PREPARING FOR SEALEVEL RISE AT SHORELINES

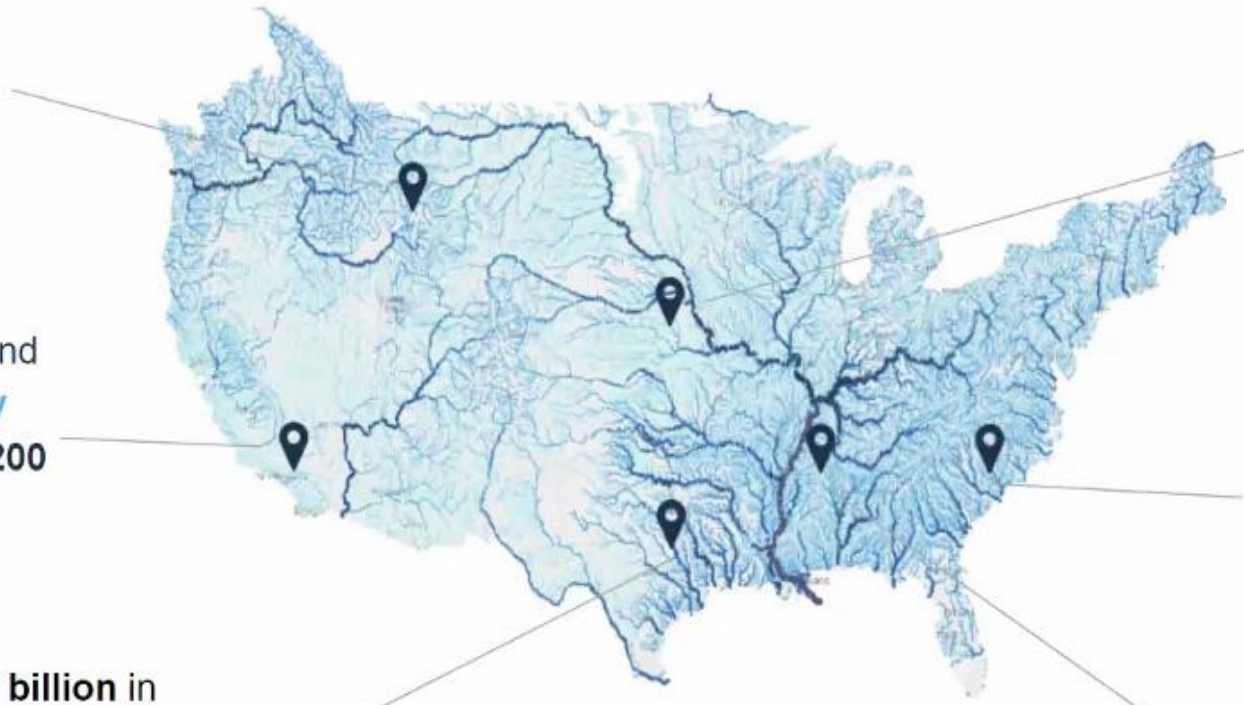
MELTING ICECAPS, WARMER OCEANS, BIGGER STORMS, WITH 50% OF THE POPULATION LIVING ON THE COASTS.

We believe that flooding is the defining issue of our time, affecting everyday Americans across all states

Since 2015, flooding has caused **$1 billion in annual damages** on average to the **Northern Rockies and Plains**

Post-fire flash flood in 2018 and 2019 in **Santa Barbara County** killed **23 people** and caused **$200 million** in property damage

