

Design as Play: Sea-Level Rise Planning Board Game

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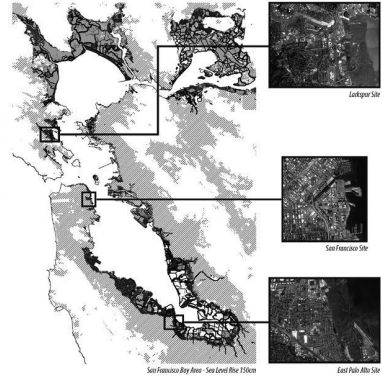
The waterfront along the San Francisco Bay is facing a growing threat from sea-level rise. Over the years, the Bay Area has seen a large portion of the historic wetlands filled or leveled off for residential, commercial, and industrial land uses. According to current sea level rise projections, water will once again reclaim the bay lands that have been filled. The issues presented by sea level rise along the urban edge of the San Francisco Bay involve a complex series of challenges including: regional versus local governance, built versus natural environment, vulnerable local and regional infrastructure, diverging interests with diverse stakeholders, and population growth. With each possible future scenario come multiple outcomes with winners and losers. How can the best policy and design be selected and tested? How will distinct communities learn about different options and strategies for adaptation and be empowered to act? By creating and playing a sea level rise adaptation “game,” students were able to explore these different scenarios and inform future urban planning and design decisions.

To address the complex issues presented by sea level rise along the urban edge of the San Francisco Bay, we choose to play. More precisely, students designed board games to play out various scenarios of sea level rise adaptation to determine the best strategies for future resilient development. The process began with site analysis to create a base map of past historical ecology and urban morphology, present built and natural environment, and future sea level rise scenarios and population growth projections. Next, students researched various potential adaptation strategies and identified local stakeholders that became the “players.” In teams, they created game pieces of housing development, shoreline protection, natural environment, and public infrastructure, playing cards of chance events that included economic, environmental, and governmental occurrences, and finally they developed the rules of game play.

By designing the game, students conducted complex site research, identifying site factors past, present, and future. Through a mapping of the past transformations that have taken place, they were better able to understand the present built and natural environments and diverse interests of local stakeholders. With an open-end approach to determine potential future outcomes, students were more likely to experiment with innovative resilient urban development strategies. Through play, students were able to test out various scenarios of development and sea level rise adaptation.

The game play enabled discourse between the students on which outcome were the best for each of the “players” or local stakeholders based on their stated goals. Students identified the stakeholder goals that were competing with each other and those which could be collaborative to create a shared vision for the future.

DESIGN AS PLAY! SEA-LEVEL RISE PLANNING BOARD GAME

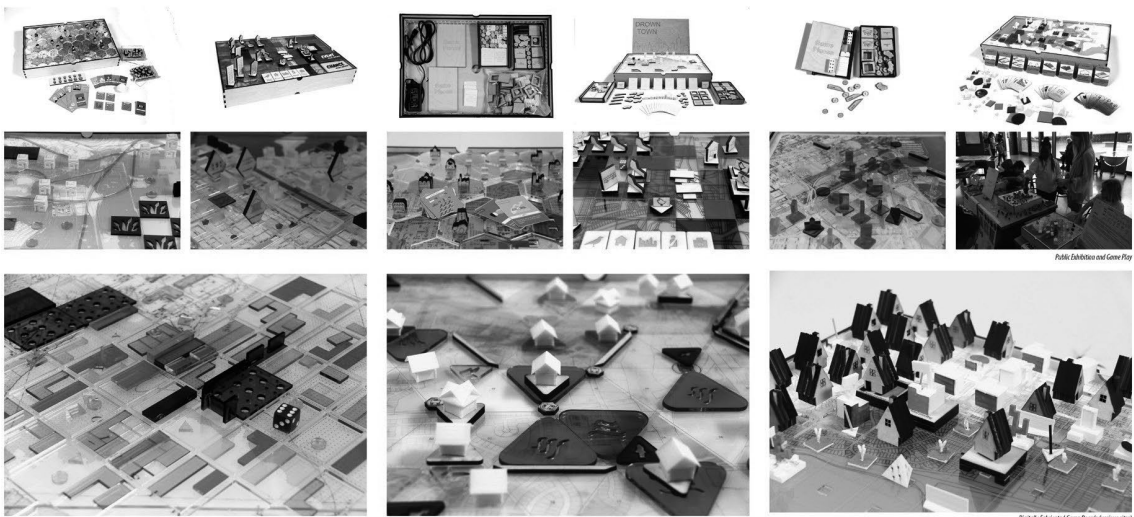


DESIGN AS PLAY
Sea-Level Rise Planning Board Game

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PROJECT MISSION BAY

ALTOPOLY RESILIENCE OF EAST PALO ALTO



Public Exhibitions and Game Play

Digitally Fabricated Game Boards (various sites)