





### **Community Workshop** November 1, 2024





- Re-introduction
- Project Background and Overview
- Sea Level Rise Science and Projections
- Game of Floods Princeton
  - Lunch Break (between Part 1 and Part 2 of game)





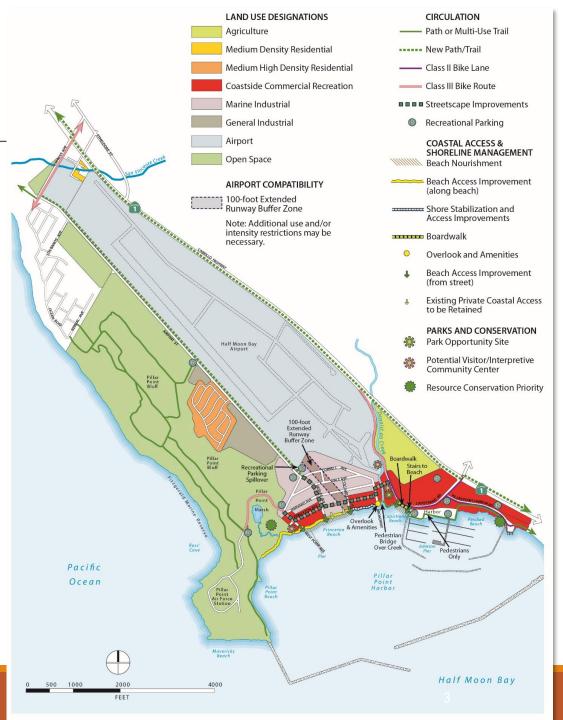


### **Re-introduction**

- Last Public Engagement June 2015 Preferred Plan
- 2015 2024: Development/ Updates to California Coastal Commission Sea Level Rise Policy Guidance

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• Pandemic related delay











### **Plan Princeton** Background and Overview

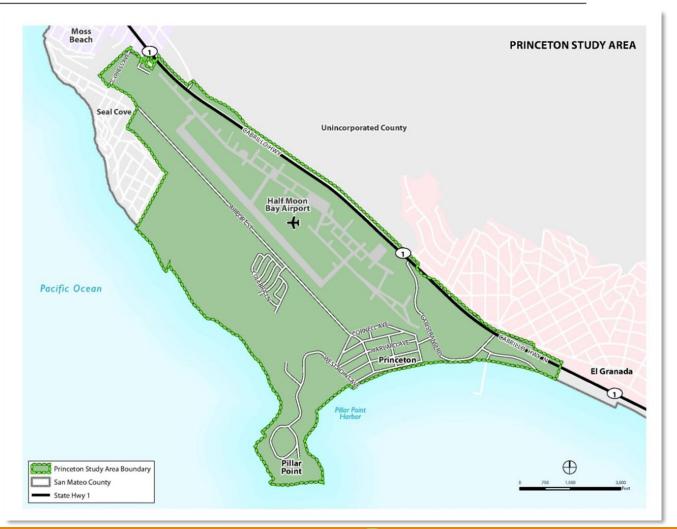


## What is Plan Princeton?

County initiative to provide comprehensive policy, plan, and zoning amendments that will help realize the community's vision for the future of Princeton.

### Planning Area

Includes Half Moon Bay Airport, Pillar Ridge residential community, and community of Princeton.





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### **Purpose of Plan Princeton**

- Enhance coastal access, recreation & education opportunities
- Support coastal-dependent & coastal-related uses
- Provide needed facilities for commercial fishing industry & recreational boaters
- Promote economic development
- Abate neighborhood blight & zoning violations
- Address parking, circulation, & infrastructure needs
- Ensure community resilience to sea level rise
- Protect & restore water quality and sensitive habitats
- Comply with State Coastal Act & State airport compatibility requirements





## **Community Vision**

- "Don't Change"
- Preserve Existing Character
- Allow for a Mix of Uses
- Protect the Shoreline
- Improve Access to Coastal Recreation
- Protect Coastal Resources



