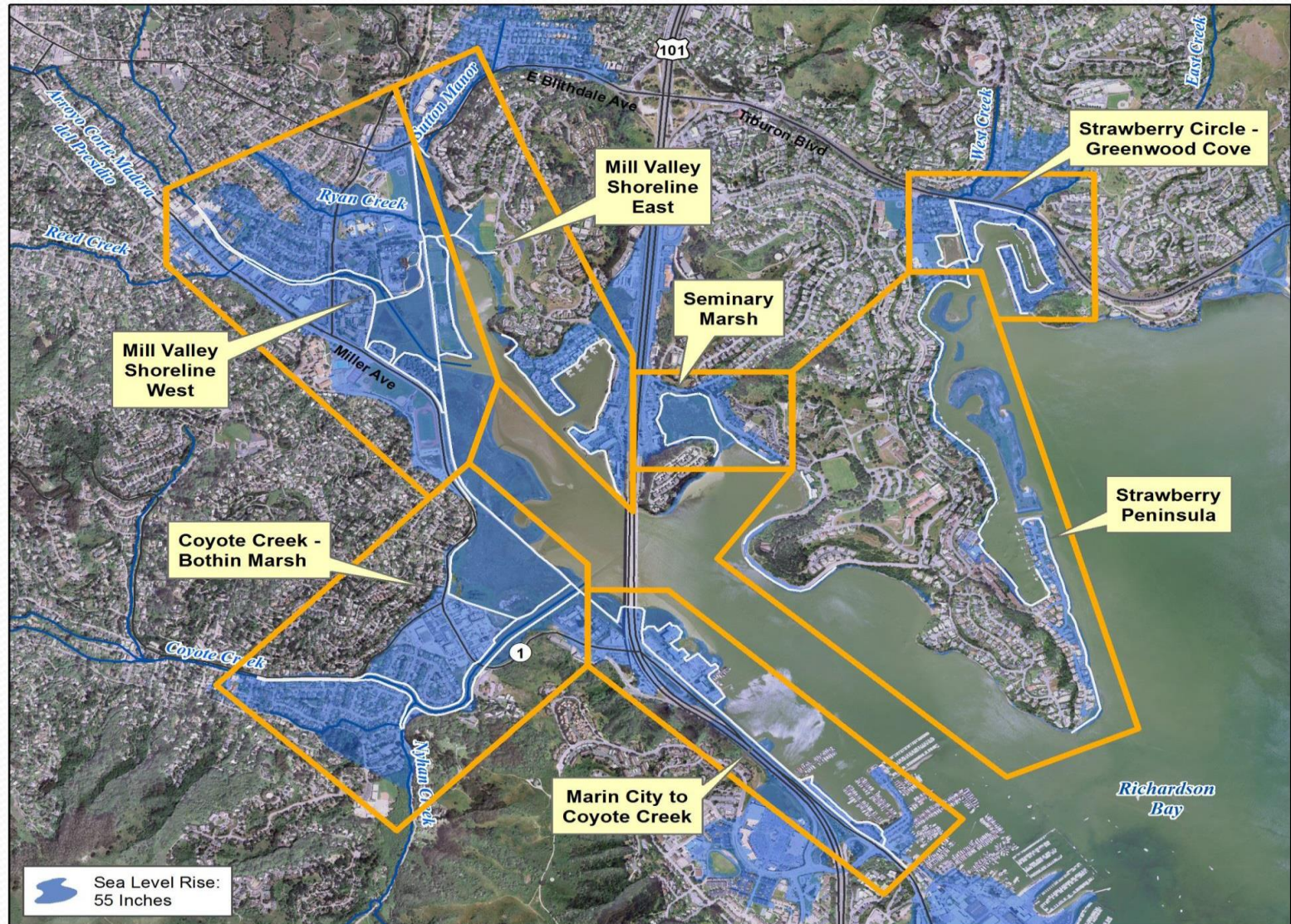
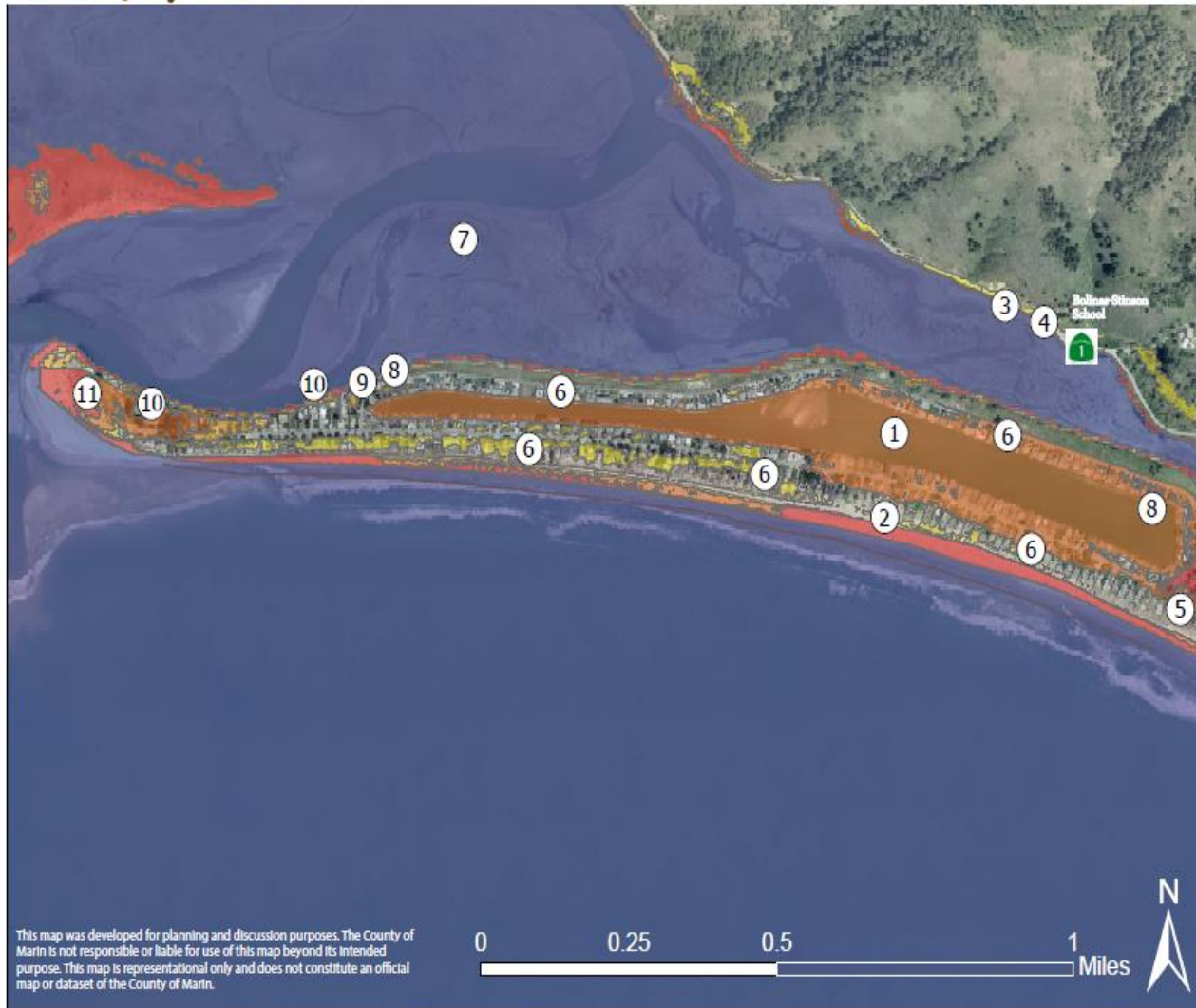


