EAST BOSTON BUFFER: A TRANSFERABLE URBAN FRAMEWORK FOR ADAPTING TO SEA RISE

GLOBAL
- Climate change and storm surges call for urgent solutions.
- East Boston, with its 3.57% of the US population, needs a transferable urban framework for adaptation.

NATIONAL
- The Buffalo-to-Washington, DC metropolis is projected to gain 20 million inhabitants by 2050.
- East Boston is an overlooked neighborhood, especially vulnerable to flooding.

REGIONAL
- East Boston is a high-hazard area, with 6.5 million visitors and the highest percentage of flood-prone buildings.

URBAN
- The buffer project increases the city's and the region's resilience by encouraging sustainable future at multiple scales.

LOCAL
- Proposed interventions are designed to benefit the city as a whole and the region.

> PARAMETERS
- Farmable area: 3.0 HA
- Energy gen: H_2O FILTERED 12.0 MW
- Energy retained: H_2O RETAINED 50,000 m^3 (113.2 million gallons)
- Building area: 10.8 HA / 14 HA (residential areas)

> SYSTEM PERMUTATIONS

> PROCESS

> NEW WATERFRONT EXPERIENCE

> MECHANISMS
- Level: Retaining walls
- Wetland
- Lightweight construction & foundation

> SYSTEMATIC SECTION

> PERFORMANCE

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