### **Community Visioning Report**



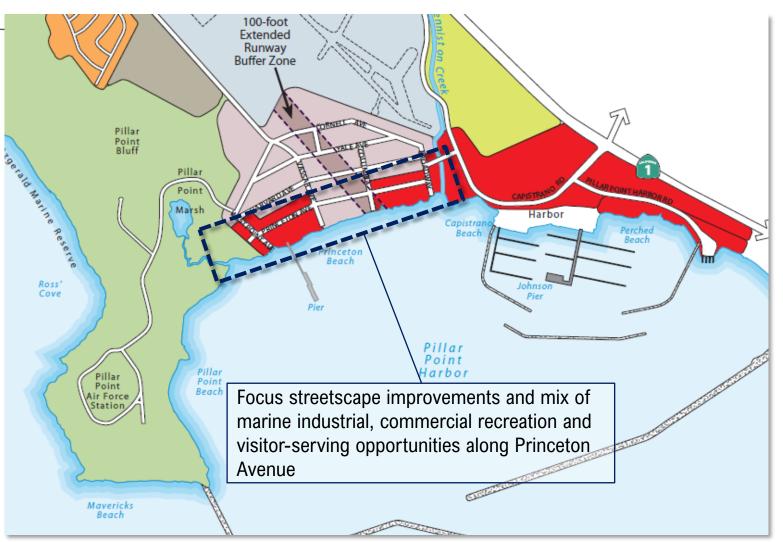






### **Preferred Plan**

- Small-scale development.
- Mix of commercial recreation and marine industrial uses along Princeton Avenue.
- Extend visitor-serving area along Princeton Avenue.
- Focus streetscape improvements along the waterfront/Princeton Avenue.

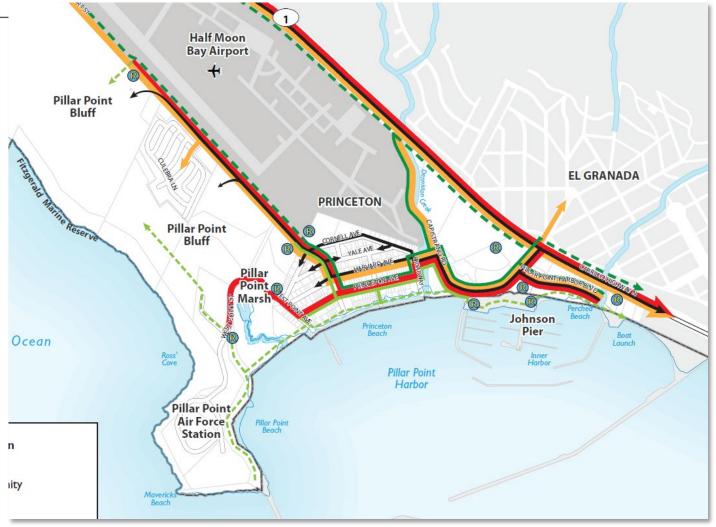




### **Preferred Plan**

- Improve circulation to meet the needs of different users.
- Incorporate public transit component.
- Wayfinding signage program to clarify public parking options.





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### **Preferred Plan**

Priority to preserve and protect natural resource areas and agricultural land.





Protect community from effects of sea level rise and coastal erosion with priority for nature-based solutions.