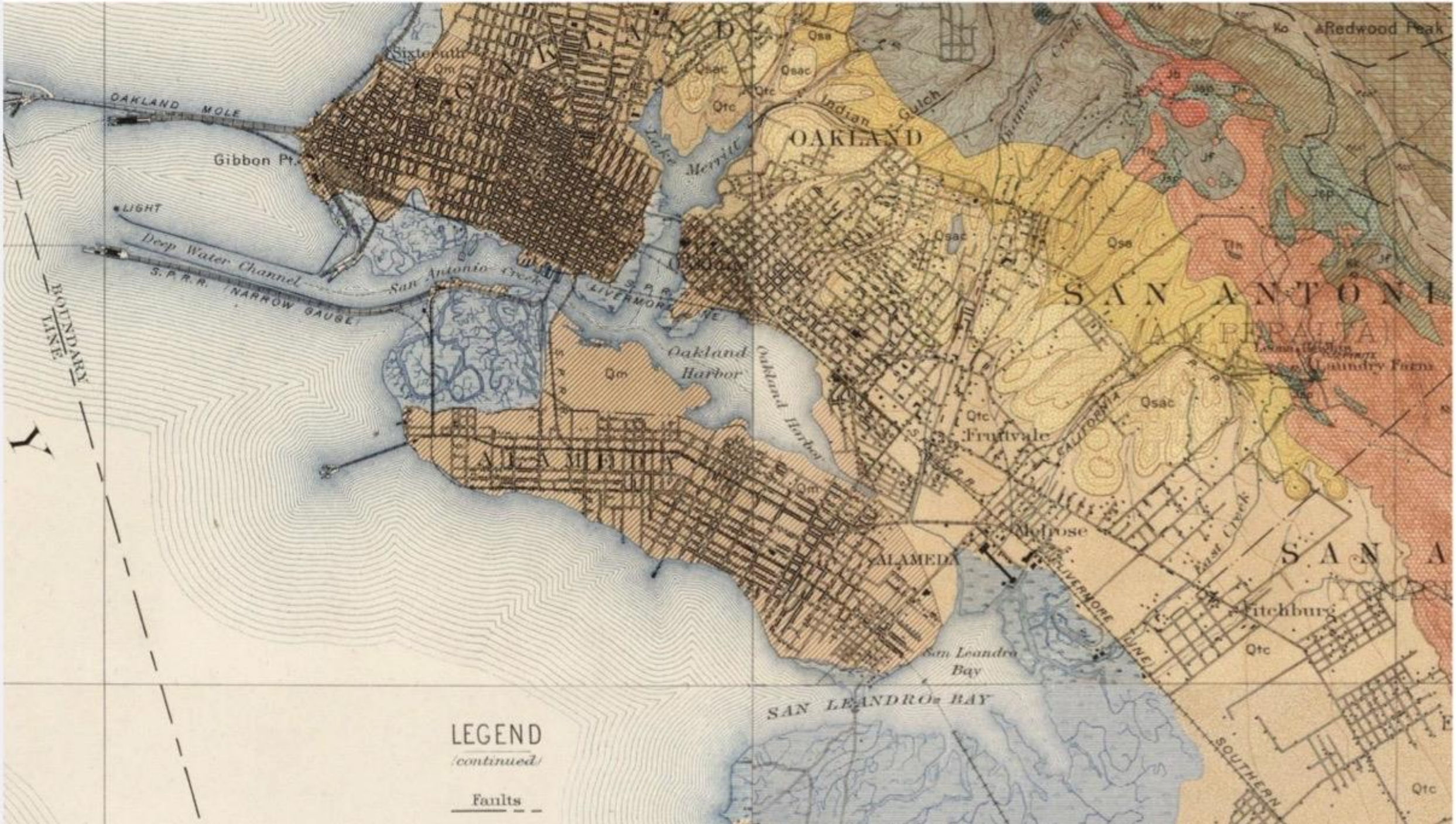
Hurricane Harvey caused **$125 billion** in damage, but HUD's high damage thresholds **excluded 2/3** of very **low-income Texans** from relief

