

# AQUATIC PARK + FISHERMAN'S WHARF SUBAREAS

## REPORT OUT NOTES

1. What are the most important considerations for evaluating measures?

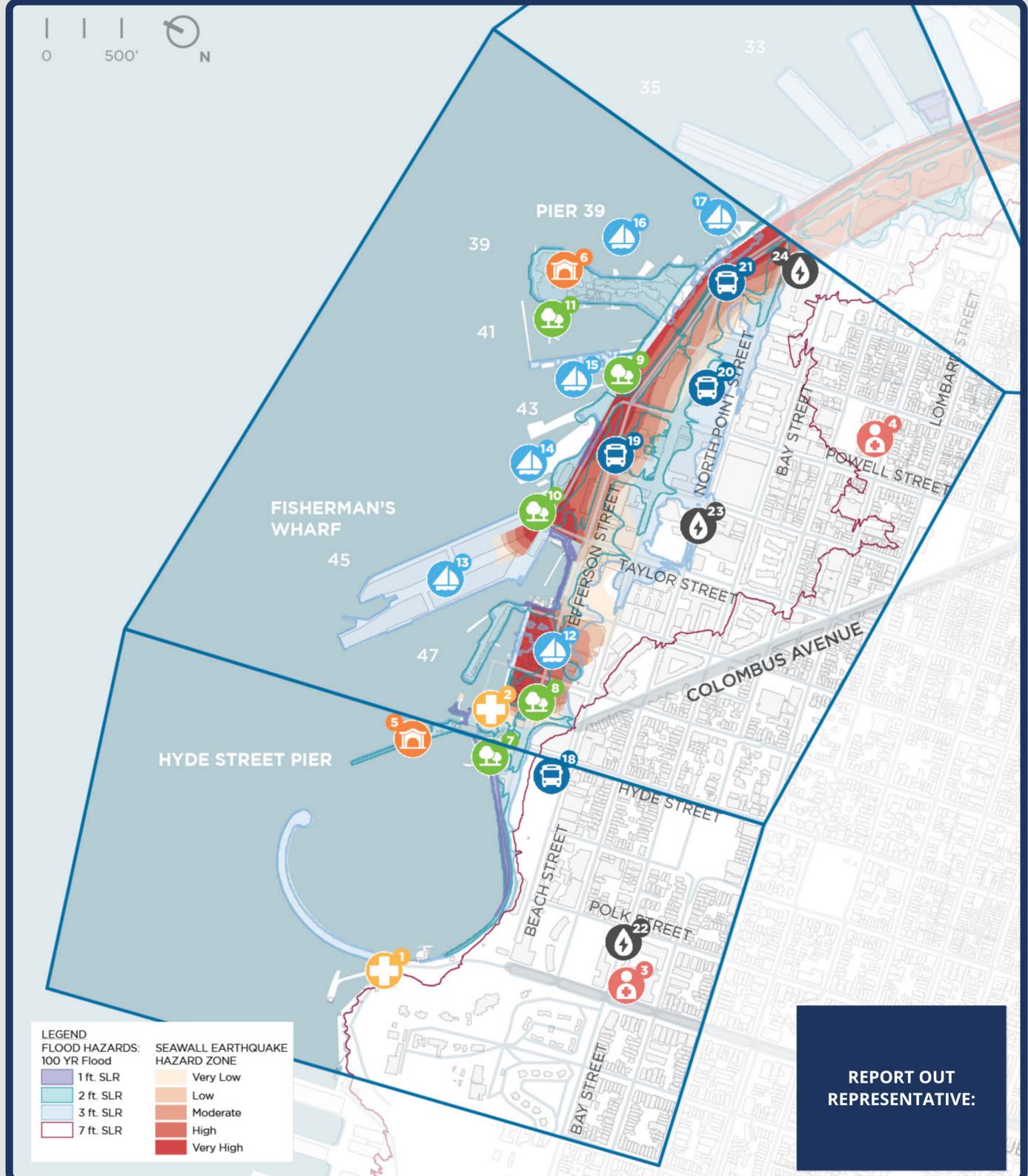


2. What concerns do you have about any of the measures?



### ASSET LEGEND

- Disaster Response**
  - 1. Emergency Fire Water Supply Pump Station 2
  - 2. Police Dept. / Port Joint Operations & Security
- Critical Facilities**
  - 3. Galileo High School
  - 4. Francisco Middle School
- Historic & Cultural**
  - 5. Hyde Street Pier
  - 6. Pier 39
- Open Space & Ecology**
  - 7. Dolphin Club + South End Rowing Club
  - 8. Bay Trail
  - 9. Jefferson Street Plaza
  - 10. Pier 43 Promenade
  - 11. Sea Lion Viewing Area
- Maritime**
  - 12. Fish Alley
  - 13. Pier 45
  - 14. Red and White Fleet
  - 15. Belt Railroad Headhouse
  - 16. Pier 39 Marina
  - 17. Blue and Gold Ferry Terminal
- Transportation**
  - 18. Hyde Street Cable Car Turnaround
  - 19. Muni E/F Line
  - 20. Kirkland Yard
  - 21. Embarcadero Roadway
- Utilities**
  - 22. North Point Tunnel
  - 23. Jackson Transport / Storage Box
  - 24. North Point Wet Weather Facility and Northshore Pump Station



REPORT OUT REPRESENTATIVE:

		DESIGN LIFE	ADAPTABILITY	IMPACT ON THE WATERFRONT	COST	COMPATIBLE MEASURES	
FLOOD MEASURES	PHYSICAL INFRASTRUCTURE	1 LEVEES	75+ years	Low	Major Intervention	\$\$\$\$\$	Nearshore Buttress, Bulkhead Wharf Retrofit, Ecological Features
		2 SEAWALLS	50-100 years	Varies	Major Intervention	\$\$\$	Nearshore Buttress, Drilled Shafts, Ecological Shorelines
		3 RAISED MARINE STRUCTURES	50+ years	Medium	Major Intervention	\$\$\$\$	Drilled Shafts, Ecological Features