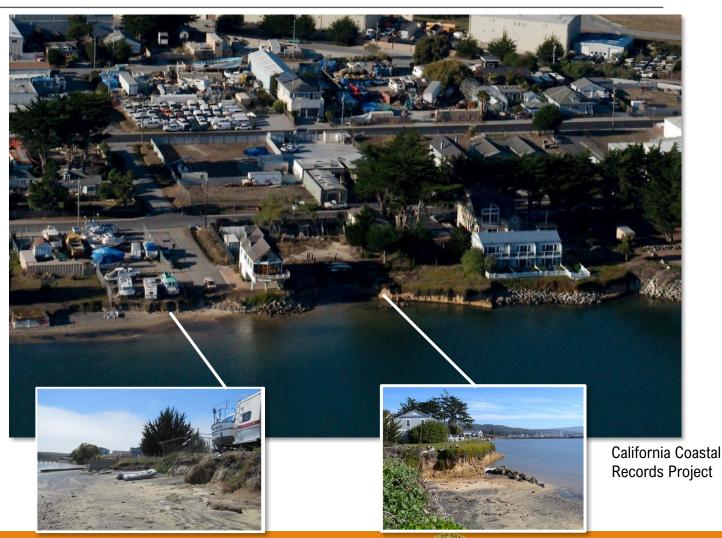




### **Shoreline Management Plan**

Ensure community resilience to the effects of sea level rise.

**Resilience** is the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events.







County of San Mateo **Planning and Building Department** 

### Sea Level Rise Science and Projections



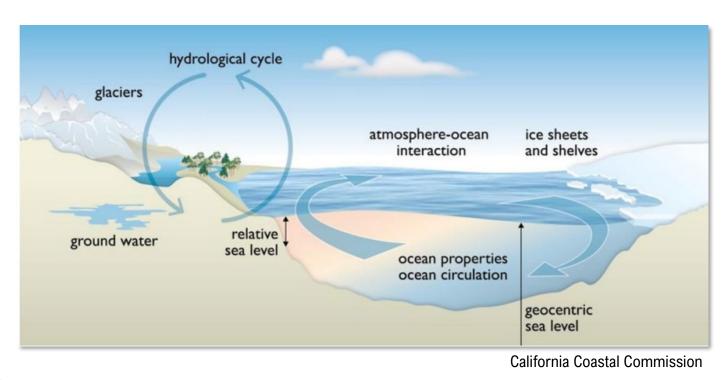
### What is Sea Level Rise?

Sea level rise is the increase in the average global sea level, which is mainly caused by thermal expansion and ice melt as a result of climate change.

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Climate change is any significant long-term change in the Earth's average temperatures and weather conditions.

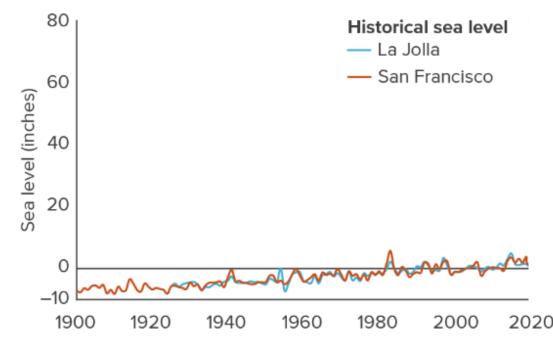
Sea level rise is an effect of climate change.





### **Sea Level Rise Trends**

- Sea level rise is accelerating!
- Global Sea Level Rise
  - ~ 5 inches of rise during 20<sup>th</sup> century
  - ~4 inches of rise within past 30 years
  - Current rate (1.7 inches/decade) is triple the 20<sup>th</sup> century rate
- Regional Relative Sea Level Rise
  - ~ 8 inches over the past century, expected to accelerate after 2050



Public Policy Institute of California



## **California Sea Level Rise Projections**

**Low Scenario** – assumes current rate of sea level rise continuing on into the future.

**Intermediate-Low** – range of future warming levels and emissions pathways.

**Intermediate** – driven by high emissions scenarios and higher warming levels.

**Intermediate-High** – rapid ice sheet loss combined with intermediate to high future emissions, and high warming.

**High** – high future emissions and high warming with large potential contributions from rapid ice-sheet loss.

#### 2024 Ocean Protection Council Statewide Averages for Five Sea Level Rise Scenarios

Median values for California Sea Level Scenarios, relative to a 2000 baseline. All median scenario values incorporate the local estimate of vertical land motion.

