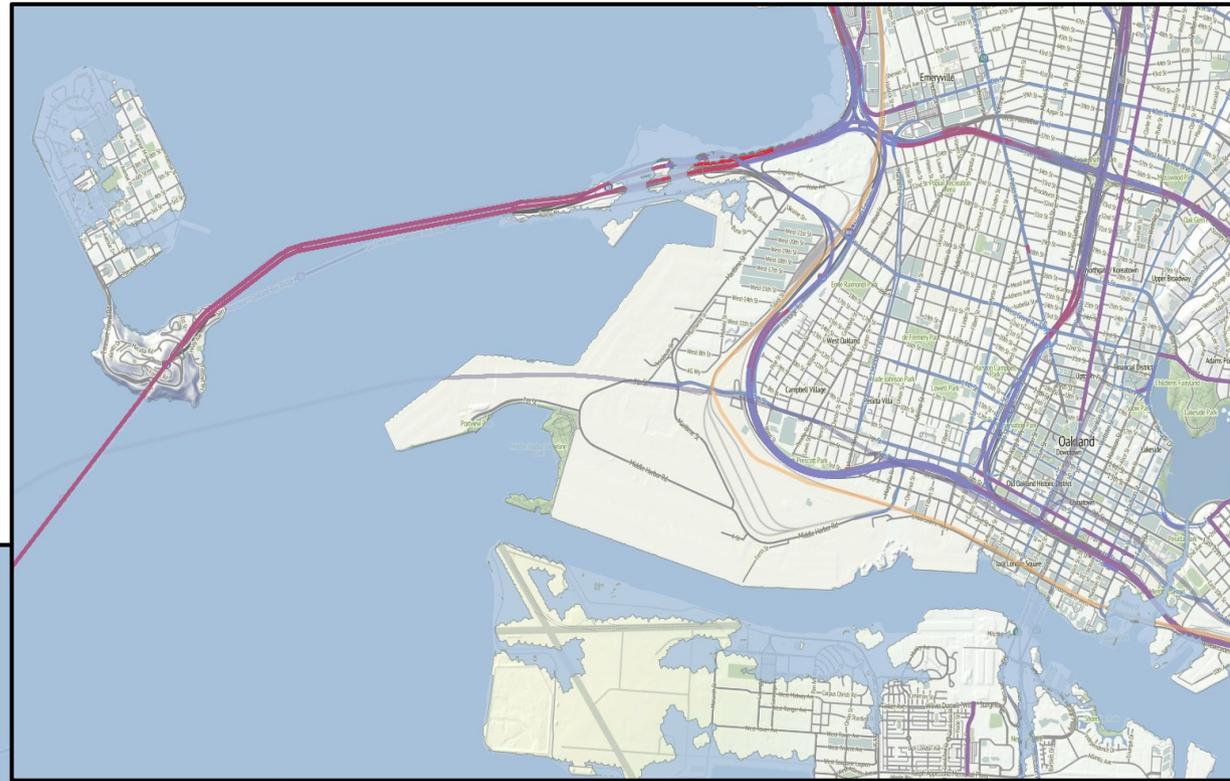
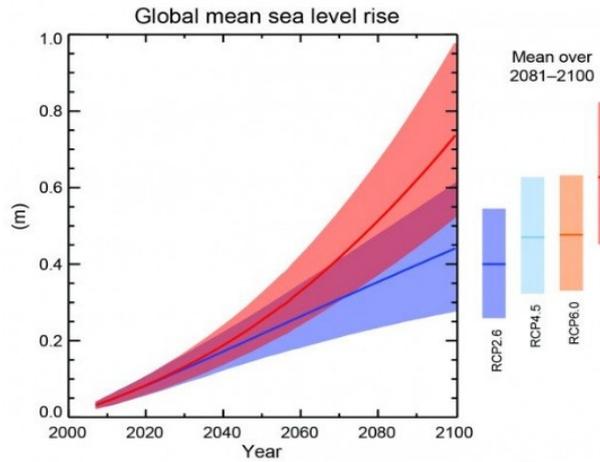


RISeR: Resilience of Infrastructure as Seas Rise



An NSF-funded collaboration between UC-Berkeley, UC-Davis, the USGS, NYU, Lawrence Berkeley Laboratory, and the Climate Readiness Institute

