

Title of the project:

Integrating the multiple values of water into decision-making for water allocation in transboundary river basins

Type:

PhD Research

Duration:

February 2023-February 2027

Persons involved:

M. Poplawsky (PhD candidate)
Dr.ir. H.J. Hogeboom (Daily supervisor)
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Funding:

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Summary:

Conflict and cooperation over water has been a growing topic over the past decades, with the focus being transboundary rivers. To understand how water in transboundary river basins can be efficiently and cooperatively allocated it is necessary to understand a broad spectrum of the values that water holds, both to humanity and to the environment. However, this understanding is lacking. Thus, increasing theoretical and empirical scientific knowledge of how to measure and incorporate the economic, environmental, and social values of water into decision-making is needed. These methods remain siloed across disciplines and there are knowledge gaps of how they can be applied together, especially in transboundary river basins. This PhD aims to understand how to measure the multiple values of water and inform how they can be included in decision-making for allocation in transboundary river basins. Specifically, the project will determine how decision-makers currently implicitly include the values of water in decision-making, which methods are available from across multiple disciplines to assess the values of water, how the values of water can be evaluated comprehensively within a framework, and how the values of water can be explicitly considered in decision-making for allocation. The project will be conducted with a case study of the Syr Darya basin. Project results will aid to explicitly include the values of water into decision-making for allocation in transboundary river basins.

Keywords

Transboundary rivers, river basins, values of water, decision-making, allocation

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