		4 FLOODWALLS	30-50 years	Low	Minor Intervention	\$\$	Bulkhead Wharf Retrofit, Drilled Shafts
	ECO. INFRA.	5 ECOLOGICAL FEATURES	10-50+ years	Medium-High	Minor Intervention	\$*	All Flood Measures and Seismic Measures
		6 ECOLOGICAL SHORELINES	Decades	Medium-High	Typically Minor Intervention	\$*	All Flood Measures and Seismic Measures
SEISMIC MEASURES	SHORELINE STABILIZATION	7 NEARSHORE BUTTRESS	100+ years	Very High	Major Waterside Intervention	\$\$\$\$\$	Levees, Seawalls, Ecological Features
		8 DRILLED SHAFTS	75+ years	Medium	Moderate Landside Intervention	\$\$\$	Raised Marine Structures, Floodwalls, Seawalls
	TARGETED MEASURES	9 BULKHEAD WHARF RETROFIT	30 years	Low	Minor Waterside Intervention	\$\$	Levees, Floodwalls, Ecological Features
FLOOD + SEISMIC	10 EMERGENCY PREPAREDNESS			No physical impact	\$	All Flood Measures and Seismic Measures	

\*Must be combined with other measures to provide flood protection

# 2a PIER 31-35 + NORTHEAST WATERFRONT SUBAREAS

**ASSET LEGEND**

- Disaster Response**
  - 1. Bay-Delta Maritime Tugboat Dock
  - 2. Pier 9
- Critical Facilities**
  - 3. Broadway Family Apartments
- Historic & Cultural**
  - 4. Coit Tower
  - 5. Pier 23 Cafe
  - 6. Exploratorium
- Open Space & Ecology**
  - 7. Chestnut and Kearny Open Space
  - 8. Public Pier
  - 9. Northeast Wharf Plaza
  - 10. Levi Plaza
  - 11. Bay Trail + Promenade
- Maritime**
  - 12. Alcatraz Landing
  - 13. Cruise Terminal
  - 14. Beltline Railroad Complex
- Transportation**
  - 15. Muni E/F Line
  - 16. Embarcadero Roadway
- Utilities**
  - 17. North Point Deepwater Outfalls
  - 18. Jackson Transport / Storage Box
  - 19. Shoreside Power Facility
  - 20. North Shore Force Main