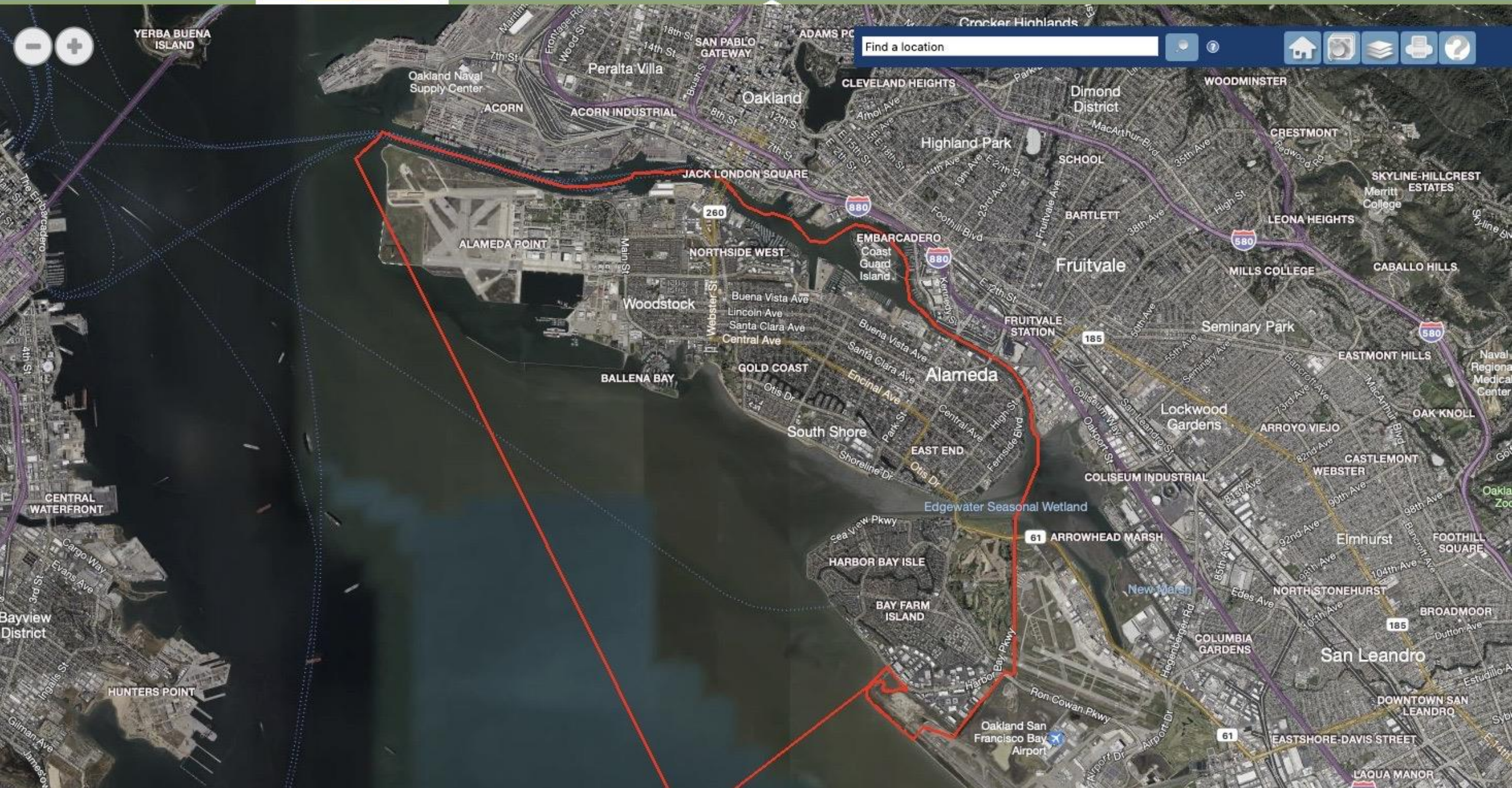


Floods in 2019 **ruined 20 million acres of farmland in the Midwest**, causing an estimated **$1 billion** in crop and livestock **losses** in **Nebraska** alone

