

Ecological Restoration of Streams and Rivers: Shifting Strategies and Shifting Goals

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Ecological restoration has grown rapidly and now encompasses not only classic ecological theory but also utilitarian concerns, such as preparedness for climate change and provisioning of ecosystem services. Three dominant perspectives compete to influence the science and practice of river restoration. A strong focus on channel morphology has led to approaches that involve major Earth-moving activities, such as channel reconfiguration with the unmet assumption that ecological recovery will follow. Functional perspectives of river restoration aim to regain the full suite of biogeochemical, ecological, and hydrogeomorphic processes that make up a healthy river, and though there is well-accepted theory to support this, research on methods to implement and assess functional restoration projects is in its infancy. A plethora of new studies worldwide provide data on why and how rivers are being restored as well as the project outcomes. Measurable improvements postrestoration vary by restoration method and measure of outcome.

Article can be accessed here:

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