YEAR	LOW	INT-LOW	INTERMEDIATE	INT-HIGH	нібн
2020	0.2	0.2	0.2	0.2	0.3
2030	0.3	0.4	0.4	0.4	0.4
2040	0.4	0.5	0.6	0.7	0.8
2050	0.5	0.6	0.8	1.0	1.2
2060	0.6	0.8	1.1	1.5	2.0
2070	0.7	1.0	1.4	2.2	3.0
2080	0.8	1.2	1.8	3.0	4.1
2090	0.9	1.4	2.4	3.9	5.4
2100	1.0	1.6	3.1	4.9	6.6
2110	1.1	1.8	3.8	5.7	8.0
2120	1.1	2.0	4.5	6.4	9.1
2130	1.2	2.2	5.0	7.1	10.0
2140	1.3	2.4	5.6	7.7	11.0
2150	1.3	2.6	6.1	8.3	11.9

https://opc.ca.gov/wp-content/uploads/2024/05/California-Sea-Level-Rise-Guidance-2024-508.pdf

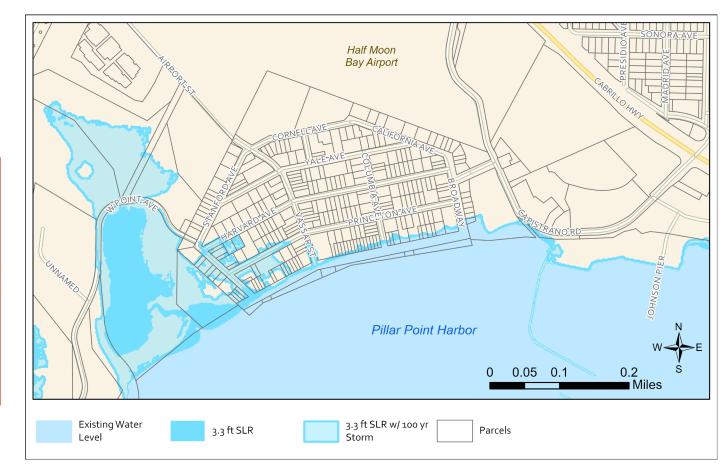




### **Sea Level Rise Projections in Princeton**

# 3.3 ft.3.3 ft. with 100-year storm

YEAR	LOW	INT-LOW	INTERMEDIATE	INT-HIGH	нібн
2020	0.2	0.2	0.2	0.2	0.3
2030	0.3	0.4	0.4	0.4	0.4
2040	0.4	0.5	0.6	0.7	0.8
2050	0.5	0.6	0.8	1.0	1.2
2060	0.6	0.8	1.1	1.5	2.0
2070	0.7	1.0	1.4	2.2	3.0
2080	0.8	1.2	1.8	3.0	4.1
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2110	1.1	1.8	3.8	5.7	8.0
2120	1.1	2.0	4.5	6.4	9.1
2130	1.2	2.2	5.0	7.1	10.0
2140	1.3	2.4	5.6	7.7	11.O
2150	1.3	2.6	6.1	8.3	11.9





