

## **Transnational management of the Meuse river: challenges in times of climate change**

French Translation of the title (arial 14pt)

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### **RÉSUMÉ**

Although the Meuse river is among the smaller rivers in Europe, with an average discharge of 350 m<sup>3</sup>/s in the winter, and a maximum of 3260 m<sup>3</sup>/s (reached in July 2021), it exhibits all the challenges that almost all rivers nowadays face: climate change, changing land use, erosion and sedimentation issues and increased urbanization. The effects of climate change became clear last summer, when especially the Belgium and Dutch part of the Meuse catchment experienced severe flooding, resulting in the highest discharge ever measured at the Dutch-Belgium border. In this presentation, we describe the most important characteristics of the Meuse catchment, and explain the role of the different national organizations with respect to the management of the Meuse river. We will discuss the characteristics of the 2021 flood event, and talk about the consequences of climate change in general, which results most probably in more and higher peak discharges, as well as prolonged periods of droughts. We also discuss the possibilities of nature based solutions as a way to mitigate climate change, whilst providing numerous co-benefits like increasing natural values, navigation and recreation. It turns out that considering a system approach (which is almost by definition transboundary) is quite essential in proper river management. Finally, we will briefly address the future of the Meuse river and the consequences for management.

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### **ABSTRACT**

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**KEYWORDS**

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#### **LIST OF REFERENCES** (3 maximum)

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