Southern Marin – Mill Valley to Sausalito



Seadrift



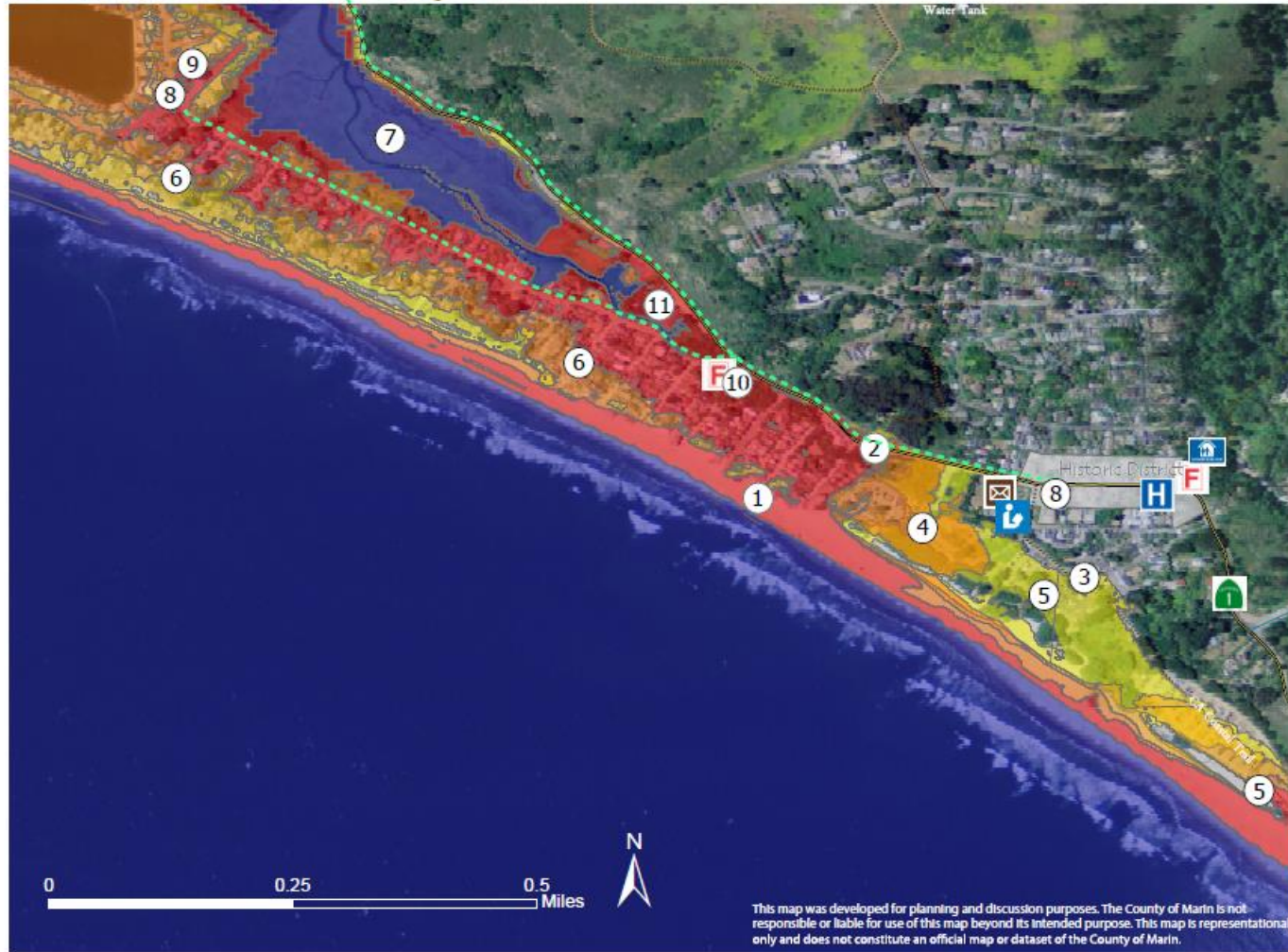
Exposed Assets

- 1 Seadrift Lagoon
- 2 Seadrift Beach
- 3 California Coastal Trail
- 4 State Highway 1
- 5 Walla Vista Walkway
- 6 Residential Development (served by individual, on-site wastewater systems)
- 7 Bolinas Lagoon
- 8 Inlet/Outlet Valves to Seadrift Lagoon
- 9 Boat Launch
- 10 Bulkhead (10-20')
- 11 Sensitive Nesting Habitat Preserve (Dunes)

