



# Sea Level Rise

**General Plan 2040 Steering Committee  
September 11, 2109**



# Sea Level Rise “White Paper”

- ❑ Prepared in 2014
- ❑ “First Step” in responding to CCAP recommendations
- ❑ Informational document
- ❑ Not a technical report or study
- ❑ Identified vulnerable areas, adaptation tool and opportunities

**DISCLAIMER:** The inundation data used in these maps do not account for shoreline protection or wave activity. These maps are for informational purposes only. Users agree to hold harmless and blameless the State of California and its representatives and its agents for any liability associated with the use of the maps. The maps and data shall not be used to assess actual coastal hazards, insurance requirements, or property values or be used in lieu of Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA).





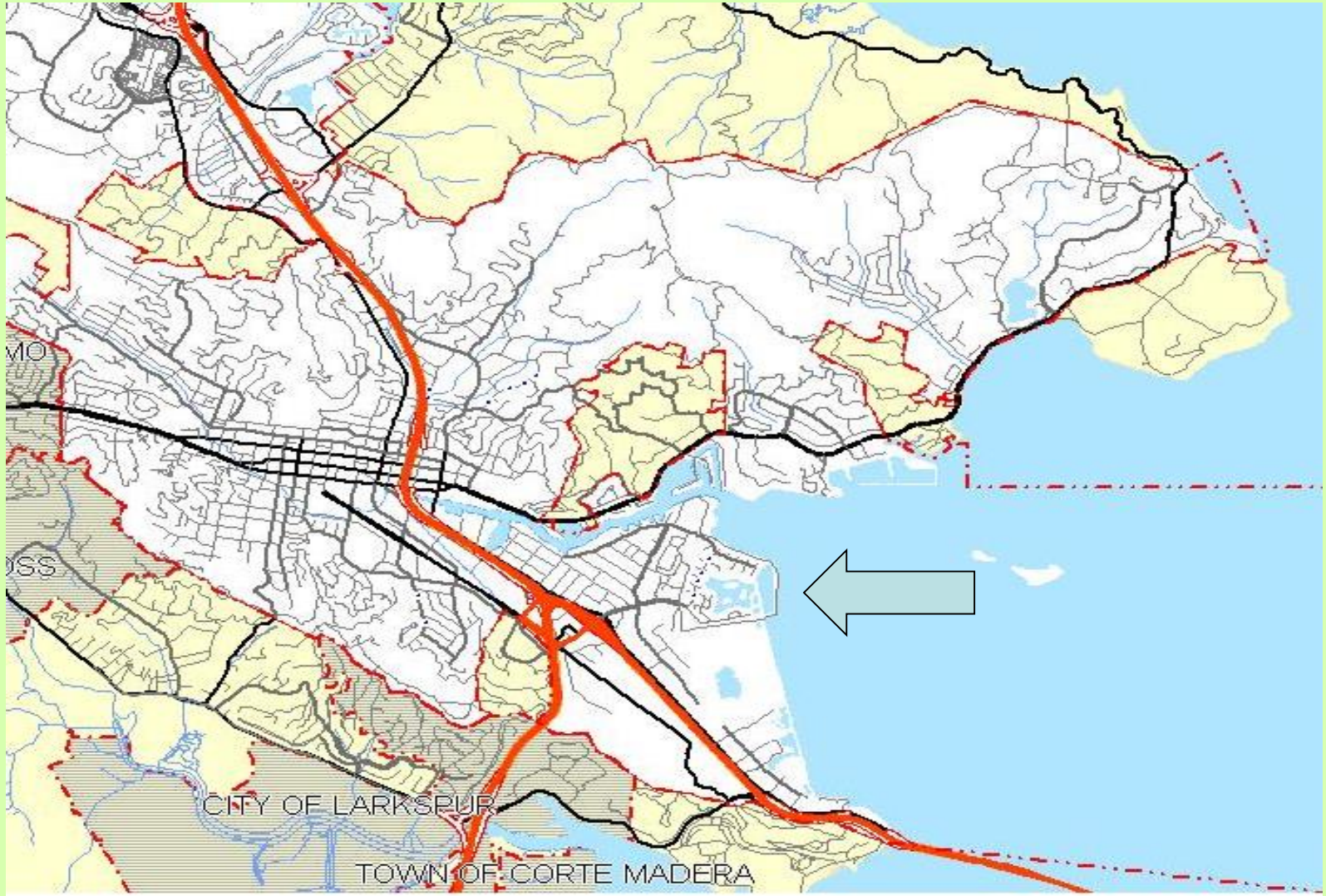
# Vulnerable Areas In San Rafael

- ❑ Greater part of Central and Southeast San Rafael (Canal, Spinnaker Pt, Francisco Blvd, Andersen Drive)
- ❑ Areas along San Rafael Canal
- ❑ Large sections of East San Rafael-San Pedro Peninsula (Peacock Gap, Glenwood)
- ❑ North San Rafael (Gallinas Creek basin)