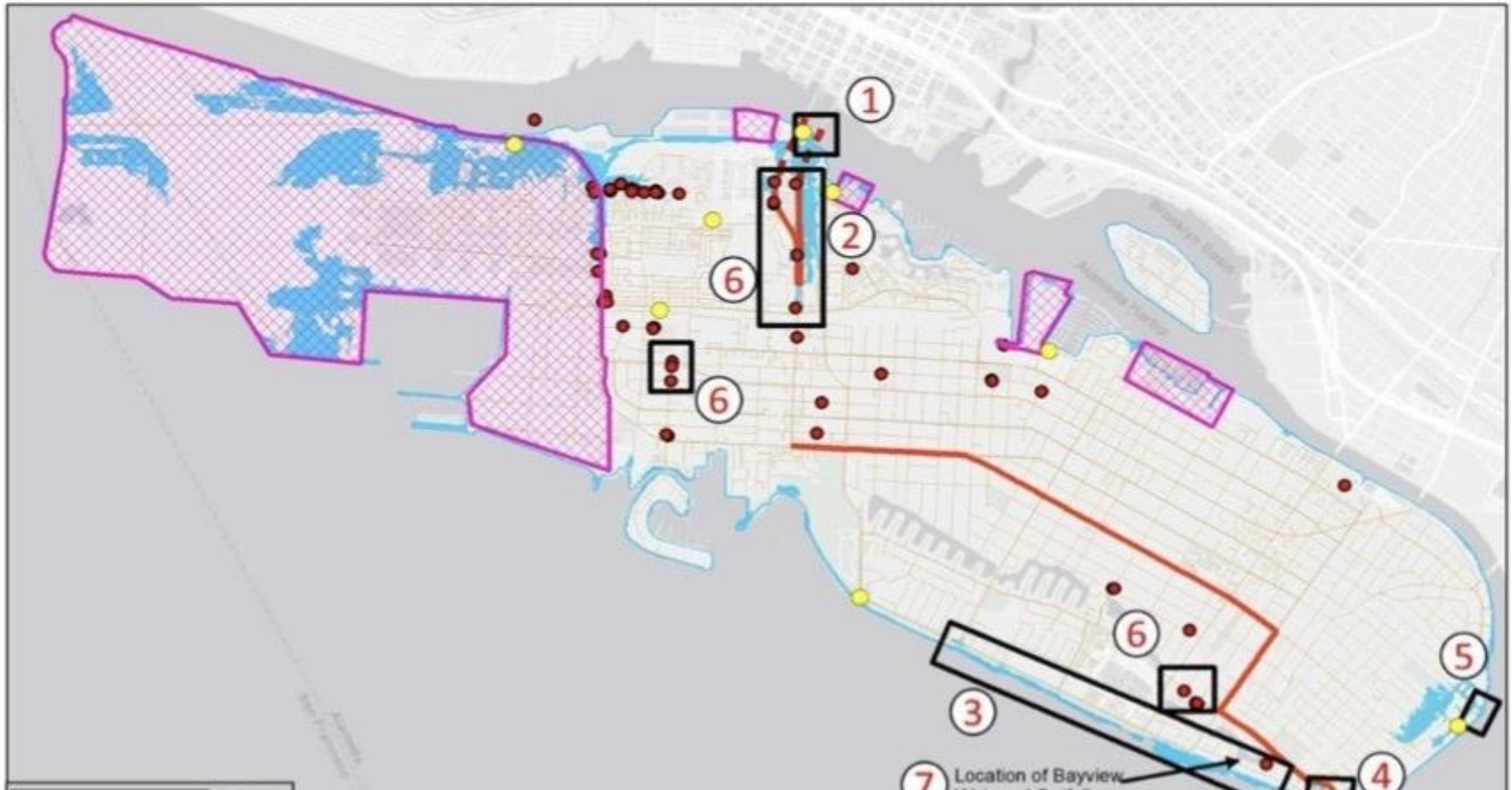
Congress spent over **$3B to rebuild two Marine Corps facilities in North Carolina** after Hurricane Florence in 2018

