



Sea Level Rise

CCAP Quarterly Meeting

January 16, 2020







Where did We Start?

- ☐ CCAP adopted 2009
- ☐ Sea Level Rise White Paper - 2014
- ☐ BayWAVE – vulnerability assessment – 2017
- ☐ Local Hazard Mitigation Plan -2018
- ☐ CCAP 2030 adopted 2019
- ☐ Resilient by Design - 2018



Predictions

- ❑ Predictions vary
- ❑ BCDC/Coastal Commission =
12" by 2050 3-5 ft by 2100
- ❑ State Guidance = plan for 4-7 feet
by 2100
- ❑ Challenge = uncertainty +
speculation



Vulnerable Areas In San Rafael

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



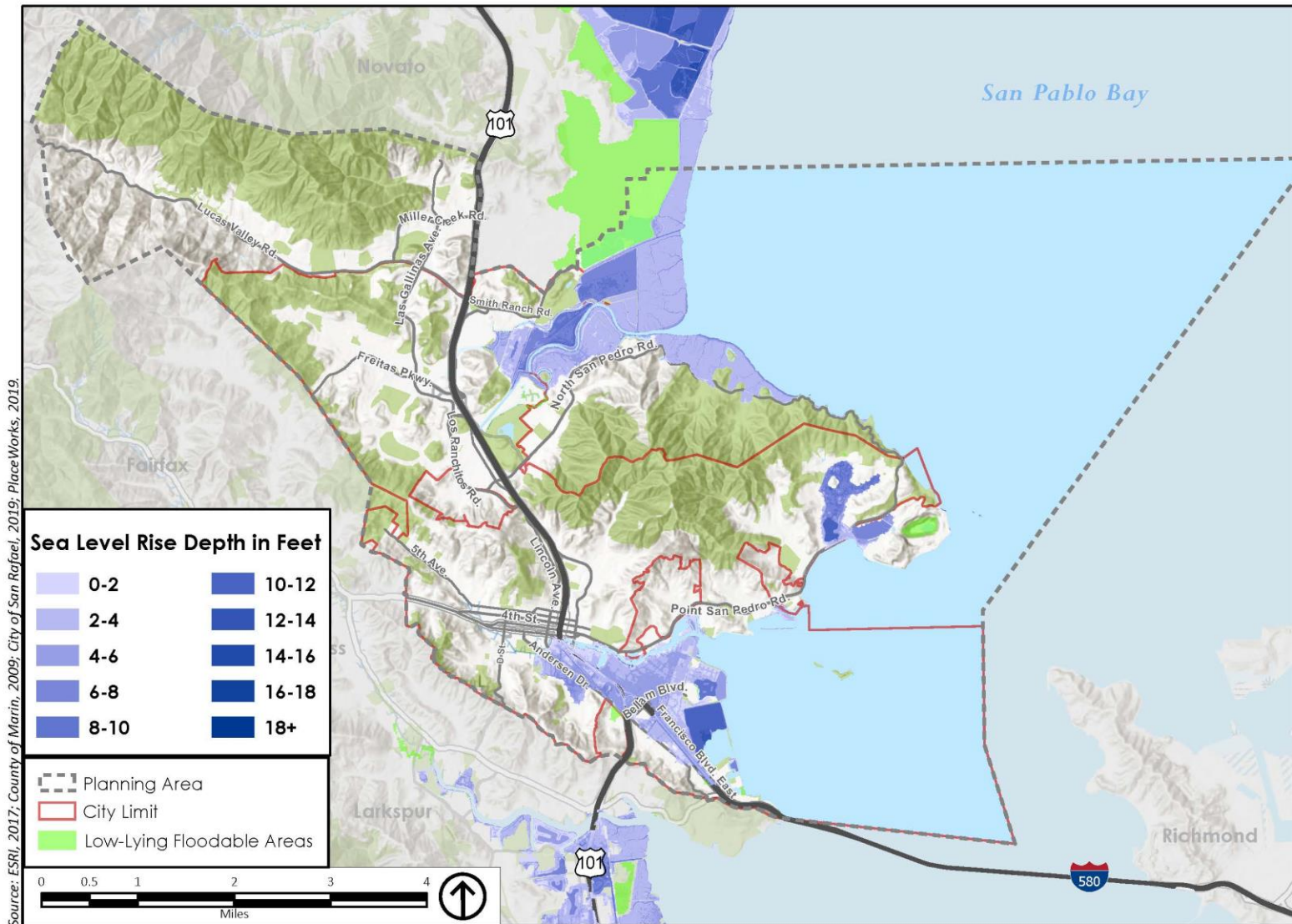
General Plan 2040

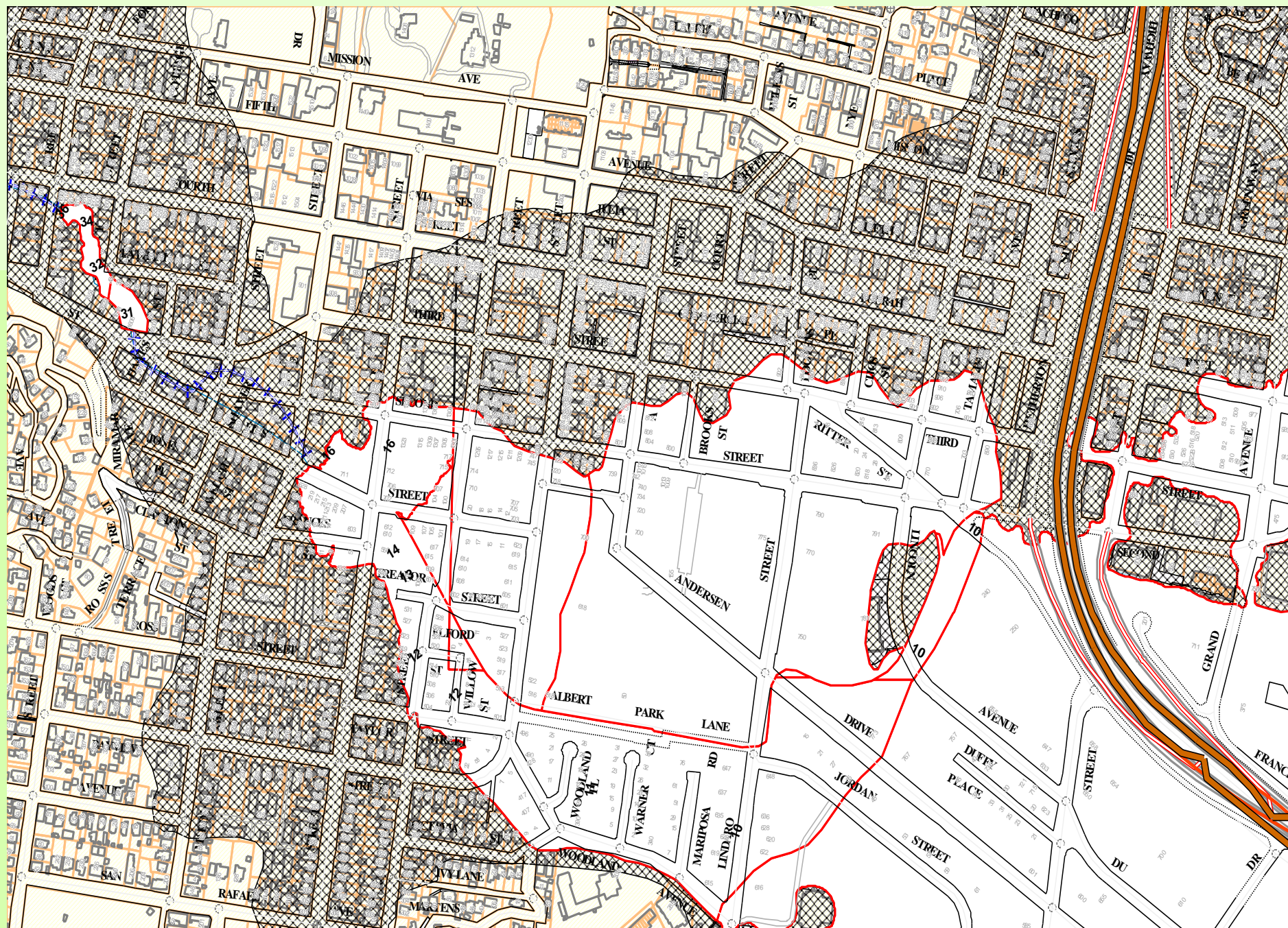
- ☐ Citywide “master plan” to 2040
- ☐ Sea level rise focus. . .
 - ✓ Awareness/Disclosure
 - ✓ Framework for regulations (construction elevation)
 - ✓ Preparing for adaptation planning
- ☐ Plan for 2050 predictions with five-year updates

What will General Plan Include?