# East San Rafael Shoreline







# Spinnaker Point







# Inner Canal





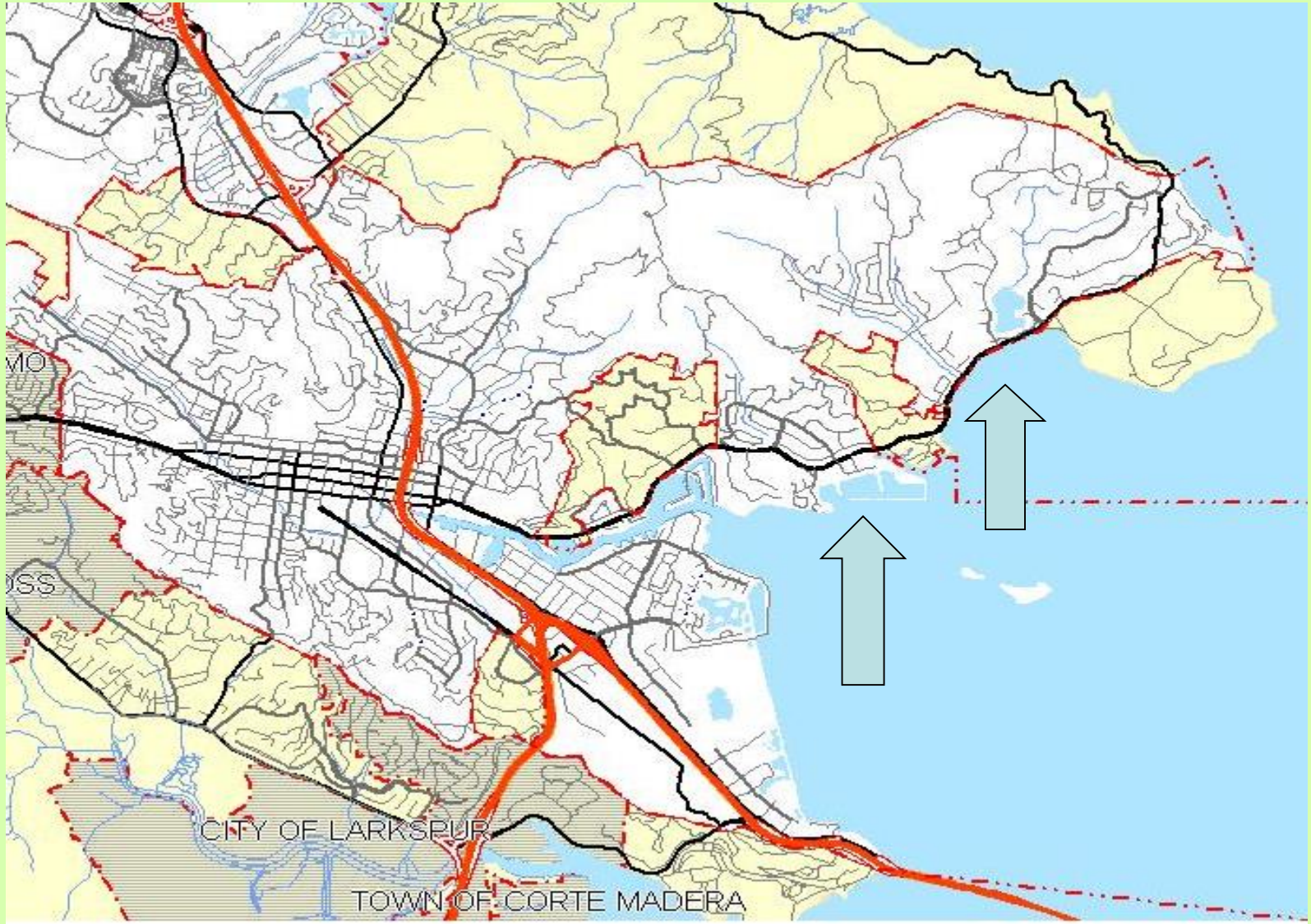
# San Rafael Creek (Canal)