51% of waterborne disease outbreaks **across the country** were preceded by flooding

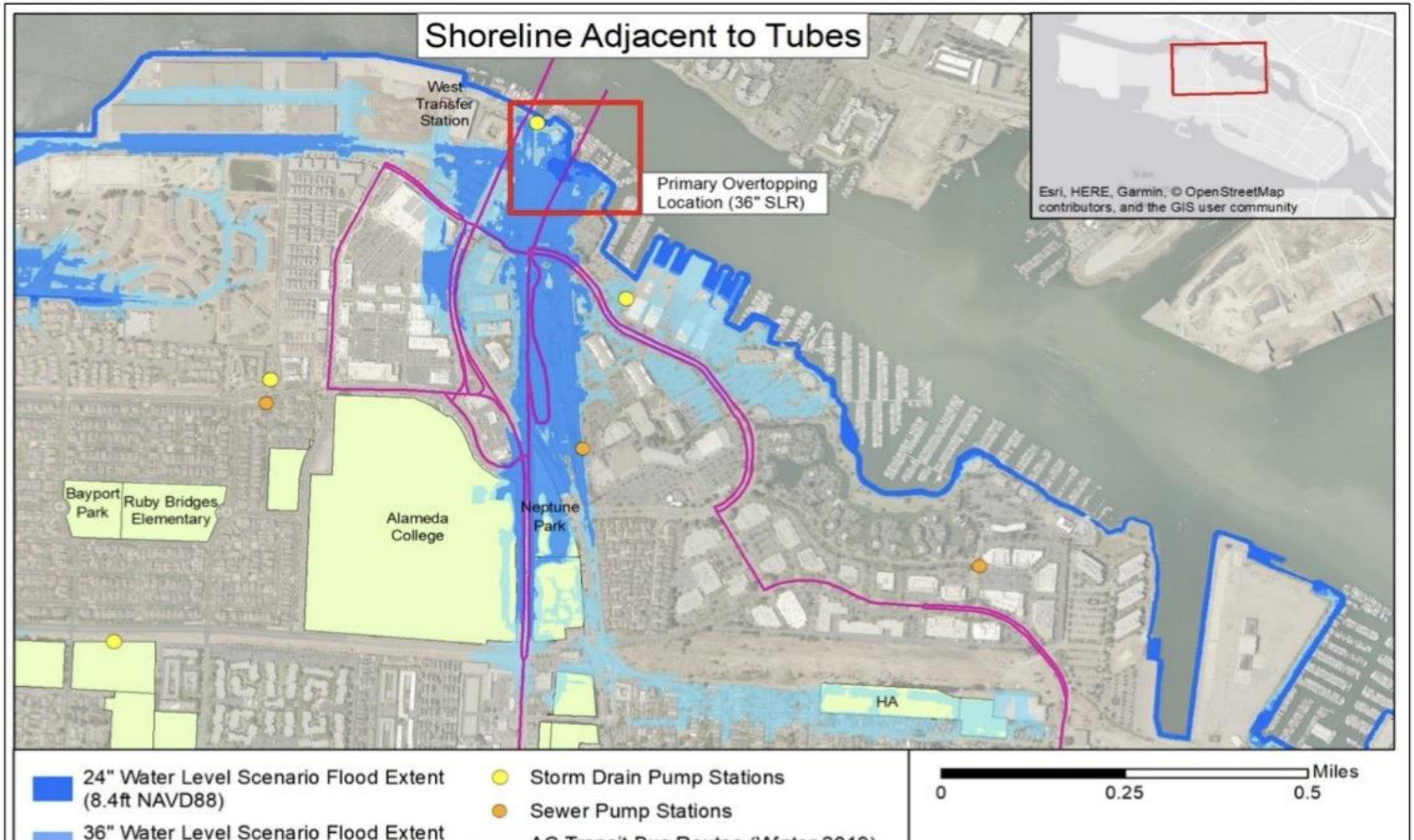

OAKLAND MOLE
Gibbon Pt.
LIGHT
Deep Water Channel
S.P.R.R. NARROW GAUGE
San Antonio Creek
BOUNDARY LINE
Lake Merritt
Indian Gulch
Piedmont Creek
Redwood Peak
OAKLAND
Oakland Harbor
ALAMEDA
Fruitvale
Laundry Farms
Melrose
Fitchburg
East Creek
CALIFORNIA
SAN LEANDRO BAY
San Leandro Bay
SOUTHERN
LEGEND
/continued/
Faults


Find a location
YERBA BUENA ISLAND
Oakland Naval Supply Center
ACORN
ACORN INDUSTRIAL
Peralta Villa
SAN PABLO GATEWAY
Oakland
CLEVELAND HEIGHTS
Dimond District
WOODMINSTER
CRESTMONT
Highland Park
SCHOOL
JACK LONDON SQUARE
ALAMEDA POINT
NORTHSIDE WEST
Woodstock
EMBARCADERO
Coast Guard Island
Fruitvale
BARTLETT
LEONA HEIGHTS
SKYLINE-HILLCREST ESTATES
Merritt College
MILLS COLLEGE
CABALLO HILLS
FRUITVALE STATION
Seminary Park
EASTMONT HILLS
BALLENA BAY
GOLD COAST
Alameda
South Shore
EAST END
Lockwood Gardens
ARROYO VIEJO
OAK KOLL
CASTLEMONT
WEBSTER
COLISEUM INDUSTRIAL
CENTRAL WATERFRONT