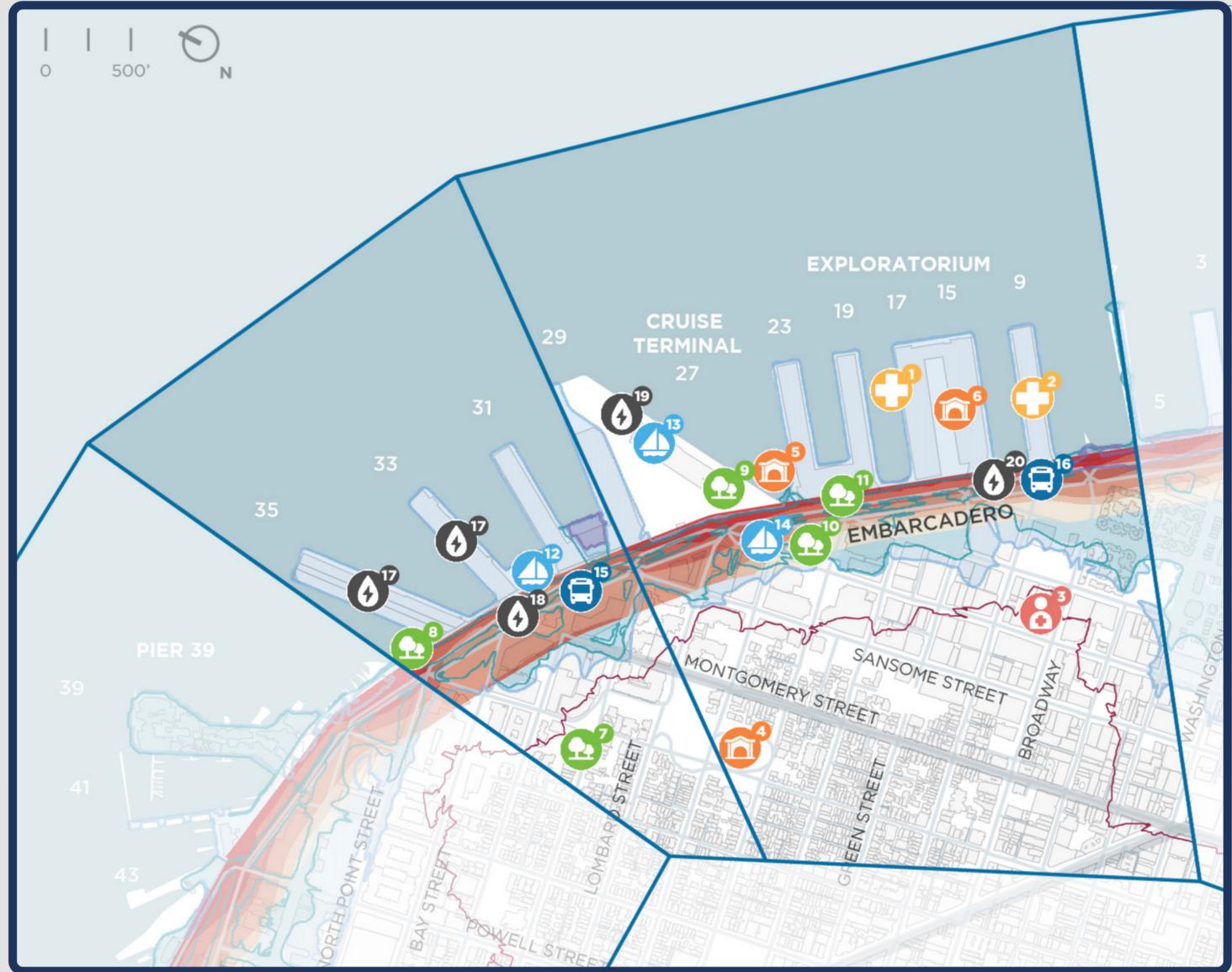
**LEGEND**

**FLOOD HAZARDS: 100 YR Flood**

- 1 ft. SLR
- 2 ft. SLR
- 3 ft. SLR
- 7 ft. SLR

**SEAWALL EARTHQUAKE HAZARD ZONE**

- Very Low
- Low
- Moderate
- High
- Very High



REPORT OUT REPRESENTATIVE:

**REPORT OUT NOTES**

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2. What concerns do you have about any of the measures?