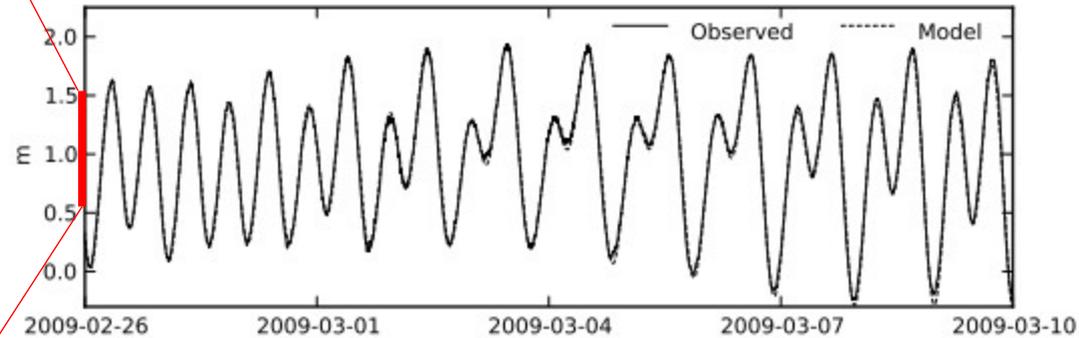
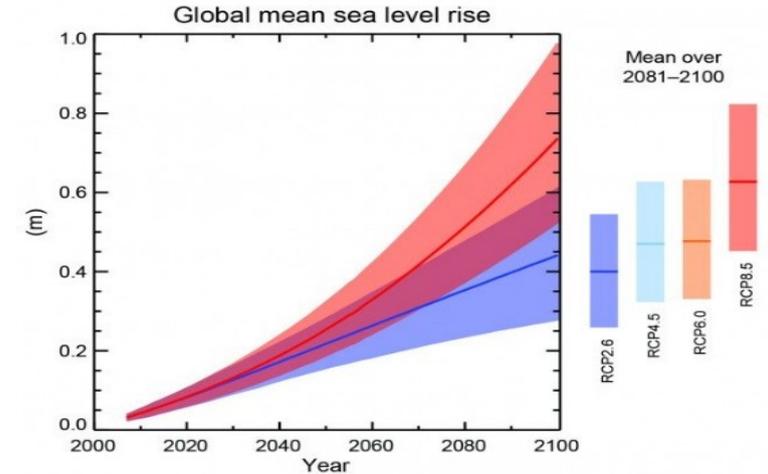
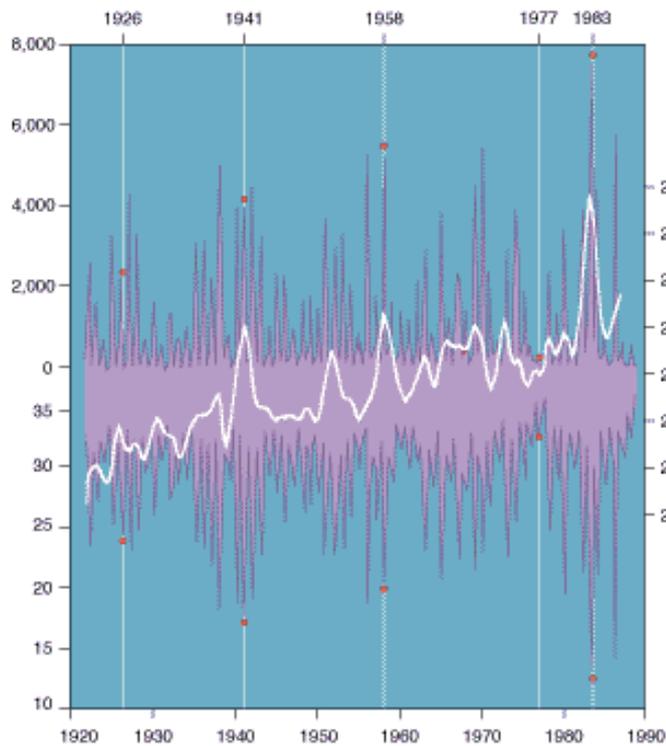
The Looming Threat of Coastal Flooding



