SUSTAINABLE COMMERCE AND LIVING WITH A RISING SEA

.....what the maritime industry is doing about it.....



Dilip Trivedi, Bay Planning Coalition Moffatt & Nichol, Walnut Creek, CA

SAME, Oct 2016

San Francisco Bay – Major Seaports and Airports



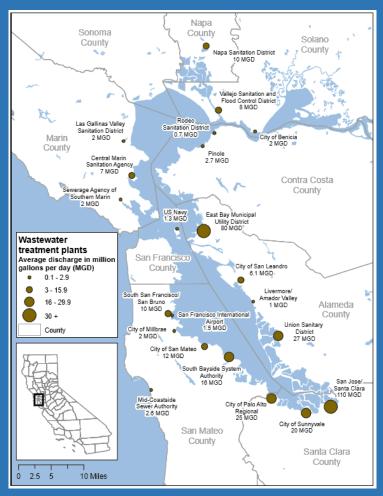
Ports/Marinas

- Oakland, Richmond, Redwood City, Stockton, San Francisco
- Chevron, Valero, Tesoro
- Aggregates
- City/Private Marinas

Impacts

- Jobs
- Regional Investments/Economy
- Recreation
- Continued Dredging
- Reliability of Transportation
- > Air Quality Compliance
- > Environmental Compliance

San Francisco Bay – Major Infrastructure



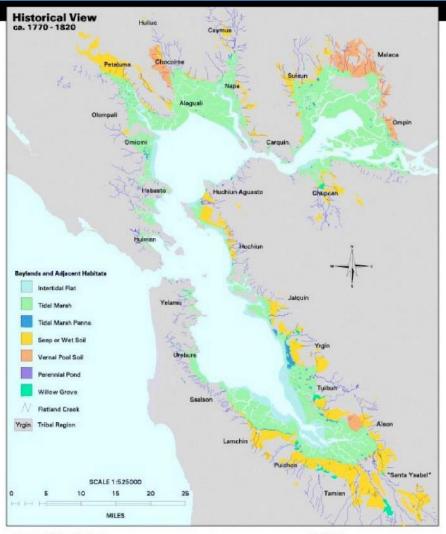
- Wastewater Treatment Plants
- Power Plants
- Industry
- Housing
- Transportation



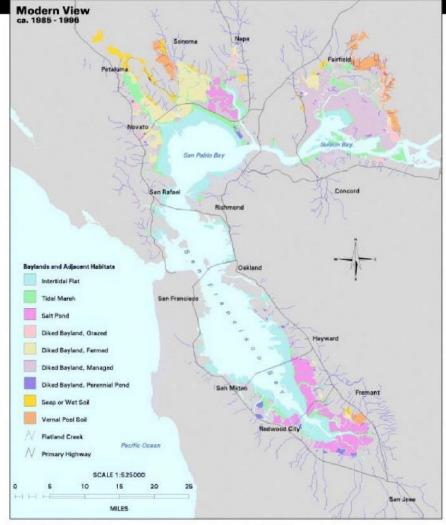


SAME Resiliency, Oct 2016

San Francisco Bay - Past and Present



Historical View Primary Sources: US Coset Survey, US Geological Survey, US Department of Agriculture, Spanish disense, explorers' journals, and local archives. Tribal Regions courcey of Randall Millikan. Projection: 1927 North American Datum Universal Transverse Mercator Projection UTM Zone 10



Present morphology is levees fronted by mudflats

Modern View Primary Sources: CA State Lands Commission, US Geological Survey, US Fish and Wildlife Service, US National Aeronautical and Space Administration, and local experts.

No buffer for marsh progression

Production: Science coordination, GIS and Map Design by the San Francisco Estuary institute Richmond, California http://www.efei.org EcoAtlas 1.0 °1997 SFEI

