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Impact of Large Wood on River Ecosystems

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Deadline for manuscript submissions:

closed (30 November 2021)

Message from the Guest Editors

Dear colleagues,

Large wood (LW), also referred to as instream wood or driftwood, is a relevant part of a river ecosystem, commonly used for restoration and interacting with river engineering structures. LW in rivers creates heterogeneous flow conditions and morphological structures. LW accumulations may form ecologically beneficial dead water zones, thereby enabling the storage of nutrients. In addition, LW accumulations provide habitat for many different species and increase hyporheic exchange. Recent floods demonstrated an increase in sediment and woodladen flows, which affects the design of hydraulic structures. Current river engineering structures impair the ecologically required sediment and LW continuity during low flows

This Special Issue focuses on the impact of large wood on river morphodynamics and the related ecosystems. We invite contributions that study wood transport dynamics and the interactions between wood, flow, sediment, or fauna to inform restoration efforts. We further encourage studies on sustainable wood management in rivers, including innovative technical solutions. We invite contributions using field, laboratory, or numerical approaches.









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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. Water invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to technological scientific domains and interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

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