

## The Relevance of Community Involvement in Flood Risk Governance Towards Resilience to Groundwater Flooding. A Case Study of Project Groundwater Buckinghamshire, UK

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**Abstract :** The shift in Flood Risk Governance (FRG) has moved away from traditional approaches that solely relied on centralized decision-making and structural flood defenses. Instead, there is now the adoption of integrated flood risk management measures that involve various actors and stakeholders. This new approach emphasizes people-centered approaches, including adaptation and learning. This shift to a diversity of FRG approaches has been identified as a significant factor in enhancing resilience. Resilience here refers to a community's ability to withstand, absorb, recover, adapt, and potentially transform in the face of flood events. It is argued that if the FRG merely focused on the conventional 'fighting the water' - flood defense - communities would not be resilient. The move to these people-centered approaches also implies that communities will be more involved in FRG. It is suggested that effective flood risk governance influences resilience through meaningful community involvement, and effective community engagement is vital in shaping community resilience to floods. Successful community participation not only uses context-specific indigenous knowledge but also develops a sense of ownership and responsibility. Through capacity development initiatives, it can also raise awareness and all these help in building resilience. Recent Flood Risk Management (FRM) projects have thus had increasing community involvement, with varied conceptualizations of such community engagement in the academic literature on FRM. In the context of overland floods, there has been a substantial body of literature on Flood Risk Governance and Management. Yet, groundwater flooding has gotten little attention despite its unique qualities, such as its persistence for weeks or months, slow onset, and near-invisibility. There has been a little study in this area on how successful community involvement in Flood Risk Governance may improve community resilience to groundwater flooding in particular. This paper focuses on a case study of a flood risk management project in the United Kingdom. Buckinghamshire Council is leading Project Groundwater, which is one of 25 significant initiatives sponsored by England's Department for Environment, Food and Rural Affairs (DEFRA) Flood and Coastal Resilience Innovation Programme. DEFRA awarded Buckinghamshire Council and other councils 150 million to collaborate with communities and implement innovative methods to increase resilience to groundwater flooding. Based on a literature review, this paper proposes a new paradigm for effective community engagement in Flood Risk Governance (FRG). This study contends that effective community participation can have an impact on various resilience capacities identified in the literature, including social capital, institutional capital, physical capital, natural capital, human capital, and economic capital. In the case of social capital, for example, successful community engagement can influence social capital through the process of social learning as well as through developing social networks and trust values, which are vital in influencing communities' capacity to resist, absorb, recover, and adapt. The study examines community engagement in Project Groundwater using surveys with local communities and documentary analysis to test this notion. The outcomes of the study will inform community involvement activities in Project Groundwater and may shape DEFRA policies and guidelines for community engagement in FRM.

**Keywords :** flood risk governance, community, resilience, groundwater flooding

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