USGS CoSMoS simulations: 1 meter SLR, 100 Year storm

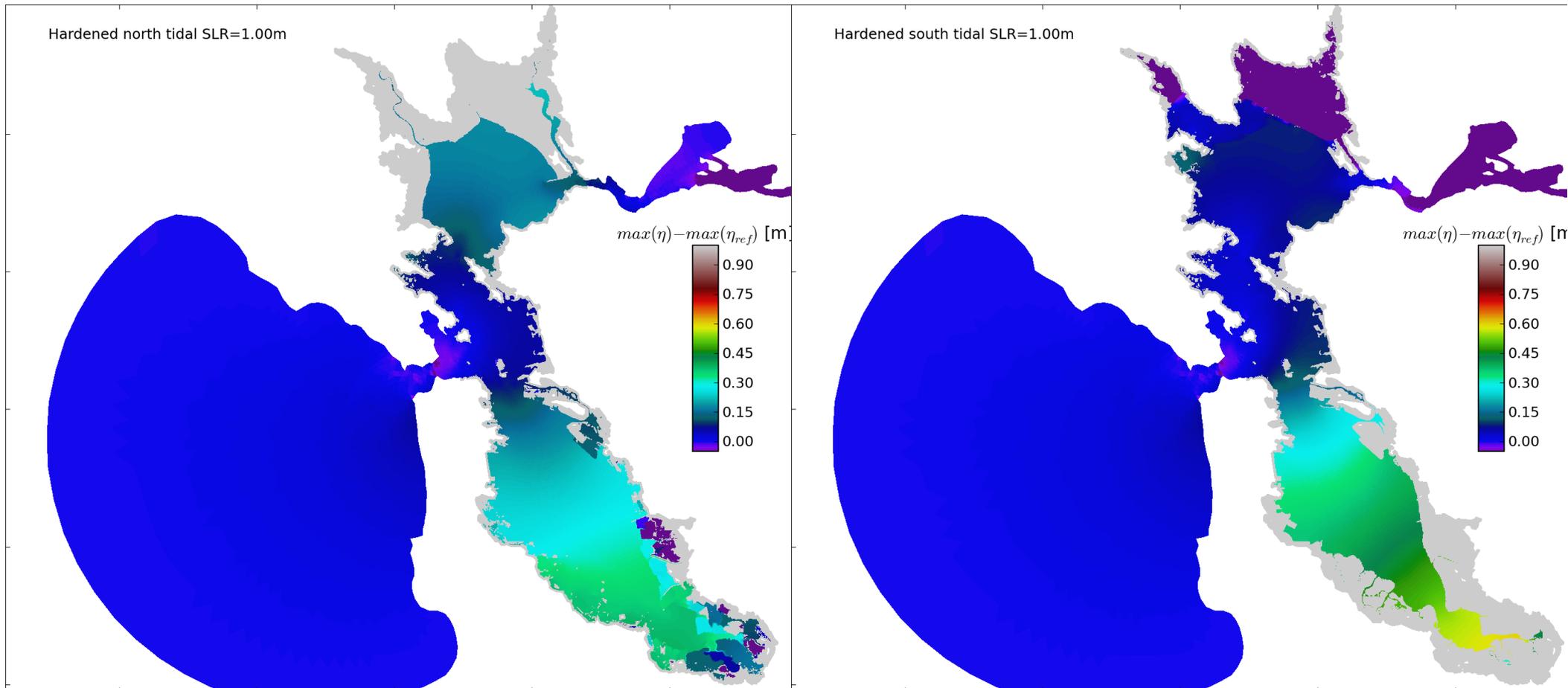
Inundation in SF Bay

- Large tidal range sets water level



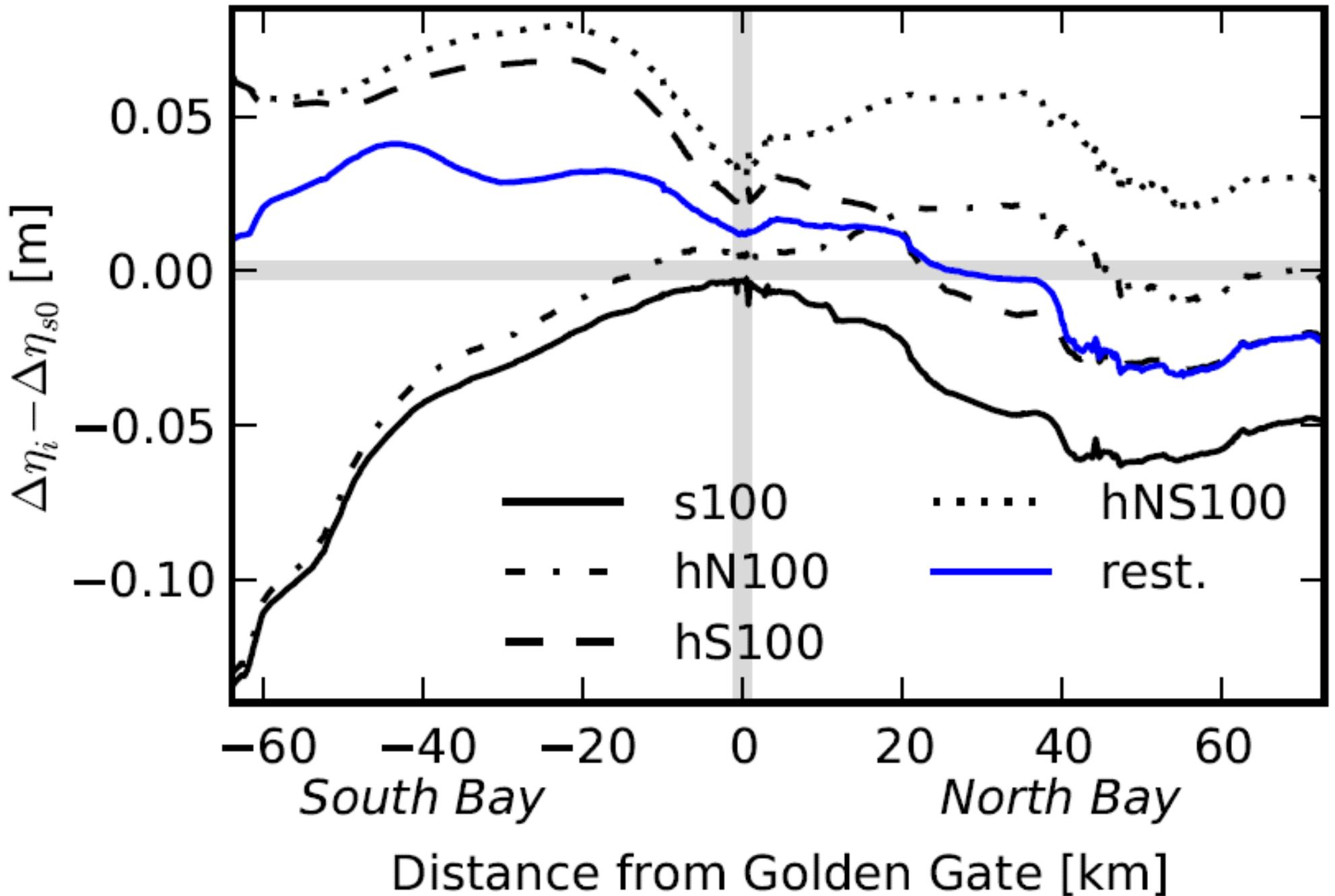
*Peterson et al., 1995,
American Scientist, v.83(1)*

