"Into the Floodscapes: A Landscape Character Assessment of Bacoor City's Lowland Communities"

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Abstract: Bacoor City in Cavite, Philippines, lies within a flood-prone landscape where lowland communities experience recurrent inundation due to rainfall, poor drainage, and the convergence of waterways at the city's lowest points. Urban sprawl, land use conversion, and high-density residential development further exacerbate flooding, limiting open spaces for natural absorption and complicating conventional engineering solutions. As waterways inevitably flow toward the lowest points, Bacoor's lowland settlements bear the greatest flood burden. These communities face compounding vulnerabilities that threaten both livelihoods and long-term resilience. However, existing flood management strategies remain largely reactive and infrastructure-driven, often overlooking the spatial and ecological dimensions of the lowland environment.

This research uses Landscape Character Assessment (LCA) to analyze the city's lowland floodscapes. By mapping landscape character units and integrating land use patterns, hydrological features, and settlement dynamics, LCA provides a framework for understanding the relationship between landscape character and flood vulnerability. Data collection includes spatial analysis, desk review, community inputs, and hazard mapping to identify opportunities for adaptive interventions. The study also suggests the exploration of adaptive landscape strategies such as multifunctional drainage corridors, retention ponds, rain gardens, bioswales, urban greenways, and integrated landscape-based design. By examining Bacoor's floodscapes through LCA, this study demonstrates how landscape-sensitive planning can inform a more adaptive and sustainable flood management plan. The findings contribute to shaping resilient lowland communities and provide insights applicable to other Philippine cities with similar conditions.

Keywords: Floodscapes, Landscape Character Assessment (LCA), Lowland Communities, Flood Resilience, Landscape-based Design