Sea Level Rise (SLR) Scenarios

- Baseline No SLR/ No Storm
- 25 cm (0'10") SLR w/ Annual Storm
- 25 cm (0'10") SLR w/ 20 year Storm
- 50 cm (1'8") SLR w/ 20 year Storm
- 100 cm (3'3") SLR w/ 100 year Storm
- 200 cm (6'6") SLR w/ 100 year Storm

Stinson Beach



Exposed Assets

- ① Stinson Beach
- ② State Highway 1
- ③ California Coastal Trail
- ④ Picnic Area
- ⑤ Stinson Beach Parking Lots
- ⑥ Commercial/Residential Development
- ⑦ Bolinas Lagoon
- ⑧ Tsunami Evacuation Route
- ⑨ Emergency Generator
- ⑩ Fire Station
- ⑪ Water District Office

Additional Natural Resources include Steelhead Trout habitat, Harbor Seal Haul Outs, Brown Pelican Roosting Sites, Wetlands

Sea Level Rise (SLR) Scenarios

- Baseline No SLR/ No Storm
- 25 cm (0'10") SLR w/ Annual Storm
- 25 cm (0'10") SLR w/ 20 year Storm
- 50 cm (1'8") SLR w/ 20 year Storm
- 100 cm (3'3") SLR w/ 100 year Storm
- 200 cm (6'6") SLR w/ 100 year Storm

Properties Exposed

- | | |
|-------|-------|
| ■ 2 | ■ 398 |
| ■ 120 | ■ 490 |
| ■ 250 | |

This map was developed for planning and discussion purposes. The County of Marin is not responsible or liable for use of this map beyond its intended purpose. This map is representational only and does not constitute an official map or dataset of the County of Marin.