Spatial Interactions I: Hydrodynamics

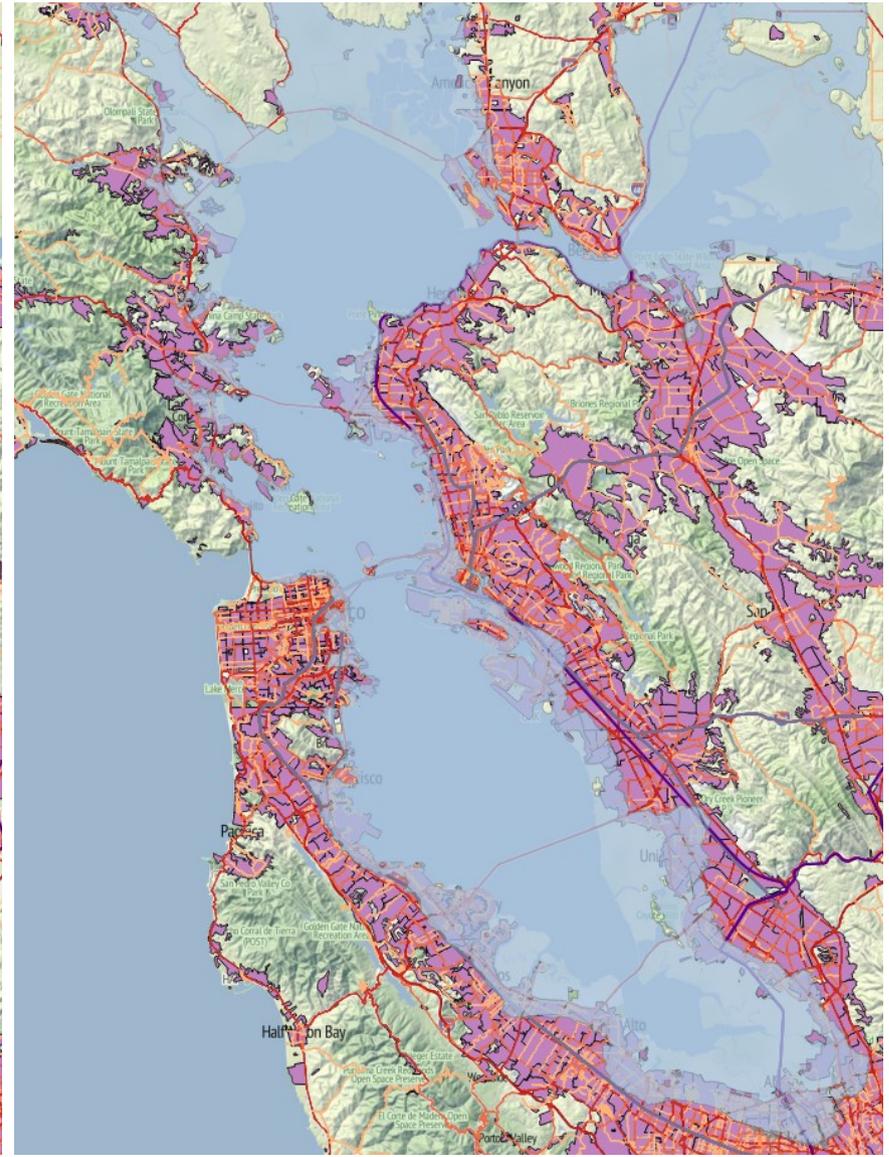
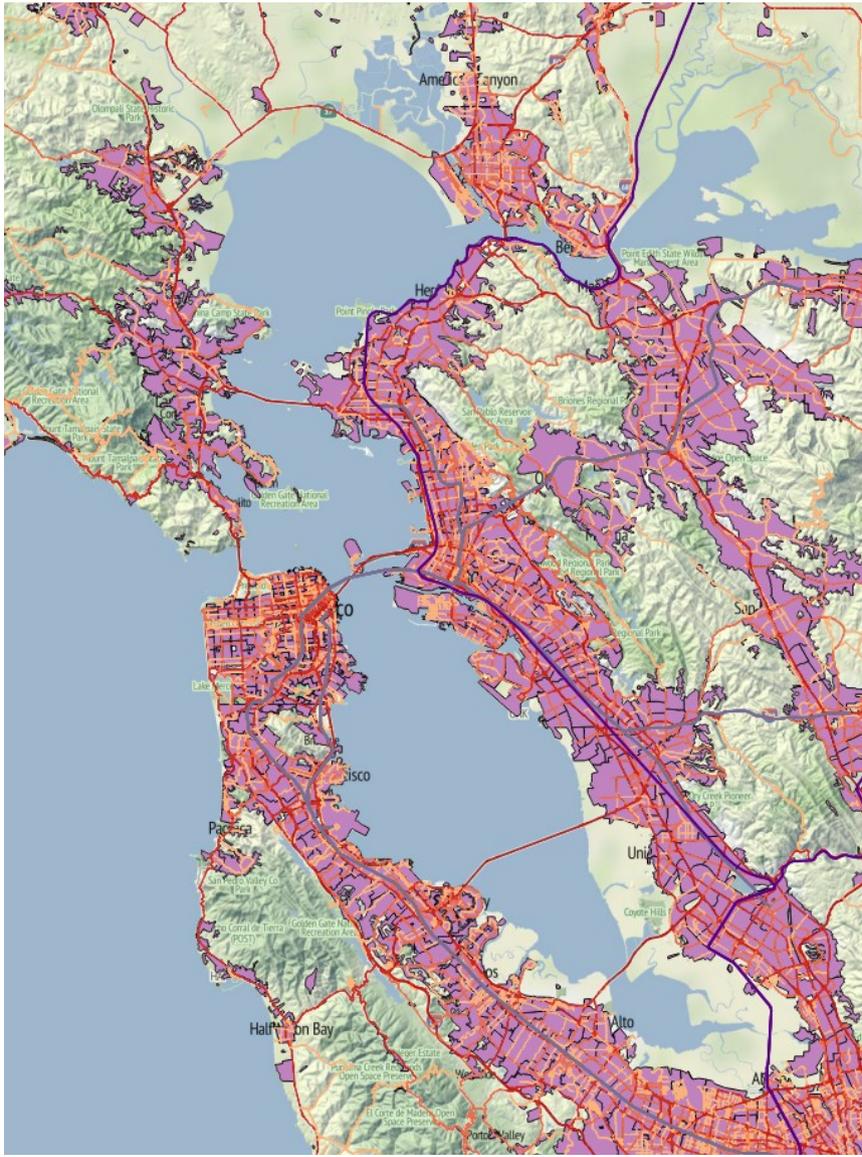