# San Pedro Peninsula







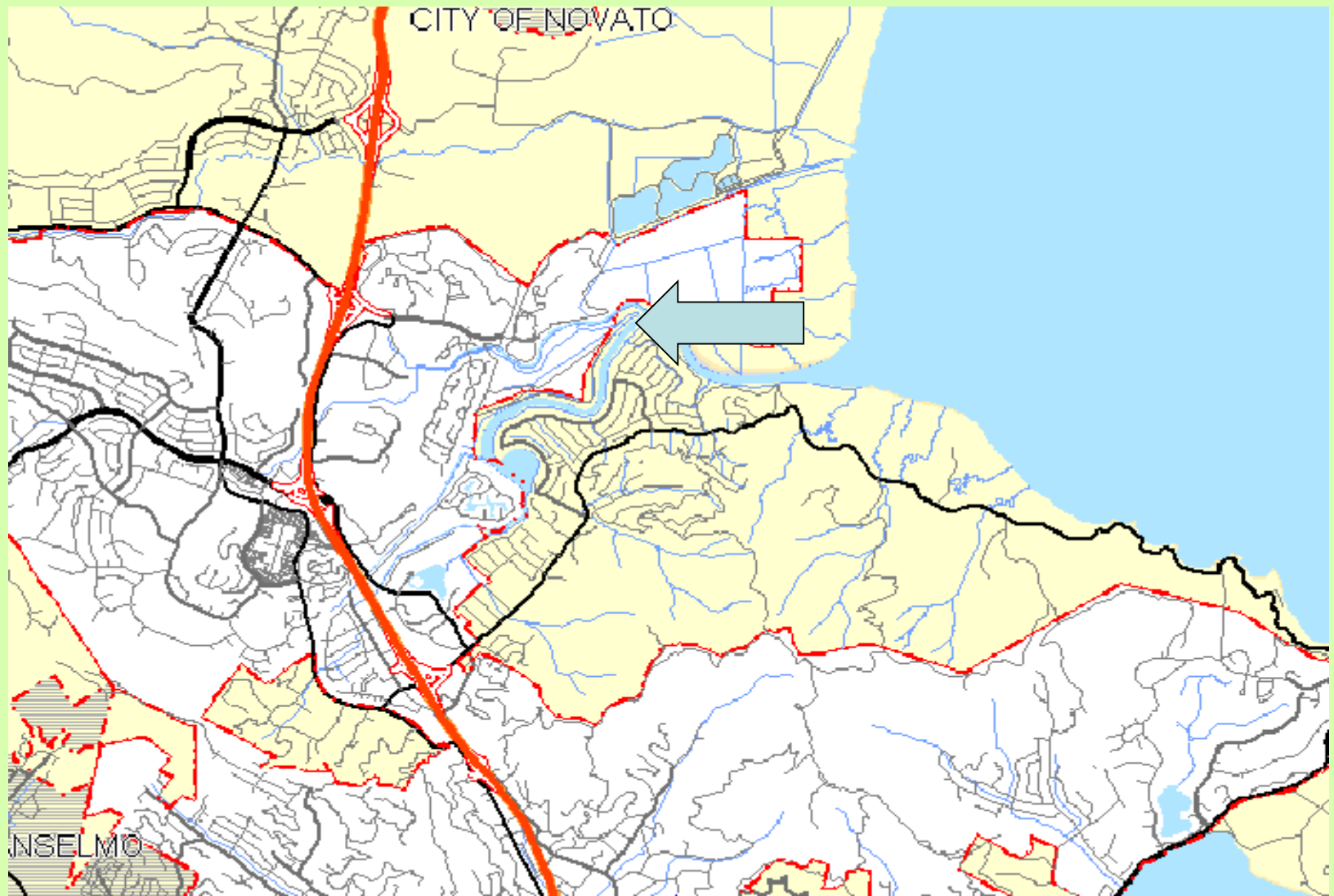
# Glenwood & Peacock Gap







# Gallinas Creek Basin





# Contempo Marin







# Participation in BayWAVE

- ❑ 2015-2017
- ❑ Vulnerability Assessment profiling risks and assets
- ❑ Comprehensive coverage of San Rafael
- ❑ Foundation for next steps in planning for sea level rise



# Post BayWAVE

- Resilient by Design
- Local Hazard Mitigation Plan
- Measure AA
- CCAP 2030
- ESA – deeper dive to BayWAVE + adaptation concepts





# General Plan 2040

## Focus. . .

- ✓ Awareness/Disclosure
- ✓ Framework for regulations (construction elevation)
- ✓ Preparing for adaptation planning