December 3, 2014 - Mill Valley

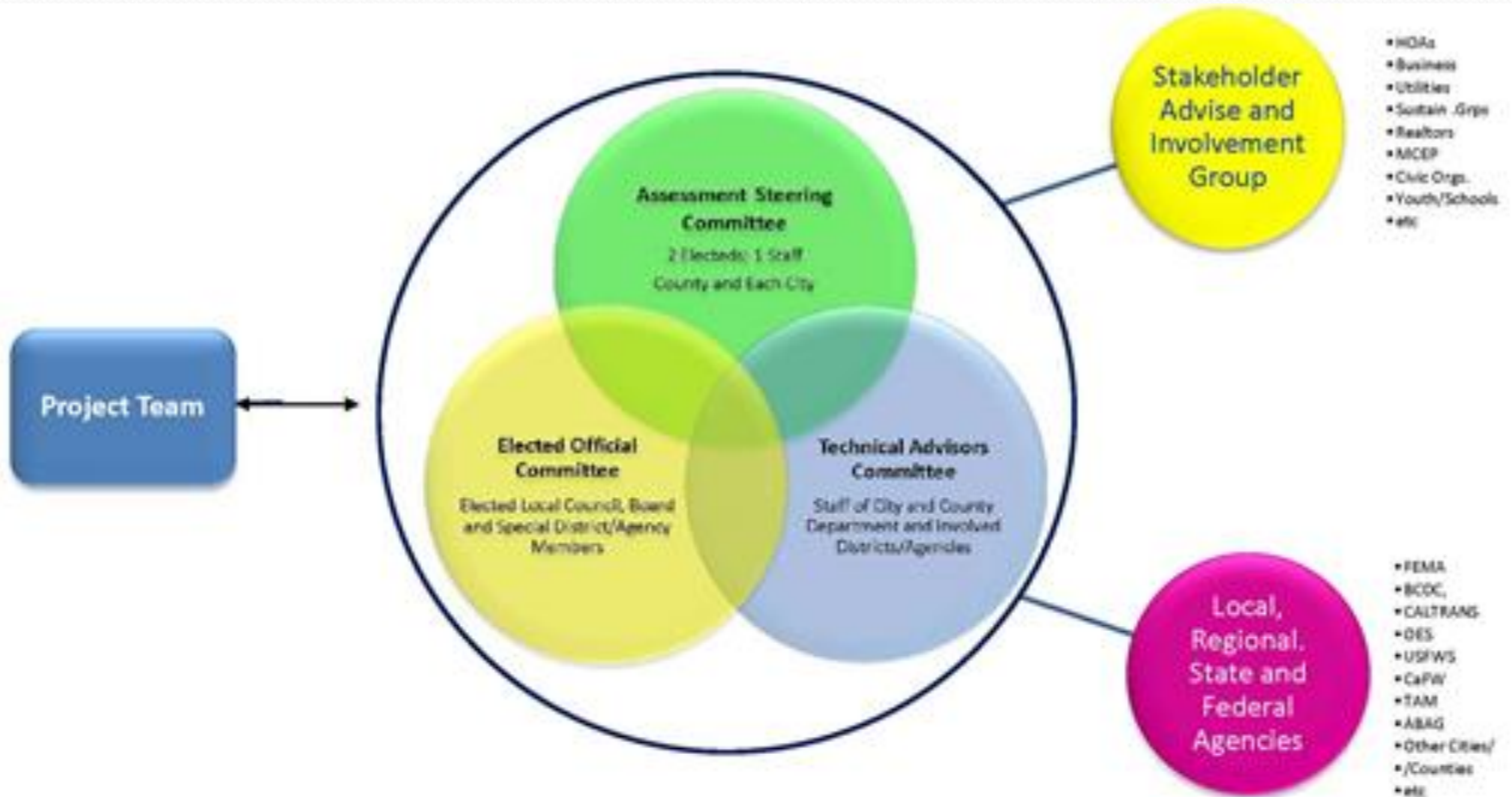


December 3, 2014 - Mill Valley



Very Preliminary Draft Governance Framework – Marin SLR Study

Local Collaboration AND Local Control



