Resilient By Design

BAY AREA CHALLENGE

SPUR

June 8, 2016



The Threat

Climate change and associated sea level rise pose real threats to the Bay Area. Critical infrastructure is at risk, requiring innovative design and engineering solutions. We must act now to protect our communities from disastrous flooding that could cause millions in economic damage and disrupt our quality of life.





San Francisco Sea Level Rise PROJECTIONS

YEAR	MOST LIKELY (CEQA/Project Approvals*)	UPPER RANGE (Long-Range Planning*)
2030	6 in	12 in
2050	11 in	24 in
2100	36 in	66 in

Source: Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future (NRC 2012)

NOTE: Storm Surge + King Tides add ~40" to SLR (108" in 2100)

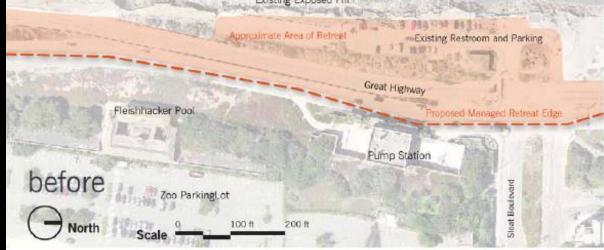
^{*}The City uses the NRC's (National Research Council) most likely SLR projection of 36" for ongoing planning and development purposes related to environmental review and project approvals. The SLR Action Plan considers adaptive strategies to address the NRC's upper end estimate of 66" of SLR by 2100 in the event that future GHG emissions and land ice melting accelerates beyond current predictions.

Urban flooding will increase





Ocean Beach Master
Plan
Before and After



South of Sloat Existing Conditions, Ocean Beach Master Plan.



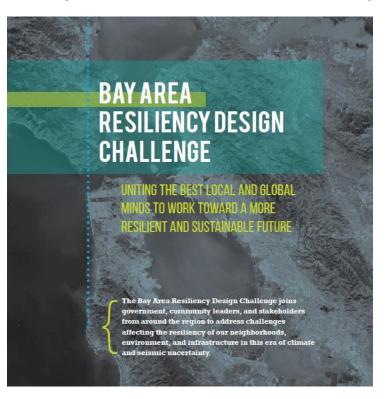


SEA LEVEL RISE PRIORITY ACTIONS [2016-2018]

01 02 Climate science & SLR Citywide research priorities vulnerability VULNERABILITY assessment Citywide risk 06 03 assessment -Storm event monitoring Comprehensive **MONITOR IMPLEMENTATION** economic risk analysis 04 05 **Governance structures** -Backflow prevention Community SLR **DEVELOP IMPLEMENT** Airport shoreline protection **ADAPTATION** ADAPTATION outreach strategy PLAN Capacity building **Bay Area Resiliency Design Challenge** CITYWIDE SLR ADAPTATION PLAN Policy & financing tools

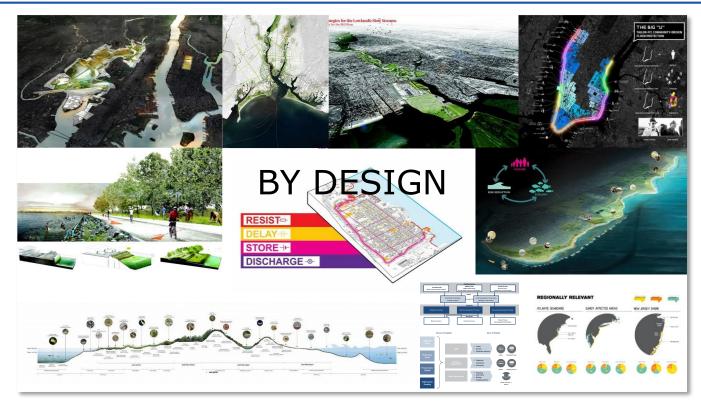
Near-term adaptation plans (high-risk shoreline areas & assets)

Bay Area Resilient by Design Challenge

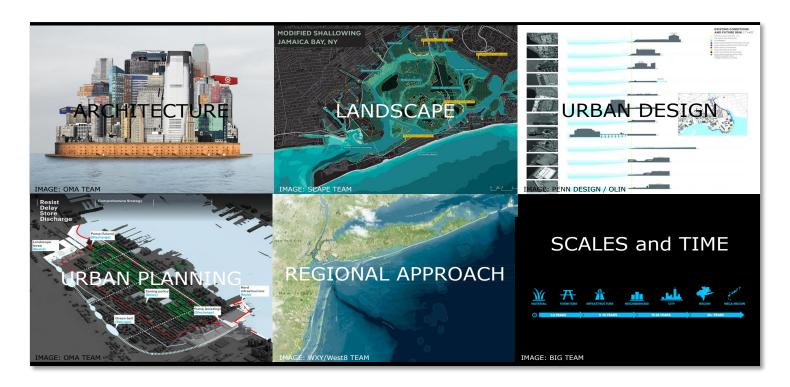


- A vision for the future: Innovative and Inspiring
- A solution that works: Based on RBD
- Collaborative and interdisciplinary
- Replicable and Implementable
- An invitation to all: Regional & Community and Design-driven

A Vision for the Future



Collaborative at the Core





An Invitation to All



A Solution That Works

Rebuild by Design began as a response to Hurricane Sandy in the Northeast United States as a way to build back better.

It creates processes for communities and government to work with designers to a shared vision of a more resilient region.







Who We Are: Join Us!

- Chief Resiliency Officers San Francisco, Berkeley, Oakland
- Marin County, San Mateo County, SCVWD, CHARG, City of Richmond
- BCDC
- BARC
- ABAG
- Coastal Conservancy
- SPUR
- Climate Readiness Institute
- SFEI
- And You



Next Steps

- Broaden the group of supporters and collaborators
- Create a uniquely Bay Area brand and approach that invites every community
- Outreach to elected officials, municipal leaders, community organizations and potential partners
- Partner with philanthropy and businesses







THANK YOU

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