- Compare effects of hardening shorelines on resulting water levels

Spatial Interactions I: Hydrodynamics

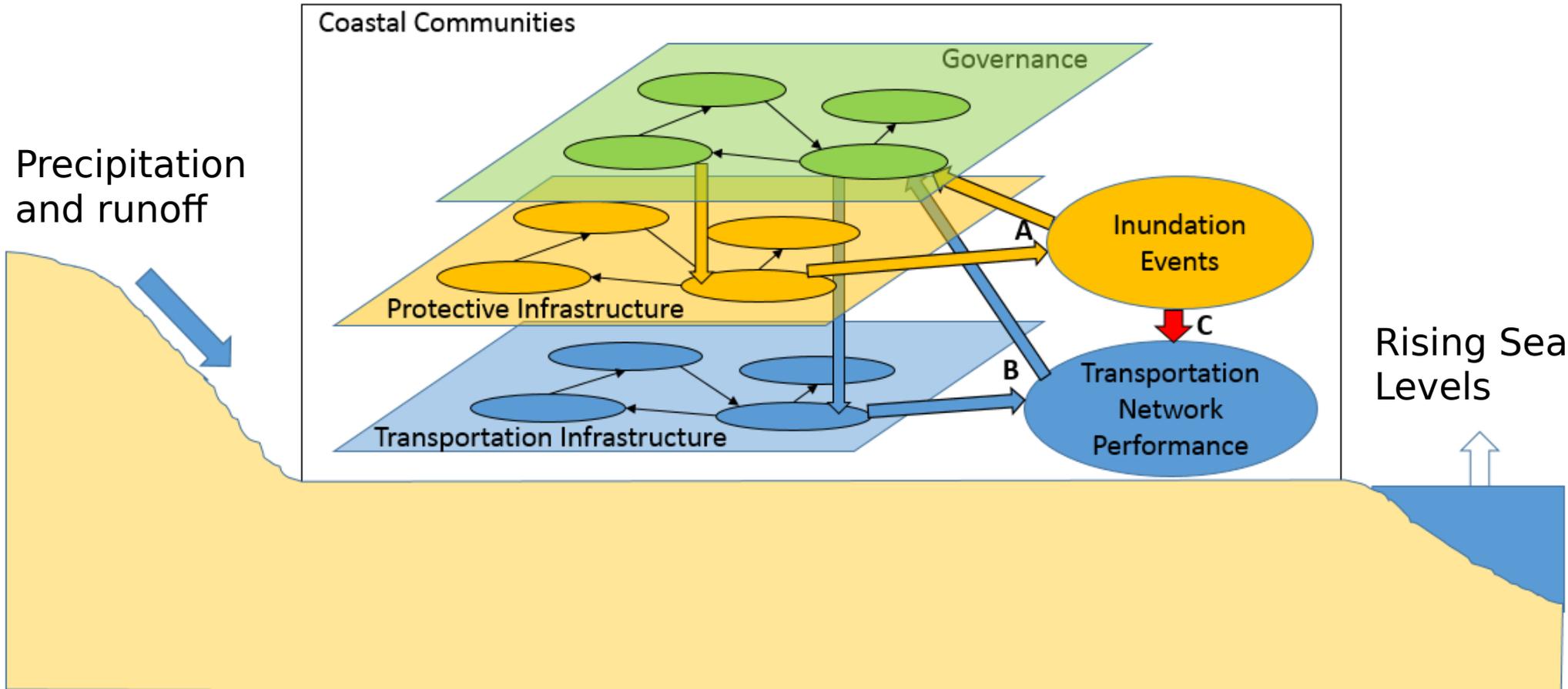


