunct between geomorphic concepts of braided riverbed lateral boundaries and the Resource Management Act (RMA) definition of riverbed that has historically been used to decide these boundaries in New Zealand has left many of New Zealand’s braided rivers vulnerable to constriction due to adjacent land use change. Circumstances arising in 2023 presented an opportunity to resolve this issue. Generational change to New Zealand’s RMA legislation prompted the authors of this paper, and others, to make a series of submissions to Parliament. The Natural and Built Environments Act (NBEA) passed into law in August 2023. The submission process resulted in a successful amendment to section 7(1) of the NBEA, which now exempts “braided and wandering rivers” from the common-law bank-to-bank definition of the RMA.

In this presentation we will outline how braided river morphology is changing in New Zealand and the implications of these changes, why legal definitions pose a challenge to river management, and the process we went through to help support changes in legislation. We will also discuss how science can help inform the next steps in resource management reform.