

## Collective Potential: A Network of Acupuncture Interventions for Flood Resilience

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**Abstract :** The occurrence of natural disasters has increased in an alarming rate in recent times due to escalating effects of climate change. One such natural disaster that has continued to grow in frequency and intensity is 'flooding', adversely affecting communities around the globe. This is an exploration on how architecture can intervene and facilitate in preserving communities in the face of disaster, specifically in battling floods. 'Resilience' is one of the concepts that have been brought forward to be instilled in vulnerable communities to lower the impact from such disasters as a preventative and coping mechanism. While there are number of ways to achieve resilience in the built environment, this paper aims to create a synthesis between resilience and 'urban acupuncture'. It will consider strengthening communities from within, by layering a network of relatively small-scale, fast phased interventions on pre-existing conventional flood preventative large-scale engineering infrastructure. By investigating 'The Woodlands', a planned neighborhood as a case study, this paper will argue that large-scale water management solutions while extremely important will not suffice as a single solution particularly during a time of frequent and extreme weather events. The different projects will try to synthesize non-architectural aspects such as neighborhood aspirations, requirements, potential and awareness into a network of architectural forms that would collectively increase neighborhood resiliency to floods. A mapping study of the selected study area will identify the problematic areas that flood in the neighborhood while the empirical data from previously implemented case studies will assess the success of each solution. If successful the different solutions for each of the identified problem areas will exhibit how flooding and water management can be integrated as part and parcel of daily life.

**Keywords :** acupuncture, architecture, resiliency, micro-interventions, neighborhood

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