Spatial Interactions II: Transportation



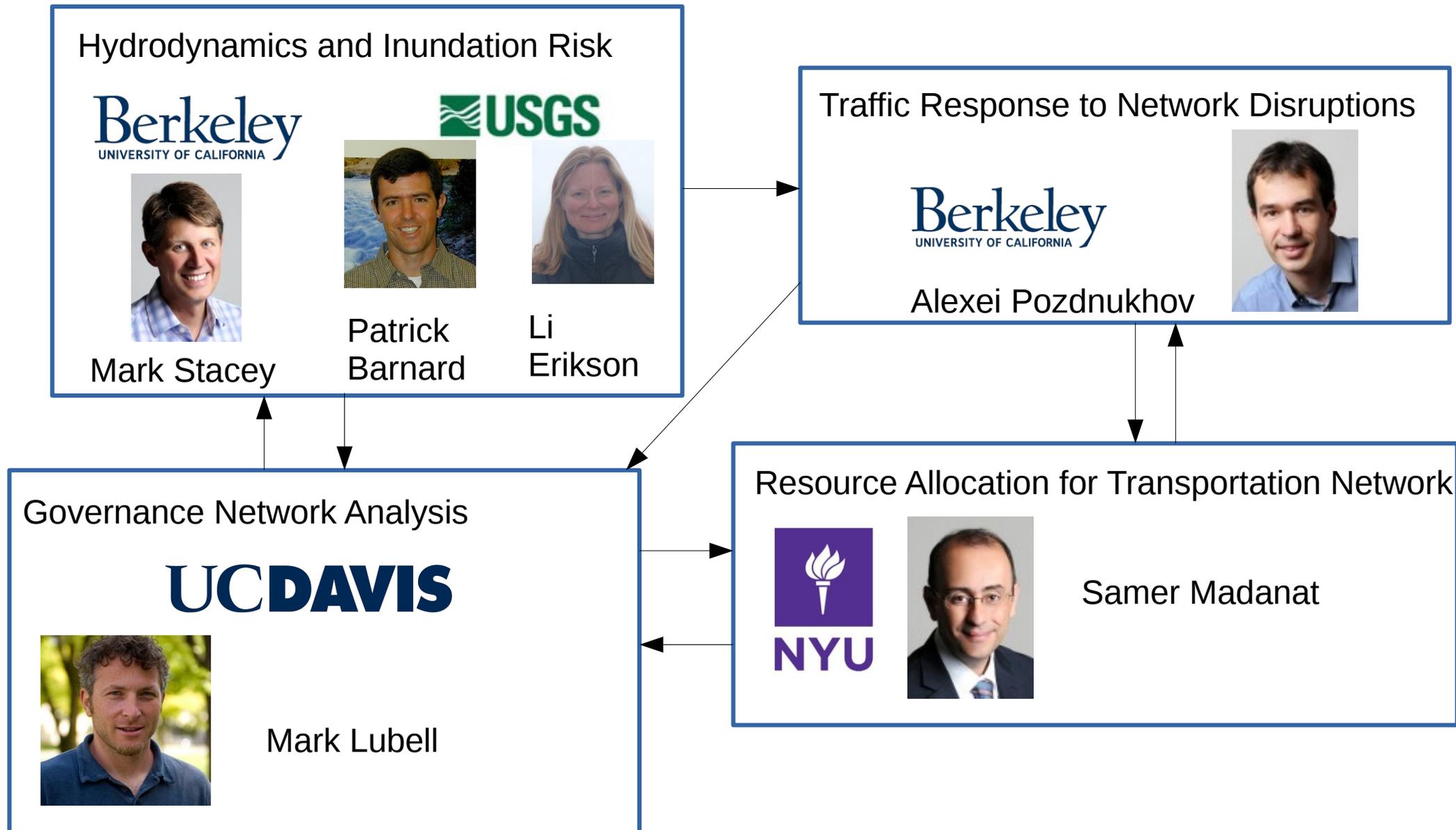
- Vulnerability of transportation network, risk of regional response