Edgewater Seasonal Wetland
ARROWHEAD MARSH
HARBOR BAY ISLE
Elmhurst
FOOTHILL SQUARE
BAY FARM ISLAND
NORTH STONEHURST
BROADMOOR
COLUMBIA GARDENS
San Leandro
Bayview District
HUNTERS POINT
DOWNTOWN SAN LEANDRO
Oakland San Francisco Bay Airport
EASTSHORE-DAVIS STREET
LAQUA MANOR

Shoreline and Natural Areas | Utilities | Transportation



1 & 2 – Posey / Webster Tubes



Plan Bay Area 2050: Adapt to Sea Level Rise Strategy

Estimated Cost of Climate Adaptation Projects Across Region

Bay Area Resiliency Projects
(in millions of $YOE)

Category	Units	Subtotal
Marsh Restoration	100,000 acres	$6,539
Ecotone Levees	58 miles	$2,413
Traditional Levees	68 miles	$2,534
Seawalls	13 miles	$1,006
Elevated Roadways	11 miles	$4,795
Tidal Gates	23 units	$152
Relocation Funds	1,390 homes	$1,815
TOTAL		**$19,255**

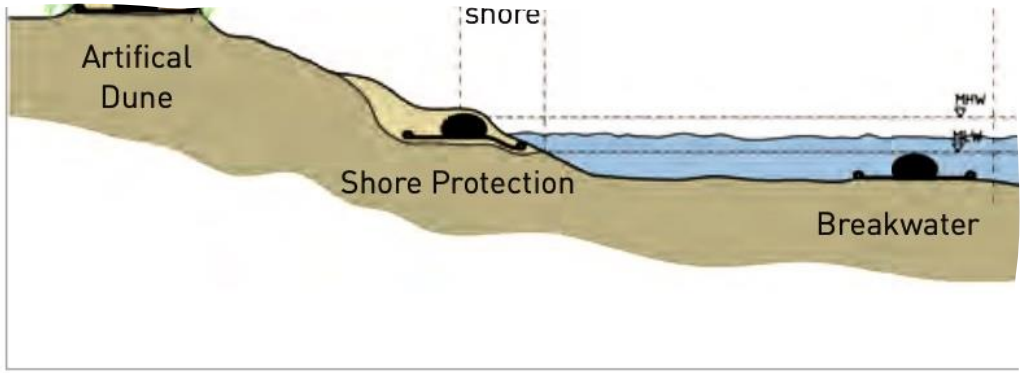
Bay Area Regional Collaborative


LindMarine





SoilTain Tube system for coastal protection exhibits exceptional performance with regard to all important aspects of a coastal protection system.