- Over 90% of wetlands filled
- Declining sediment rates into estuary

SAME Resiliency, Oct 2016

Nay Planning Coalition

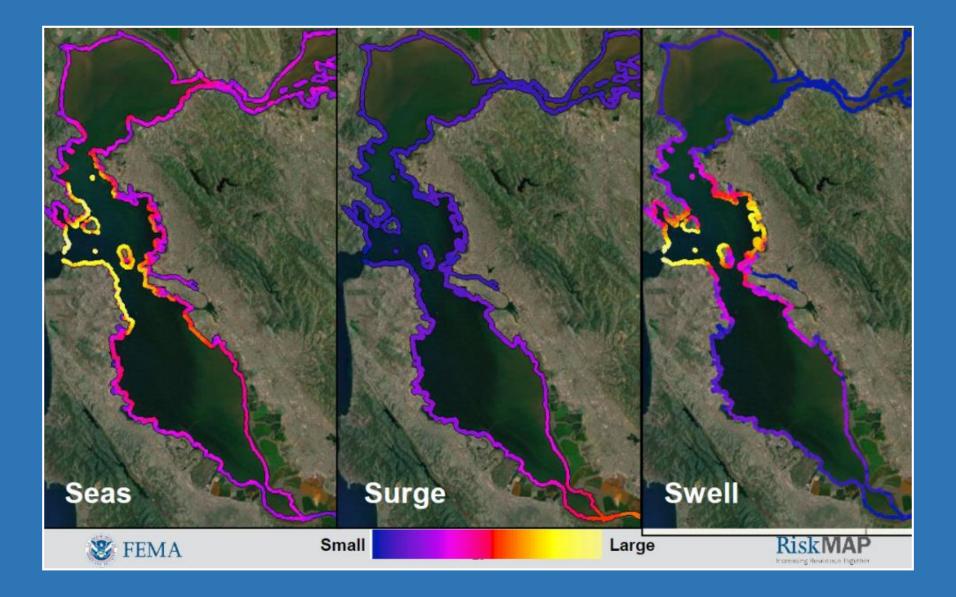
Increased Awareness of Inundation Potential



Inundation with 16" & 55" of SLR BCDC-Led Effort



FEMA Regionwide Floodplain Mapping





Summary

Challenges

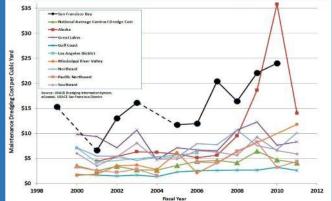
- Dredging
- Housing (Redevelopment)
- Continued Viability of Transportation Network
- Jurisdictional (53 cities with shoreline, 9 counties)
- Flood Control (by County or City)

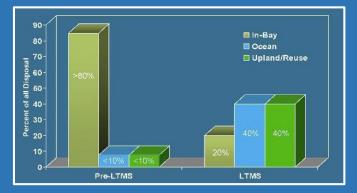
Potential Solutions

- Wetlands Restoration w/ Flood Control
- Regionwide Resiliency Planning
- Collaboration (Public + Private)
- Involve Private Sector

Nay Planning Coalition







SAME Resiliency, Oct 2016

Role of Bay Planning Coalition

- ✓ Focused specifically on SF Bay Area's economic interests and vitality
- ✓ Views the maritime industry as central to economic vitality of Region
- ✓ Provides visionary leadership to stakeholders to advance solutions for:
 - thriving economy
 - environment
 - community

Mission:

- ✓ Provide expert advocacy and facilitation
- ✓ Work through a broad coalition
- ✓ Advance industrial economy
- ✓ Support sustainable environment





Activities

- > Active via formation of six committees
- > Issue Specific Committees:
 - Dredging & Beneficial Reuse
 - Marinas, Boatyards, and Small Harbors
 - Sustainable Waterfronts
 - Water, Energy, & Infrastructure
 - Legislative & Policy
- > Work to provide focused advocacy and strategy development on relevant topics
- > Workshops, Briefings, Decision Makers Conference







Activities

Participating In:

- BCDC Bay fill working group
- BCDC Sea Level Rise working group
- RMP Steering Committee
- POSF Waterfront Land Use Plan
- CCSF Sea Level Rise Guidance Document

Legislative Activities:

- WRDA 2016 language inserted into both the House and Senate bills, going to Conference Committee
- Held CEQA Update (4th)
- Held the Energy & Water Nexus Summit
- Actively Supporting Prop 67 and Measure RR
- Opposing Prop 53 and 65



Example

Beneficial Reuse of Dredged Material + Wetlands Restoration + Flood Control

- LTMS development and review
- lobbying for congressional approvals
- legislative proposals
- Regional General Permit white paper
- Regional Monitoring Plan review

Sustainable Waterfronts

- representing members at various forums
- Preparing database of SLR related regulatory & CEQA policy
- preparing permit efficiency white paper



Hamilton Army Airfield (700 ac) Oakland 50' deepening



Montezuma Wetlands (2000 ac ongoing) Oakland 50' deepening, now maintenance

Nay Planning Coalition