		DESIGN LIFE	ADAPTABILITY	IMPACT ON THE WATERFRONT	COST	COMPATIBLE MEASURES	
FLOOD MEASURES	PHYSICAL INFRASTRUCTURE	1 LEVEES	75+ years	Low	Major Intervention	\$\$\$\$\$	Nearshore Buttress, Bulkhead Wharf Retrofit, Ecological Features
		2 SEAWALLS	50-100 years	Varies	Major Intervention	\$\$\$	Nearshore Buttress, Drilled Shafts, Ecological Shorelines
		3 RAISED MARINE STRUCTURES	50+ years	Medium	Major Intervention	\$\$\$\$	Drilled Shafts, Ecological Features
		4 FLOODWALLS	30-50 years	Low	Minor Intervention	\$\$	Bulkhead Wharf Retrofit, Drilled Shafts
	ECO. INFRA.	5 ECOLOGICAL FEATURES	10-50+ years	Medium-High	Minor Intervention	\$*	All Flood Measures and Seismic Measures
		6 ECOLOGICAL SHORELINES	Decades	Medium-High	Typically Minor Intervention	\$*	All Flood Measures and Seismic Measures
SEISMIC MEASURES	SHORELINE STABILIZATION	7 NEARSHORE BUTTRESS	100+ years	Very High	Major Waterside Intervention	\$\$\$\$\$	Levees, Seawalls, Ecological Features
		8 DRILLED SHAFTS	75+ years	Medium	Moderate Landside Intervention	\$\$\$	Raised Marine Structures, Floodwalls, Seawalls
	TARGETED MEASURES	9 BULKHEAD WHARF RETROFIT	30 years	Low	Minor Waterside Intervention	\$\$	Levees, Floodwalls, Ecological Features
FLOOD + SEISMIC	10 EMERGENCY PREPAREDNESS			No physical impact	\$	All Flood Measures and Seismic Measures	

\*Must be combined with other measures to provide flood protection

# FERRY BUILDING SUBAREA

## REPORT OUT NOTES

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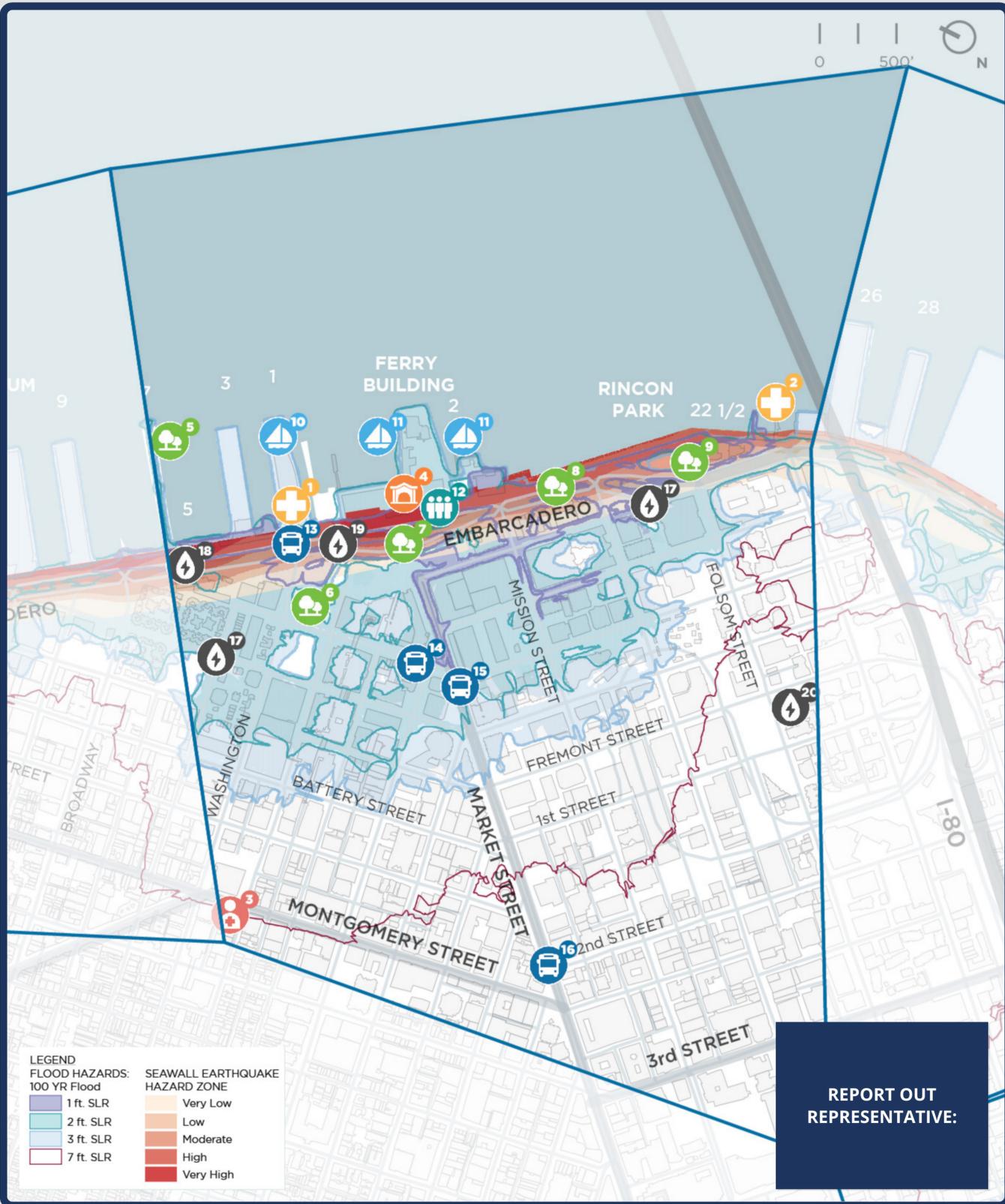
2. What concerns do you have about any of the measures?