RISeR Project Overview



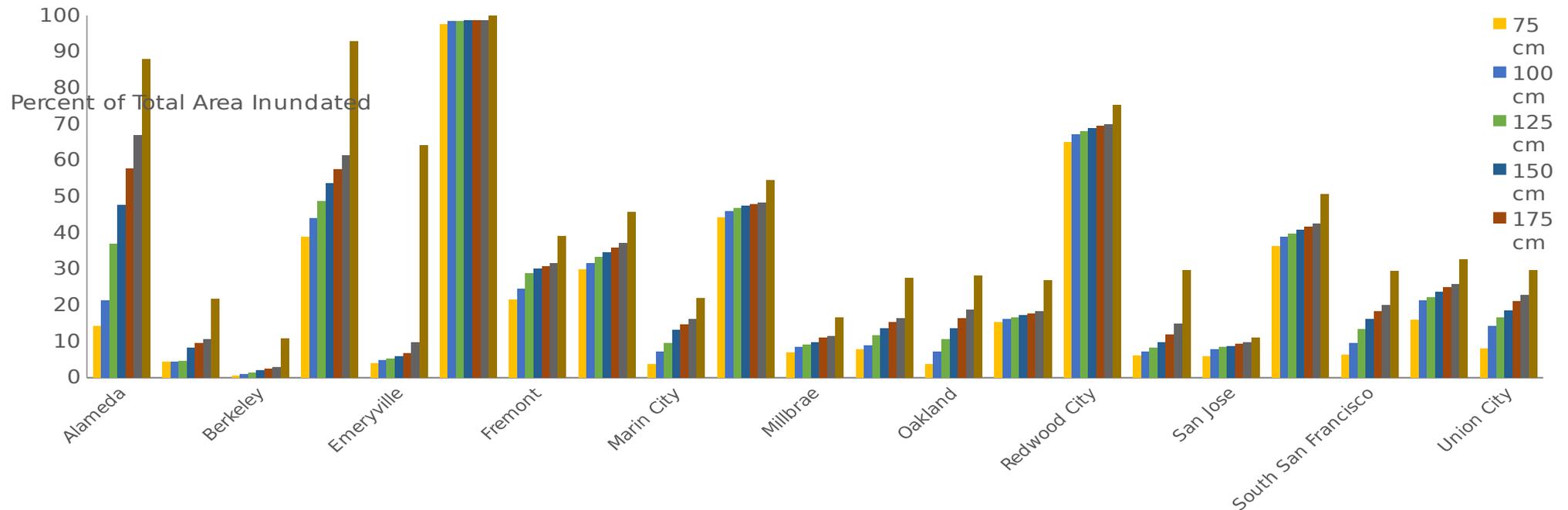
- NSF-funded project under their CRISP Program: Critical Resilient Interdependent Infrastructure Systems and Processes

