

Publication

The importance of small water bodies for biodiversity and ecosystem services: implications for policy makers

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Small waterbodies, including ponds and small lakes, low-order streams, ditches and springs, are the most numerous freshwater environments globally, are critical for freshwater biodiversity and are increasingly recognised for their role in ecosystem service delivery. Small waters often represent the best remaining examples of intact freshwater habitats and are the most likely to remain unpolluted, often being a refuge for species which have disappeared from larger, more damaged, waterbodies. Practically all water-related ecosystem services are initially mediated by small waters and some, such as carbon cycling, may be dominated by them. Small waters are exposed to all the threats affecting larger waters, and some experienced only by small waters. Despite this, small waters remain the least investigated part of the water environment and are largely excluded from water management planning. We identify the priorities for research to underpin better protection of small waters and recommend policy actions needed to better integrate small waters into the management of catchments and landscapes. The primary requirements are to identify reliable monitoring programmes for small waters, develop effective measures to protect the biodiversity and ecosystem services they provide and ensure that regulators take full account of this critical part of the water environment.

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