### ASSET LEGEND

- + **Disaster Response**
  - 1. Primary Port Dept. Operations Center
  - 2. Fireboat Headquarters, Fire Station 35
- + **Critical Facilities**
  - 3. Edwin & Anita Lee Newcomer School
- + **Historic & Cultural**
  - 4. Ferry Building
- + **Open Space & Ecology**
  - 5. Pier 7
  - 6. Sue Bierman Park
  - 7. Ferry Plaza, Harry Bridges Plaza, & Embarcadero Plaza
  - 8. Bay Trail & Promenade
  - 9. Rincon Park
- + **Maritime**
  - 10. Port of San Francisco
  - 11. Ferry terminals
- + **Community Assets**
  - 12. Farmer's market
- + **Transportation**
  - 13. Muni LRV & Embarcadero roadway
  - 14. California Street Cable Car
  - 15. Embarcadero BART station
  - 16. Montgomery BART station
- + **Utilities**
  - 17. Jackson Transport / Storage Box
  - 18. Channel Transport / Storage Box
  - 19. North Shore Force Main
  - 20. Embarcadero PG&E Substation

**LEGEND**

<span style="background-color: #d9ead3; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> 1 ft. SLR	<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> Very Low
<span style="background-color: #fce4d6; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> 2 ft. SLR	<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> Low
<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> 3 ft. SLR	<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> Moderate
<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> 7 ft. SLR	<span style="background-color: #f4cccc; border: 1px solid #ccc; width: 15px; height: 10px; display: inline-block;"></span> High
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REPORT OUT REPRESENTATIVE:

