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Advances in Dam-Break Modeling for Flood Hazard Mitigation: Theory, Numerical Models, and Applications in Hydraulic Engineering

Guest Editors:

Prof. Dr. Francesca Aureli

Department of Engineering and Architecture, University of Parma (Italy)

Prof. Dr. Andrea Maranzoni

Department of Engineering and Architecture, University of Parma (Italy)

Prof. Dr. Gabriella Petaccia

Department of Civil Engineering and Architecture, University of Pavia

Deadline for manuscript submissions: closed (25 July 2023)

mdpi.com/si/45484

Message from the Guest Editors

Dam-break modeling is still an important field of theoretical and applied research which is of great interest to hydraulic engineers. Indeed, floods potentially induced by the collapse of dams may have catastrophic consequences on downstream lands, both in terms of human and economic losses. Moreover, the vulnerability of older dams to hydrological extreme events is increasing due to structural deterioration or inadequate spillway capacity, as well as the exposure of the floodable areas as a result of urban development.

Flood hazard assessment is indeed a prerequisite to design prevention and mitigation measures aimed at reducing the number of people affected by water-related disasters, which is one of the goals of the 2030 European Commission Agenda related to the improvement of living conditions in urban areas, [...]

For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/water/special_issues /dam_model_flood_hydraulic







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Message from the Editor-in-Chief

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Water Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/water water@mdpi.com X@Water_MDPI