

Planning and Governing Nature-based Solutions in River Landscapes

A Call for Contributions for a Proposed Special Issue in *Ambio*

Proposed special issue editors and contacts

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1 Introduction and relevance

Across the world, many river landscapes have been substantially transformed to enhance navigation, to produce energy and to enable agricultural production and settlement in former floodplain areas (Posthumus et al., 2010). While these changes have led to generally more uniform flow conditions, constant water tables and sharply defined embankments, they have given rise to several unintended challenges for society, for instance exacerbating floods, diminishing water quality and biodiversity loss (Bunn and Arthington, 2002; Malmqvist and Rundle, 2002). Nature-based solutions (NBS), i.e. activities inspired and supported by ecosystem processes to fulfill human and societal needs (European Commission, 2015), are rapidly gaining popularity in science and policy as better alternatives for alleviating challenges and simultaneously creating co-benefits for people and nature today and in the future (Davis et al., 2018; European Commission, 2015; IUCN, 2012).

However, substantial knowledge gaps still exist, particularly on planning and implementation practices, effectiveness and monitoring, as well as on governance aspects (Albert et al., 2019). Practice examples are needed that showcase under which conditions NBS contribute to overcoming environmental, social and economic challenges and how such solutions can be successfully planned and realized in different ecological and societal contexts (Cohen-Shacham et al., 2016). Also, insights are required how collaborations between different disciplines, stakeholders and decision-makers can be established and fostered to develop successful governance and business models for implementation (Sekulova and Anguelovski, 2017).

2 Aim and key research questions

The aim of this proposed Special Issue in *Ambio* is to explore frontiers of planning and implementing NBS in river landscapes. The Special Issue will welcome contributions that provide insights and innovations regarding principles, barriers, and strategies for making NBS work in practice. This focus will thus be well aligned with Ambio's scope concerning links between anthropogenic activities and the environment, and the journal's interest in multi- or interdisciplinary submissions with management and policy recommendations.

More specifically, contributions to the special issue will address three key research questions:

- I. How efficient and effective are NBS towards achieving ecological, social and economic outcomes? We are interested in ex-ante and ex-post evaluations of impacts of NBS, case studies and reviews of NBS benefits and costs, and comparisons between NBS and technical alternatives. Perspectives on distributional effects of NBS benefits across different actor groups are of particular interest as well.
- II. How can we plan, design and implement NBS, in particular in inter- and transdisciplinary efforts to identify, spatially design and implement NBS at local and regional scales? We welcome studies that show how different knowledge systems can be integrated in NBS planning processes, and how results from NBS analyses can be communicated and mainstreamed to provide useful knowledge for relevant stakeholders.
- III. Which governance and business models can facilitate NBS implementation in different governance contexts and actor constellations? For instance, studies are welcome that demonstrate strategies to ensure adequate financing and funding schemes, showcase how benefits and costs of NBS can be fairly distributed, and provide insight into approaches on how government, civil society and business actors can cooperate for NBS?

3 Call for contributions and schedule

With the aim of exploring the frontiers of planning and implementing NBS in river landscapes, we herewith invite high quality contributions from scholars from around the world. Suitable article categories include Research Articles, Perspectives, Reviews, and Comments as described in the guide for authors (<https://beta.springer.com/journal/13280/submit>).

The Special Issue is proposed for *Ambio* (see website: <https://www.springer.com/environment/journal/13280>). Details for Special Issues can be found at the end of the 'Instructions for Authors' document on the same website. Ambio has not yet officially endorsed this Special Issue proposal and will make the final decision in early October 2019. The outlook of final acceptance is very good according to Ambio's chief editor.

A selection process and independent peer review will be applied to ensure thematic fit and high scientific quality of the contributions. Accepted papers will be celebrated and widely shared via social media. Cross-cutting insights from the completed Special Issue will be presented at various scientific and practice-related conferences, thereby further upscaling the dissemination.

Interested authors are asked to send a preliminary abstract (max. 300 words) before September 5, 2019 to the Special Issue Editors via (schmidt@umwelt.uni-hannover.de) to discuss suitability and thematic fit.

The envisioned time schedule is as follows:

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| – Abstract submission for preliminary discussion: | September 5, 2019 |
| – Submission of final Special Issue proposal to Ambio, including a tentative list of papers: | September 15, 2019 |
| – Invitation to submit full manuscripts: | November 15, 2019 |
| – Manuscript submission deadline: | March 31, 2020 |
| – Online first publication: | Shortly after acceptance |
| – Special Issue completion and publication: | June, 2021 |