RISeR Project: People and Roles



- 4-5 year project, started in Fall 2015

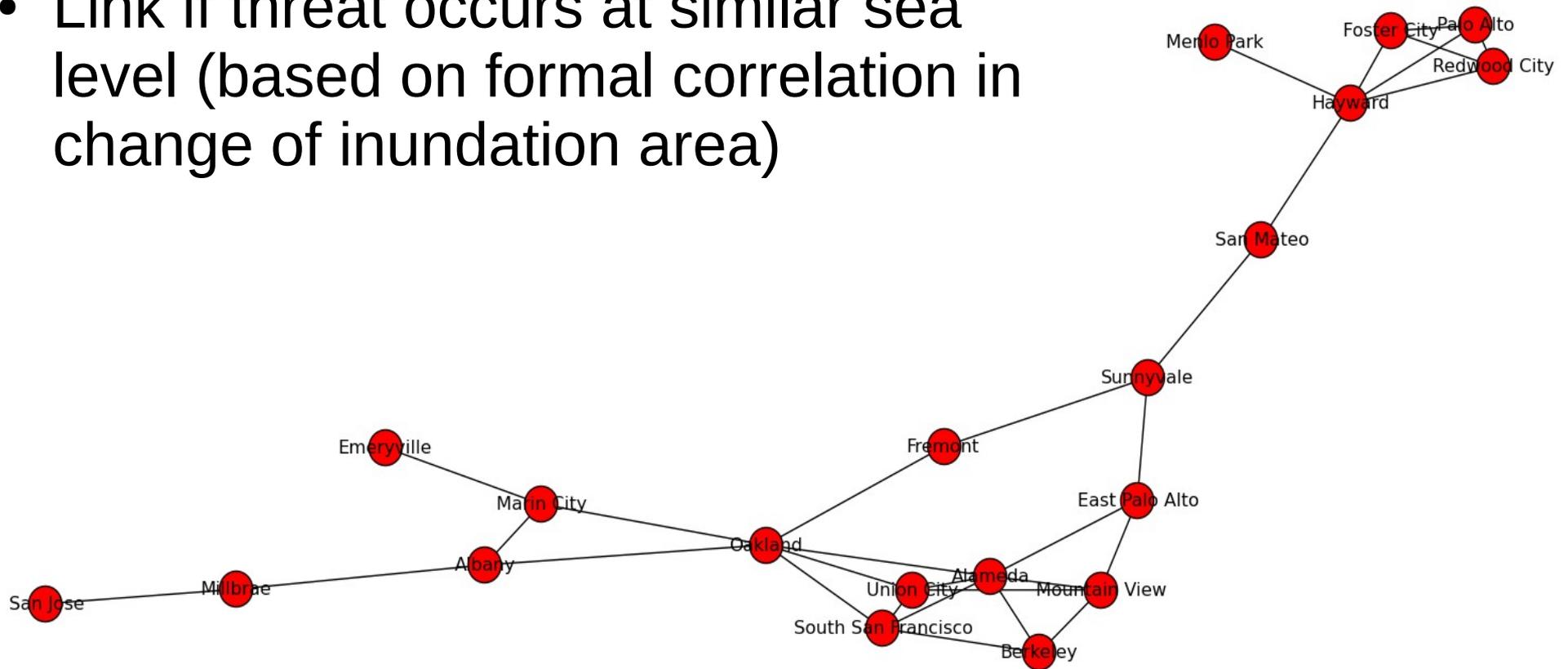
RISeR Preliminary Inundation Analyses



- Community-scale metrics for inundation
 - Initial analysis based on area only
 - Work towards more nuanced analysis of 'risk'

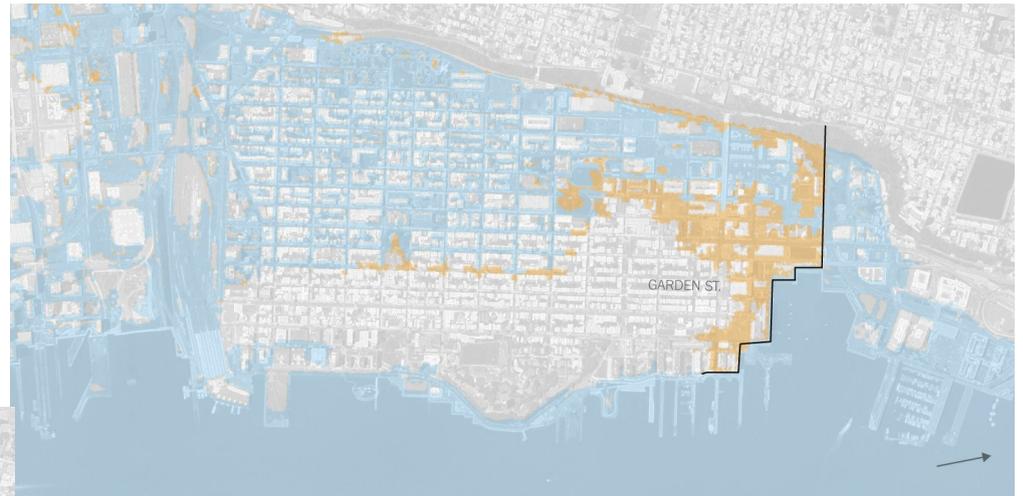
Preliminary network based on SLR

- Link if threat occurs at similar sea level (based on formal correlation in change of inundation area)



RISeR: Next Steps

- Downscaling/refining for local transportation disruptions
- Governance network empirical study
- Building interactions and links:
 - Within project and with community



Example from Hobokon New Jersey.
From Stevens Institute and New York
Times