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WATER INFRASTRUCTURE INTERDEPENDENCIES: A COMPLEX ADAPTIVE SYSTEM

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ABSTRACT

The objective of this work is to investigate key questions regarding infrastructure interdependencies related to water systems. Water systems depend on a number of infrastructures like power, transportation, and communications for their daily operations. This bidirectional, interconnected nature poses new unknowns and risks for maintaining the integrity of the water system. Maintaining the integrity of the water system requires analyzing these related infrastructures, from a systems point of view. In this work, we review the salient features of these interdependencies and present the ability of agent based modeling paradigms for modeling the water infrastructure interdependencies.

Reference: Kandiah, V. and P. Rao; Water Infrastructure Interdependencies: A Complex Adaptive System, Journal of Environmental Hydrology, Vol. 12, Paper 1, January 2004.

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