Shore stabilization possibilities with SoilTain Tubes including scour apron parallel to the coastline



SoilTain Tube as groyne with rock cover and protective non-woven



SoilTain Tube as artificial reef breakwater




ate - Protecting People For Decades
안전 제일

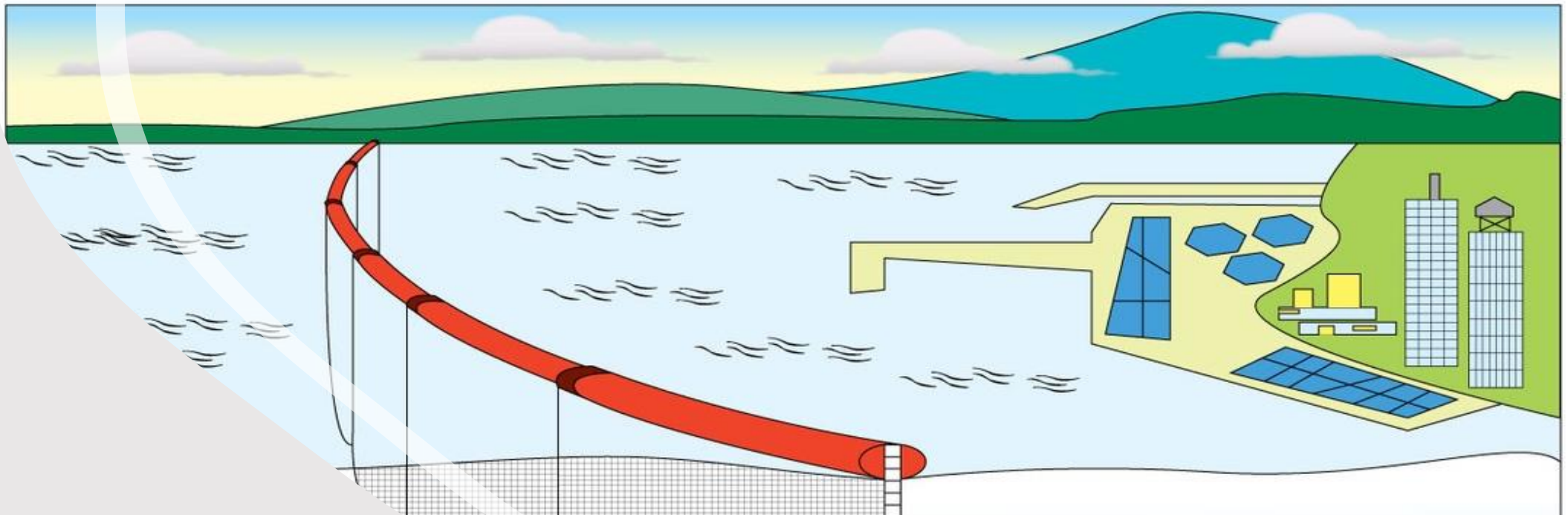

TenCate Geotube® GC1200 Series Durability Engineered Composites

TYPE 3 HEAVY-DUTY TURBIDITY CURTAIN WITH PLAIN SKIRT



TYPE 3 HEAVY-DUTY TURBIDITY CURTAIN WITH FILTER FABRIC SKIRT






Enviro-USA Floating Turbidity Barrier Guide



Watermaster
North America