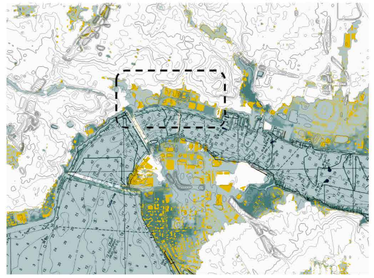


MARSH PARK: CREATING AN URBAN SPONGE TO PROTECT RIVERSIDE FROM RISING TIDES

ARC 6356 Advanced Graduate Studio III
Fall Semester 2020
Prof. Nancy Clark
Presented by: Araia Irwin

Humanity has an incredible ability to impact the world, allowing us to conquer land on every part of the globe but resulting in changes seemingly beyond our control. We must address this challenge as one of resilience and regeneration. We must educate the next generation about our impact on the environment and find economically viable approaches to protect infrastructure and development while creating a better, healthier environment.

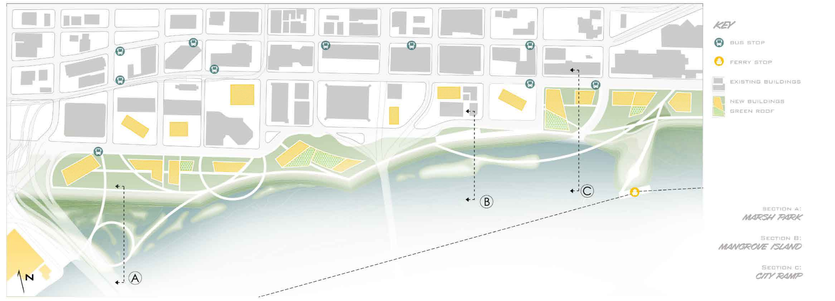
Marsh Park is a proposal to address the flooding and inundation of Jacksonville's urban core riverfront along the St. John's River. To be designed and implemented in stages, the plan will increase city land value while simultaneously providing a new water protection strategy.
The proposal is intended as a design framework for the adaptation of the shoreline infrastructure, combining the ecological benefits of a living shoreline and introducing the sponge concept underway in the South Bay Sponge project to the Jacksonville area.[i] In this project, the land is converted from hard infrastructure into a permeable habitat for absorbing and filtering floodwaters.

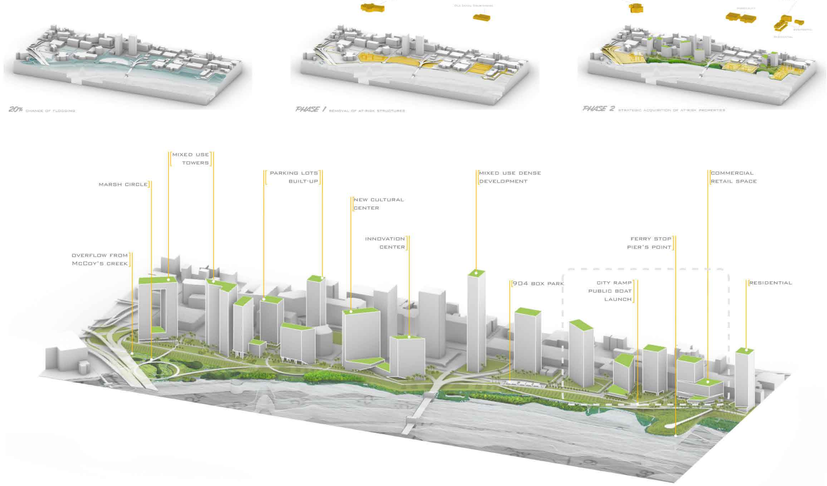
This transformation would then produce valuable lots that private investors could build up. Proposed new tower development will be elevated from the land, allowing the flow of water below to be absorbed and providing open areas for citizens to roam through. While the city's density would increase and these towers rise, the ground can remain open and connected. The hope would be that the new development techniques would allow for renewed insurance coverage in these areas and protect all the property inland from river flooding.

Using this project framework, subsequent phases of development along the riverfront would bring these same resilient methods to the property that the city could acquire along the river's edge. This plan aims to use grants and government resources to develop the initial resilience methods, creating new, more sustainable development for relocated and new businesses. The commercial buildings and residential towers will bring back the vibrancy to the Riverwalk area and provide a more pedestrian-friendly and vibrant hub for the city.

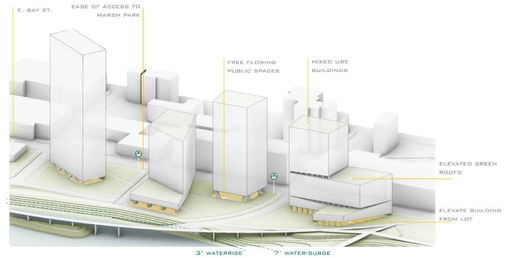
This word, resilient, does not have to come charged with political rhetoric but instead can be a call to action to find a way to live within a changing world. We can design on the water knowing that it will flood. We can create spaces that are made exciting and beautiful by the rising tides. We can teach children about how the world is changing instead of admonishing humanity to celebrate the innovation created in response to catastrophe. Making this shift begins with spaces that celebrate our place in the world. We have the greatest tool at our disposal, our imagination. With this one amazing human trait, we can approach any problem and work to find a solution. Humanity has the capacity to find a better way forward and to apply that confidence to resilient design.

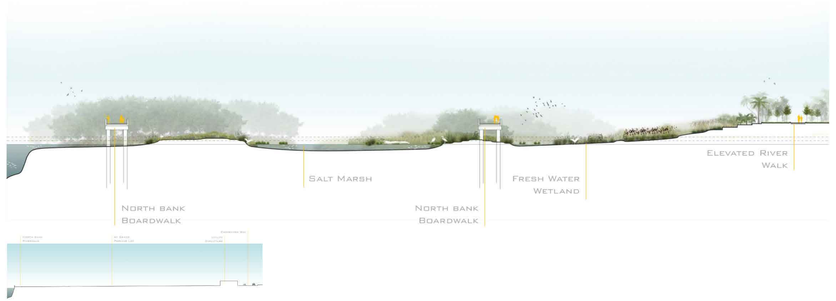
[i] South Bay Sponge: Nature, Technology and Resiliency in the South Bay, in the Resilient by Design: Bay Area Challenge





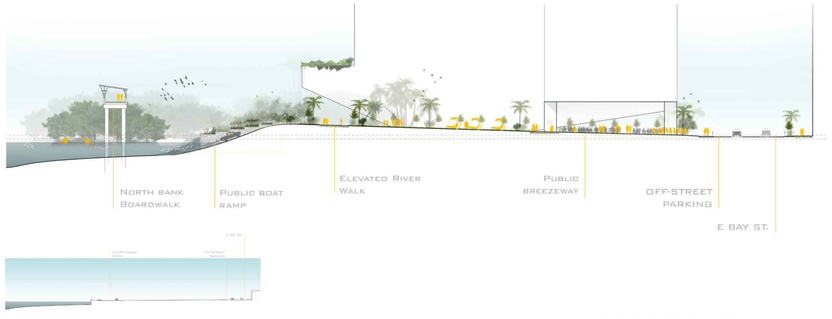
PHASE 3 ALLOW INCREASED DENSITY ON NEWLY PROTECTED LOTS





MARSH PARK PROPOSAL

MANGROVE ISLAND PROPOSAL



CITY RAMP PROPOSAL