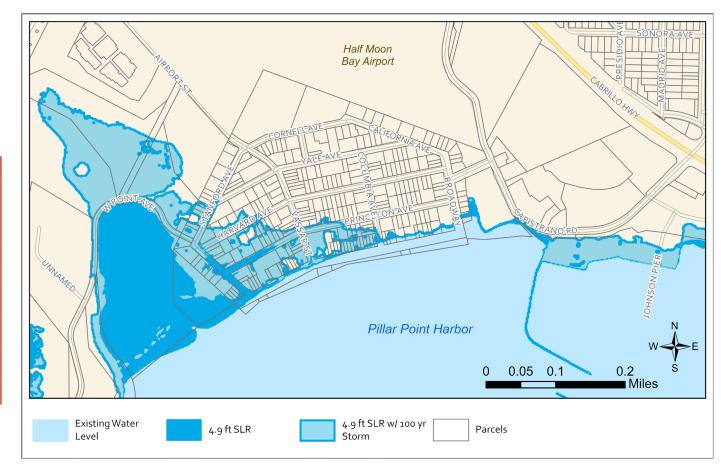




### **Sea Level Rise Projections in Princeton**

# 4.9 ft.4.9 ft. with 100-year storm

YEAR	LOW	INT-LOW	INTERMEDIATE	INT-HIGH	нібн
2020	0.2	0.2	0.2	0.2	0.3
2030	0.3	0.4	0.4	0.4	0.4
2040	0.4	0.5	0.6	0.7	0.8
2050	0.5	0.6	0.8	1.0	1.2
2060	0.6	0.8	1.1	1.5	2.0
2070	0.7	1.0	1.4	2.2	3.0
2080	0.8	1.2	1.8	3.0	4.1
2090	0.9	1.4	2.4	3.9	5.4
2100	1.0	1.6	3.1	4.9	6.6
2110	1.1	1.8	3.8	5.7	8.0
2120	1.1	2.0	4.5	6.4	9.1
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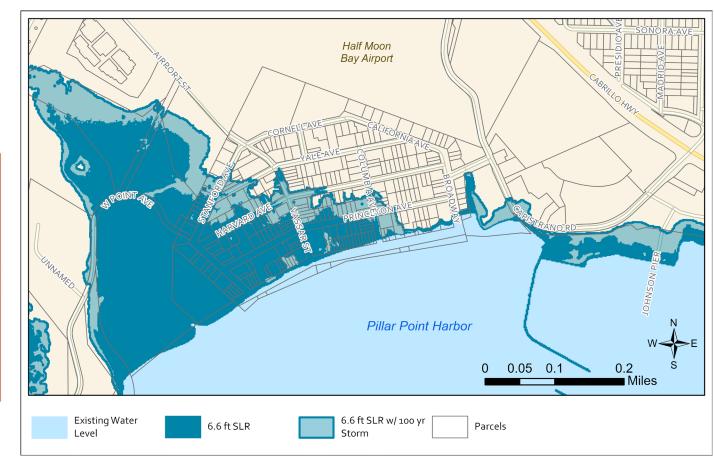




### **Sea Level Rise Projections in Princeton**

### 6.6 ft. 6.6 ft. with 100-year storm

YEAR	LOW	INT-LOW	INTERMEDIATE	INT-HIGH	нібн
2020	0.2	0.2	0.2	0.2	0.3
2030	0.3	0.4	0.4	0.4	0.4
2040	0.4	0.5	0.6	0.7	0.8
2050	0.5	0.6	0.8	1.0	1.2
2060	0.6	0.8	1.1	1.5	2.0
2070	0.7	1.0	1.4	2.2	3.0
2080	0.8	1.2	1.8	3.0	4.1
2090	0.9	1.4	2.4	3.9	5.4
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## **Sea Level Rise Consequences**

- Threat to public and critical infrastructure, public health and safety, private development, natural habitats, local jobs and economy, and public access.
- Increased risks from other coastal processes: flooding and erosion.
- Exacerbated effects of coastal storms.

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• Rising groundwater table impacts.



Midcoast Community Council, 2017



## **Adaptation Planning**

Adaptation Pathways provide flexibility and opportunities to address sea level rise impacts over time through threshold-based actions to build resilience under the future uncertainty of climate change and sea level rise.





## **Adaptation Planning**

- Protect: Engineered structures or other measures that defend development in place without changes to the development.
- Accommodate: Modifications to existing development or design new development to reduce hazard risks.
- Realign: Strategies that relocate or remove existing development out of hazard areas and limit the construction of new development in vulnerable areas.



### **Planning for Sea Level Rise in Princeton**

**Determine community asset vulnerability** – assets that are important to the quality of life and function of a community.

**Exposure** – level of asset exposure to sea level rise.

**Sensitivity** – degree that assets will be affected by sea level rise impacts.

Adaptive Capacity – assets ability to evolve in response to, or cope with, sea level rise impacts.



### **GAME OF FLOODS - PRINCETON**





- Summarize workshop feedback Nov 2024
- Update development policies January 2025
- Complete draft plan Early Spring 2025







### **Thank You for Attending!**

• Look out for a survey to provide feedback on this workshop.

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Access to workshop materials
<u>https://www.smcgov.org/planning/plan-princeton</u>

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