Sea level rise map

- ☐ Assume 2050 prediction + 100-year flood
- ☐ Public awareness/disclosure
- ☐ Used to adopt “overlay” zone
- ☐ Planning for adaptation
- ☐ Financing & funding





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



Canalways





Pickleweed Park Diked Baylands





East San Rafael Mudflats





What will the General Plan Include?

ESA Adaptation Assessment

- ☐ Next phase of BayWAVE
- ☐ More detailed review of San Rafael Shoreline
- ☐ Identifying reasonable/feasible short-term measures
- ☐ Identifying long-term measures



Adaptation Measures

No “One Size Fits All”

- ☐ Retreat (pulling back the shoreline)
- ☐ Elevate (raise buildings/roads)
- ☐ Barriers (sea walls, raise levees)
- ☐ Nature-based barriers



What will the 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

General Plan 2040 Schedule

- ❑ Draft General Plan 2040 – to be released **May 15**
- ❑ Can submit comments now or when Draft Plan is released
- ❑ General Plan 2040 adoption projected for **August 2020**

Current Adaptation Efforts

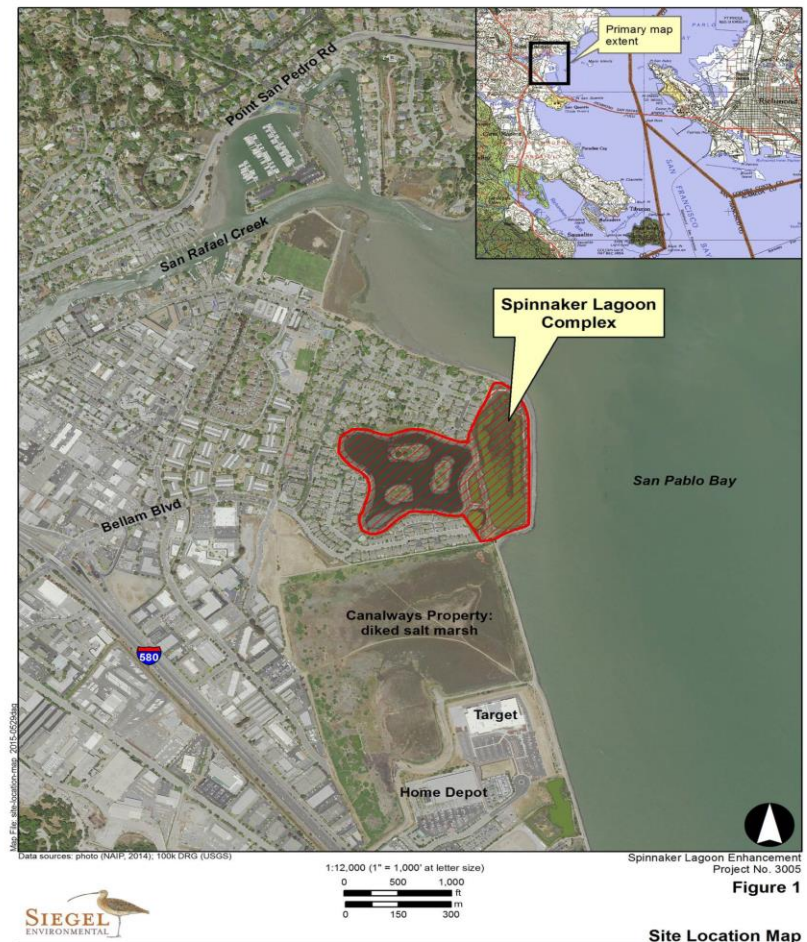
Tiscornia Marsh + Pickleweed Diked Baylands Restoration Project

Marin Audubon Society
Measure AA Grant
secured



Current Adaptation Efforts

Spinnaker Marsh
Restoration Project
City of San Rafael
Measure AA Grant
application filed (2019)



Resources

Sea Level Rise White Paper
Climate Change Action Plan 2030

www.cityofsanrafael.org/green

General Plan 2040

www.cityofsanrafael.org/departments/general-plan-2040/



Questions