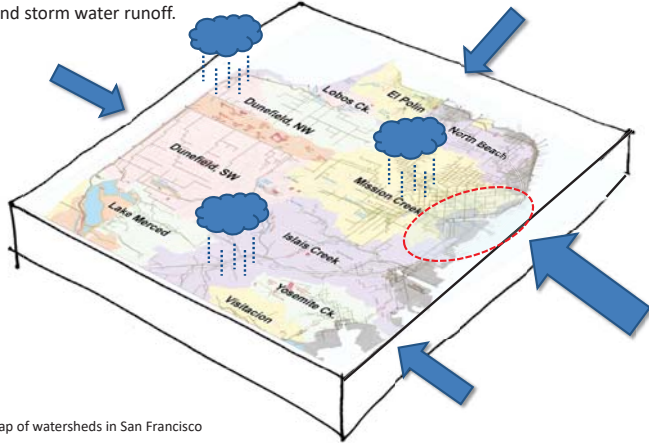


EXISTING SITUATION

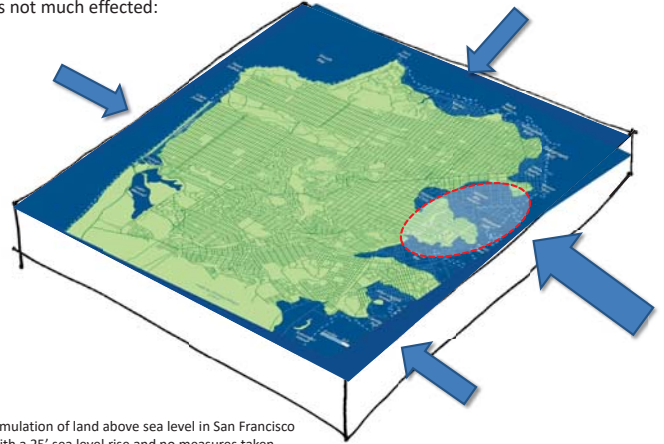
Located along the eastern waterfront of San Francisco, Mission Creek, one of the city's lowest-lying areas, is very vulnerable to flooding from both sea level rise and storm water runoff.



Map of watersheds in San Francisco

EXISTING SITUATION

This is how the area would look like with a 25' sea level rise. It's interesting to see that almost the entire western and north-western shore which exists of natural beach and cliffs is not much effected:



Simulation of land above sea level in San Francisco with a 25' sea level rise and no measures taken

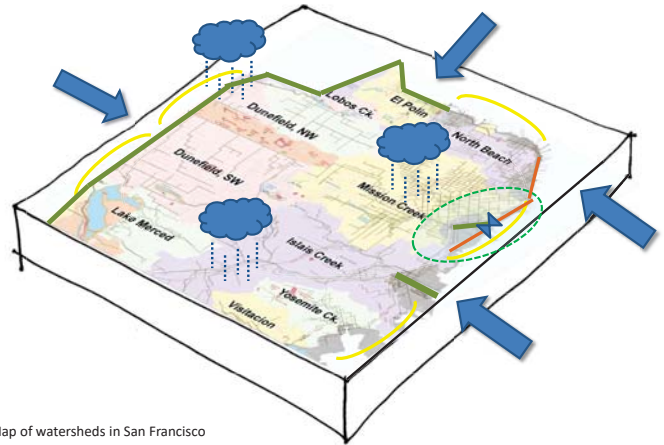
FUTURE SCENARIO without measures



2050 inundation level projection, sea level rise adaptation study for Mission Creek, San Francisco

PROPOSAL

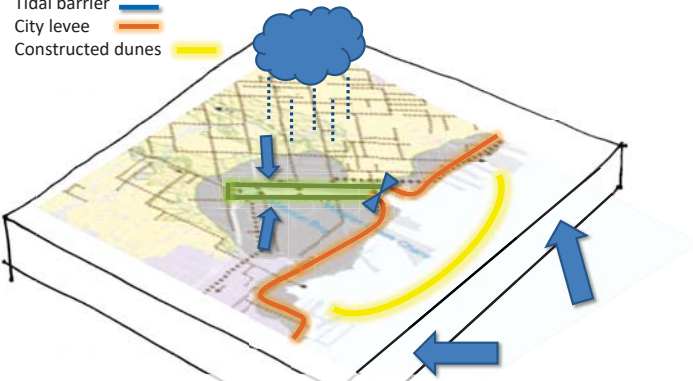
Following, I will describe possible design concepts for the creek and its surroundings that aim to build resilience on the waterfront.



Map of watersheds in San Francisco

PROPOSAL BUILDING WITH NATURE by multiple lines of protection

1. Natural shoreline protection
2. Tidal barrier
3. City levee
4. Constructed dunes



Storm water is being absorbed by the natural shoreline of the creek. The natural tidal flow and canal navigability are being maintained by means of a tidal barrier. Constructed dunes decrease the force of the waves and direct the water inflow away from the creek. A city levee is necessary along the urban waterfront where natural protection is not possible.

FUTURE SCENARIO with BUILDING WITH NATURE measures

