DyRes System

JAROSLAV ČERNI
WATER INSTITUTE

Science Fund
of the Republic of Serbia

Dynamics resilience as a measure for risk assessment of the complex water, infrastructure and ecological systems: Making a context (DyRes_System)

The world today faces enormous challenges in redesigning and rebuilding water systems, wastewater plants and infrastructure in general. Major investment is required to renew and upgrade these aging systems to adopt for rapidly growing population, whose future is affected by uncertain changing climate and natural disasters (e.g. earthquakes).
To manage impacts of natural disasters we propose the use of system approach to enhance the predictive power in resilience assessment of water, environment, and infrastructure systems beyond the largest recorded events. The main objective of the proposed research is the development of a modelling framework for dynamic resilience assessment. This framework offers an opportunity for highlighting the role of using multi-model simulations which will support the estimation of dynamic resilience. It will underpin investment decisions within the different sectors (e.g. water, hydroenergy, environmental sectors) for adaptation schemes under the uncertain changes in our environment (e.g. variable climate, natural disasters).

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DISSEMINATION ACTIVITIES:

WSDAC (Water for Sustainable Development and Adaptation to Climate Change), Located at the Jaroslav Černi Water Institute, Belgrade, Serbia – under the auspices of UNESCO

WSDAC

Kick-off meeting, 30th September 2020, Belgrade, Serbia

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