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Exploring Perceptions of Natural Water Retention Measures and Their Implementation: A Case Study in Northeastern Italy

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Heavy rainfall is one of the hydrogeological hazards increasingly connected with climatic changes. Natural Water Retention Measures (NWRMs) implementation represents a chance to build resilient communities and to reduce potential damage. This water management approach has several designs and can be adopted at different scales. However, NWRMs are not widespread, and in some cases they are even ignored by both citizens and public administrations. Understanding how people perceive NWRMs is the first step to promote the implementation of these structures. This study aims at exploring people's knowledge of NWRMs and their attitudes towards them. We conducted a survey in the Veneto Region (Northeastern Italy) in 2020. Preliminary data exploration shows that the overall knowledge of NWRMs varies depending on the type of retention measure. Respondents' attitudes towards NWRMs are positive in public areas (e.g. green spaces, parking lots), but are more heterogeneous when it comes to private properties (e.g. houses, private gardens). Further investigations are therefore needed concerning the last point. This study provides a deeper understanding of the dynamics behind water management systems' implementation to reduce heavy rainfall and flood damage and can inform policymakers dealing with flood risk management.