## Plan for 2050 predictions with five-year updates

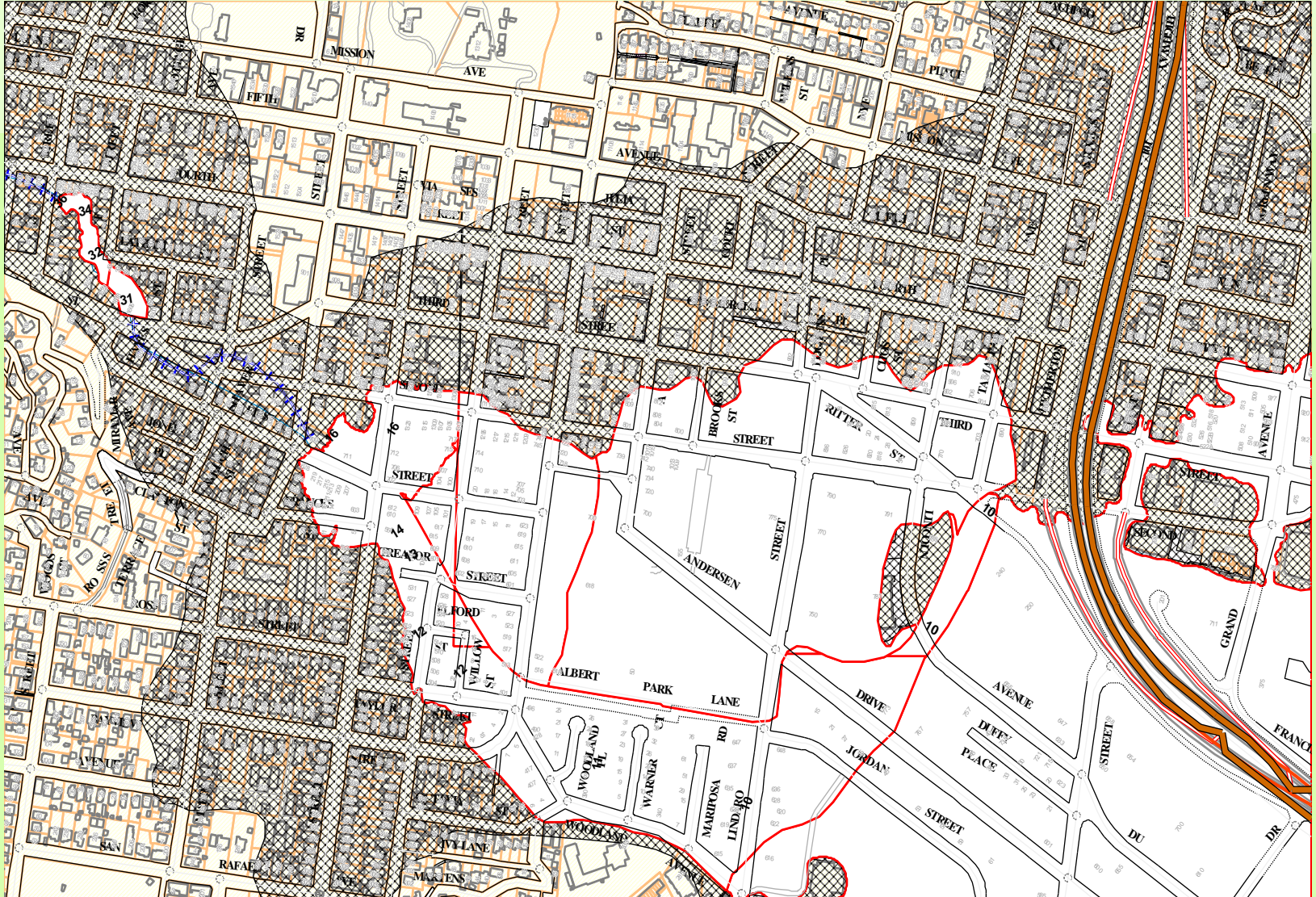
# What will General Plan Include?

## Sea level rise map

- Assume 2050 prediction
- Public awareness/disclosure
- Used to adopt “overlay” zone
- Planning for adaptation
- Financing & funding



# SLR Prediction Map





# What will General Plan Include?

## Adaptation Report

- Background + Resources
- Best practices
- Toolbox of adaptation measures
- Toolbox of financing measures
- Identify and assess opportunity areas for adaptation



# Opportunity Areas for Adaptation

## Public & Private Lands:

- Retreat**
- Armoring** -raise/improve levees
- Barriers** -sea walls/breakwaters
- Living shorelines** -horizontal levees



# Canalways







# Pickleweed Park Diked Baylands





# East San Rafael Mudflats





# San Rafael Rock Quarry





# What will General Plan Include?

## Policies & Implementing Programs

- Maintaining Sea Level Rise Map
- Awareness & Disclosure
- Minimum Construction Elevation
- Preparation of Sea Level Rise Adaptation Plan – follow-up

