Challenges in Environmental Governance: A Case Study of Risk Perceptions of Environmental Agencies Involved in Flood Management in the Hawkesbury-Nepean Region, Australia

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Abstract: The management of environmental resources requires engagement of a range of stakeholders including public/private agencies and different community groups to implement sustainable conservation practices. The challenge which is often ignored is the analysis of agencies involved and their power relations. One of the barriers identified is the difference in risk perceptions among the agencies involved that leads to disjointed efforts of assessing and managing risks. Wood et al 2012, explains that it is important to have an integrated approach to risk management where decision makers address stakeholder perspectives. This is critical for an effective risk management policy. This abstract is part of a PhD research that looks into barriers to flood management under a changing climate and intends to identify bottlenecks that create maladaptation. Experiences are drawn from international practices in the UK and examined in the context of Australia through exploring the flood governance in a highly flood-prone region in Australia: the Hawkesbury Ne-pean catchment as a case study. In this research study several aspects of governance and management are explored: (i) the complexities created by the way different agencies are involved in assessing flood risks (ii) different perceptions on acceptable flood risk level; (iii) perceptions on community engagement in defining acceptable flood risk level; (iv) Views on a holistic flood risk management approach; and, (v) challenges of centralised information system. The study concludes that the complexity of managing a large catchment is exacerbated by the difference in the way professionals perceive the problem. This has led to: (a) different standards for acceptable risks; (b) inconsistent attempt to set-up a regional scale flood management plan beyond the jurisdictional boundaries: (c) absence of a regional scale agency with license to share and update information (d) Lack of forums for dialogue with insurance companies to ensure an integrated approach to flood management. The research takes the Hawkesbury-Nepean catchment as case example and draws from literary evidence from around the world. In addition, conclusions were extrapolated from eighteen semi-structured interviews from agencies involved in flood risk management in the Hawkesbury-Nepean catchment of NSW, Australia. The outcome of this research is to provide a better understanding of complexity in assessing risks against a rapidly changing climate and contribute towards developing effective risk communication strategies thus enabling better management of floods and achieving increased level of support from insurance companies, real-estate agencies, state and regional risk managers and the affected communities.

Keywords: adaptive governance, flood management, flood risk communication, stakeholder risk perceptions

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