Draft Marin Countywide Vulnerability Assessment Organizational Framework

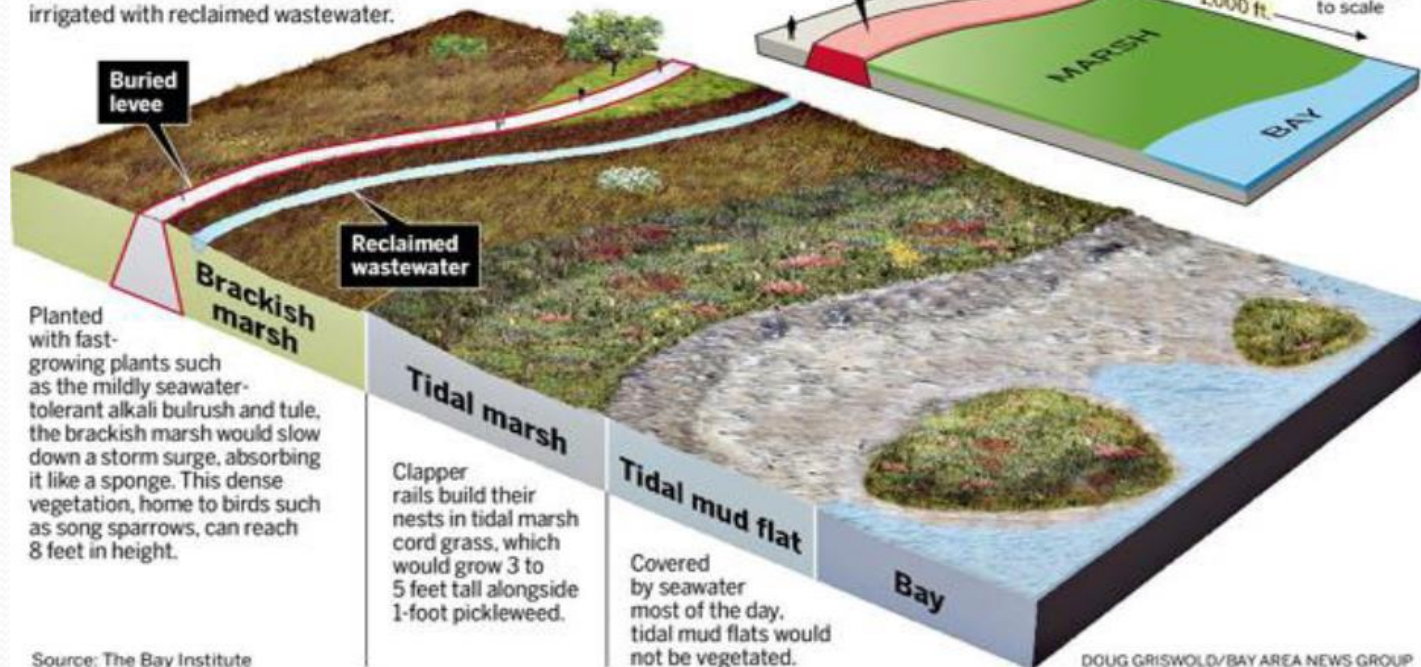
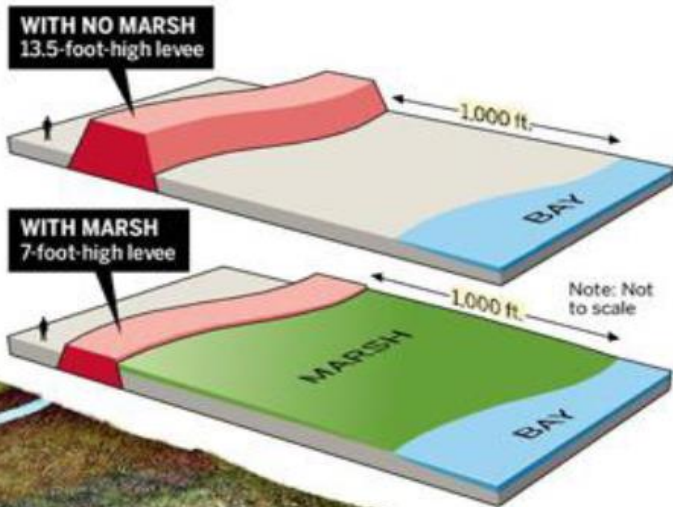
Horizontal (“Natural”) Levee