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FLOOD MEASURES	PHYSICAL INFRASTRUCTURE	1 LEVEES 	75+ years	Low	Major Intervention	\$\$\$\$\$ Nearshore Buttress, Bulkhead Wharf Retrofit, Ecological Features
	2 SEAWALLS 	50-100 years	Varies	Major Intervention	\$\$\$ Nearshore Buttress, Drilled Shafts, Ecological Shorelines	
	3 RAISED MARINE STRUCTURES 	50+ years	Medium	Major Intervention	\$\$\$\$ Drilled Shafts, Ecological Features	
	4 FLOODWALLS 	30-50 years	Low	Minor Intervention	\$-\$ Bulkhead Wharf Retrofit, Drilled Shafts	
ECO. INFRA.	5 ECOLOGICAL FEATURES 	10-50+ years	Medium-High	Minor Intervention	\$* Beaches, Vegetated Terraces	All Flood Measures and Seismic Measures
	6 ECOLOGICAL SHORELINES 	Decades	Medium-High	Typically Minor Intervention	\$* Stepped Slopes (Major Intervention), Vegetated Revetments, Vegetated Crib Walls, Natural Fiber Blankets, Gabion Baskets	All Flood Measures and Seismic Measures
	7 NEARSHORE BUTTRESS 	100+ years	Very High	Major Waterside Intervention	\$\$\$\$\$ Levees, Seawalls, Ecological Features	
SEISMIC MEASURES	SHORELINE STABILIZATION	8 DRILLED SHAFTS 	75+ years	Medium	Moderate Landside Intervention	\$\$\$ Raised Marine Structures, Floodwalls, Seawalls
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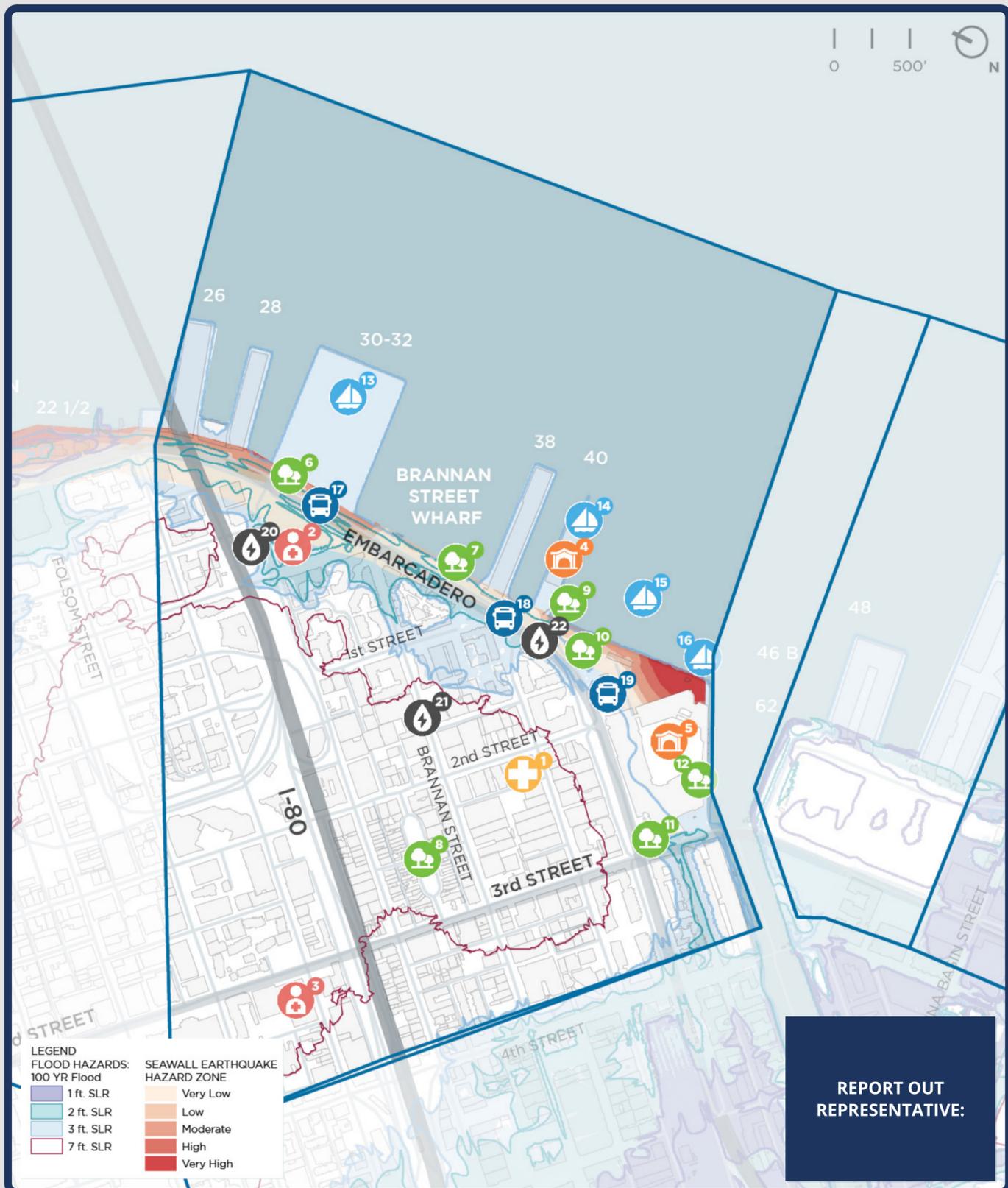
[Three yellow boxes for notes]

2. What concerns do you have about any of the measures?

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ASSET LEGEND

- Disaster Response**
  - 1. Fire Dept. Headquarters and EFWS Pump Station 1
- Critical Facilities**
  - 2. 200-Bed Navigation Center
  - 3. SOMA Mental Health
- Historic & Cultural**
  - 4. Bay Area Assoc. of Disabled Sailors
  - 5. Oracle Park
- Open Space & Ecology**
  - 6. Bay Trail + Promenade
  - 7. Brannan Street Wharf
  - 8. South Beach Park
  - 9. Bay Water Trail Launch
  - 10. South Beach Park
  - 11. Willie Mays Plaza
  - 12. Giants Promenade
- Maritime**
  - 13. Pier 30-32
  - 14. Water Taxi Dock
  - 15. South Beach Harbor
  - 16. Oracle Park Ferry Terminal
- Transportation**
  - 17. Muni E/T Line
  - 18. Embarcadero Roadway
  - 19. MTA King Street Substation
- Utilities**
  - 20. Bay Bridge Pump Station
  - 21. Brannan Street Tunnel
  - 22. Channel Transport / Storage Box



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