

Integrated Mitigation

Guayaquil is the 2nd Largest city of Ecuador, located in one of the largest estuary ecosystems of the pacific coast in South-America (Delgado, 2011). Since 1960's the city has gone through a rapid process of urbanization and informal settlements. This has caused severe spatial segregation and a development model that ignores the existing biophysical characteristics of its land and water. With increasing global environmental threats, Guayaquil faces big challenges related to future flooding vulnerability that can eventually have consequences nation-wide. Characteristics of the developing world are also present in Guayaquil, evidencing the need for an approach aiming to solve more than one issue at the time. In this context, Flood Risk and Spatial Segregation are the core problems considered for an integrated strategy. Neighborhoods that show evidence of spatial segregation are better bridged by stablishing a green and blue infrastructure which improves the geometrical configuration of the street network. This enhances the flow of non-locals (according to Legeby people leaving further than 1000m) through the previously fragmented areas. Along this network spaces for mitigating flood risk and fostering social integration are implemented. Schools appear as key elements in the city offering big potential for creating areas for interaction and space for water storage.

Keywords:
Flood risk, Spatial segregation, Open Schools, Infrastructural ecology, Guayaquil, Ecuador.