A new kind of levee

The Bay Institute, an environmental group, has proposed a number of “horizontal levees” for San Francisco Bay that blend a traditional earthen levee with restored tidal marshes. The marshes would be built up with sediment from local flood control channels. Marsh vegetation would be irrigated with reclaimed wastewater.

Marshes as barriers

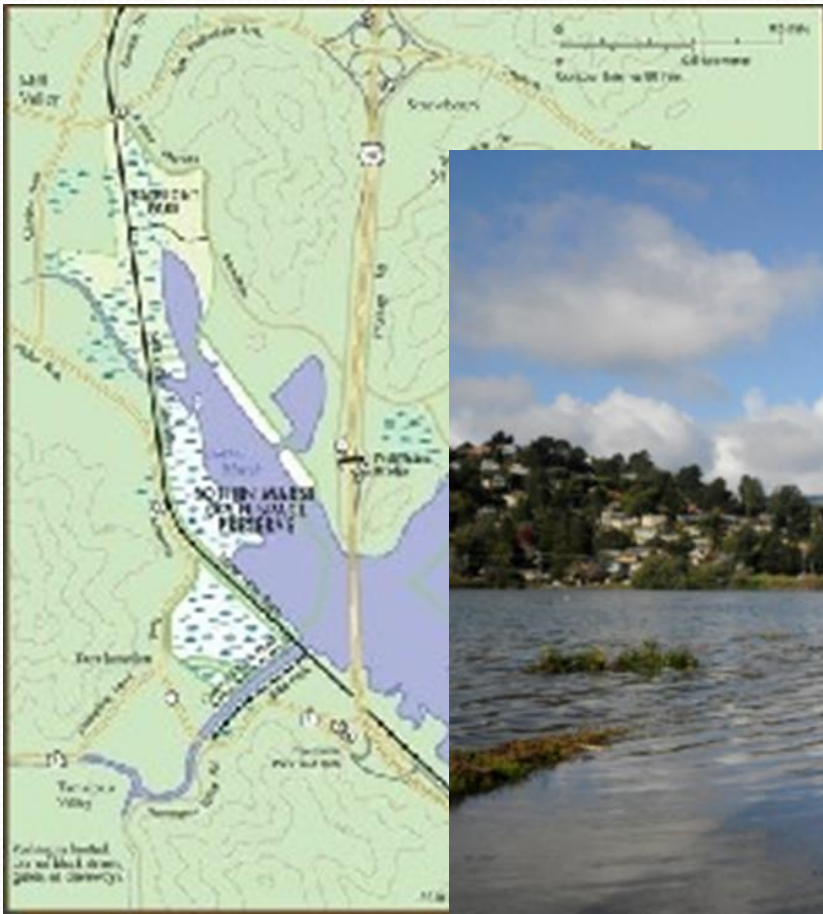
Tidal marshes can slow down storm surges, meaning levees fronted by marshes can be built half as tall, and at half the cost, as traditional levees made of earth and clay.



