

Evolution and concept of environmental flows (e-flows): Meta-analysis

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Abstract

The idea of e-flows emerged as a result of the efforts to lessen the effects of river flow alterations. The role of e-flows in ecosystem protection and water resources management isn't yet fully understood and practiced. This review summarizes the historical evolution of the concept and recaps the assessment methods; analyze impacts of river flow alterations, and identifying gaps in the focus of e-flows researches. A total of 303 articles published since 2010 were collected and assessed. Most of the publications are focused on describing the effects and management of river flow alterations. According to the findings of this meta-analysis, less attention is given for basin scale, social, policy aspects of e-flows. Moreover, the role, importance, and influence of groundwater in the e-flows is given minor attention.

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