Source: The Bay Institute

DOUG GRISWOLD/BAY AREA NEWS GROUP

Bothin Marsh Natural Levee Prototype Site

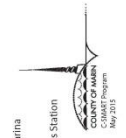


Tam High SLR Adaptation Game



THE GAME OF FLOODS

Marin Island



START

Each week the design team will be reviewing designs, creating and revising them, and then sharing them with the community. The designs will be reviewed by the community and the design team will be revising them. The designs will be reviewed by the community and the design team will be revising them. The designs will be reviewed by the community and the design team will be revising them.



- Marina
- Gas Station
- Mammal Habitat
- Seabird Colony
- Ranch
- Agriculture
- Evacuation Route
- Grocery
- Public Well
- Home
- Water
- Roadway
- Beach
- School Site
- Parking
- Boat Launch
- Restaurant
- Library
- Emergency Shelter
- Hospital
- Fire Station
- Post Office

LEGEND

<p>Managed Retreat</p> <ul style="list-style-type: none"> Retreat: \$\$\$\$\$\$ E ● Post-storm prohibitions: \$\$\$\$\$\$ E ● Move here: \$\$\$\$\$\$ E ● Stricter land use zoning: \$\$\$\$\$\$ E ● 	<p>Accomodate Water</p> <ul style="list-style-type: none"> Elevate Buildings: \$\$\$\$\$\$ E ● Floodable Buildings: \$\$\$\$\$\$ E ● Waterproof Buildings: \$\$\$\$\$\$ E ● New Road: \$\$\$\$\$\$ E ● 	<p>Hard Engineering</p> <ul style="list-style-type: none"> Revetment/Seawall: \$\$\$\$\$\$ E ● Traditional Levee: \$\$\$\$\$\$ E ● Tide Gate: \$\$\$\$\$\$ E ● Pump Station: \$\$\$\$\$\$ E ● 	<p>Soft Engineering</p> <ul style="list-style-type: none"> Horizontal Levee: \$\$\$\$\$\$ E ● Artificial Reef: \$\$\$\$\$\$ E ● Wetland/shoreline vegetation: \$\$\$\$\$\$ E ● Beach Nourishment: \$\$\$\$\$\$ E ●
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- Instructions:**
1. To begin each 25 minute round, the facilitator reads the relevant scenario card aloud.
 2. Each player takes 3-5 minutes to select an asset to retreat, relocate or defend, and affiliated strategies under the one worksheet provided to indicate your choice.
 3. The facilitator reads the scenario card aloud and the players discuss the scenario. The facilitator then reads the scenario card aloud and the players discuss the scenario.
 4. In turn, each commissioner states their asset and preparation strategies, placing their game pieces in the desired location on Marin Island. No need to duplicate pieces at the same location. Conflicting strategies are allowed.
 5. Continue taking turns until each player has laid down all of their pieces for the round or until time runs out. Repeat for the remaining scenario.
 6. The facilitator reads the scenario card aloud and the players discuss the scenario. The facilitator then reads the scenario card aloud and the players discuss the scenario.
 7. Select a spokesperson will report to large group and read jury.

PREPARATIONS

www.MarinSLR.org



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marinslr.org

Photo Credit: Dianne Arrigoni

May 29, 2015