

CLIMATE CHANGE(D): WEATHERING EXTREMES *TOGETHER*  
MODULE 2

# SEA LEVEL RISE AND FRESHWATER DROP

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**Kendall Webster,**  
Sonoma Land Trust



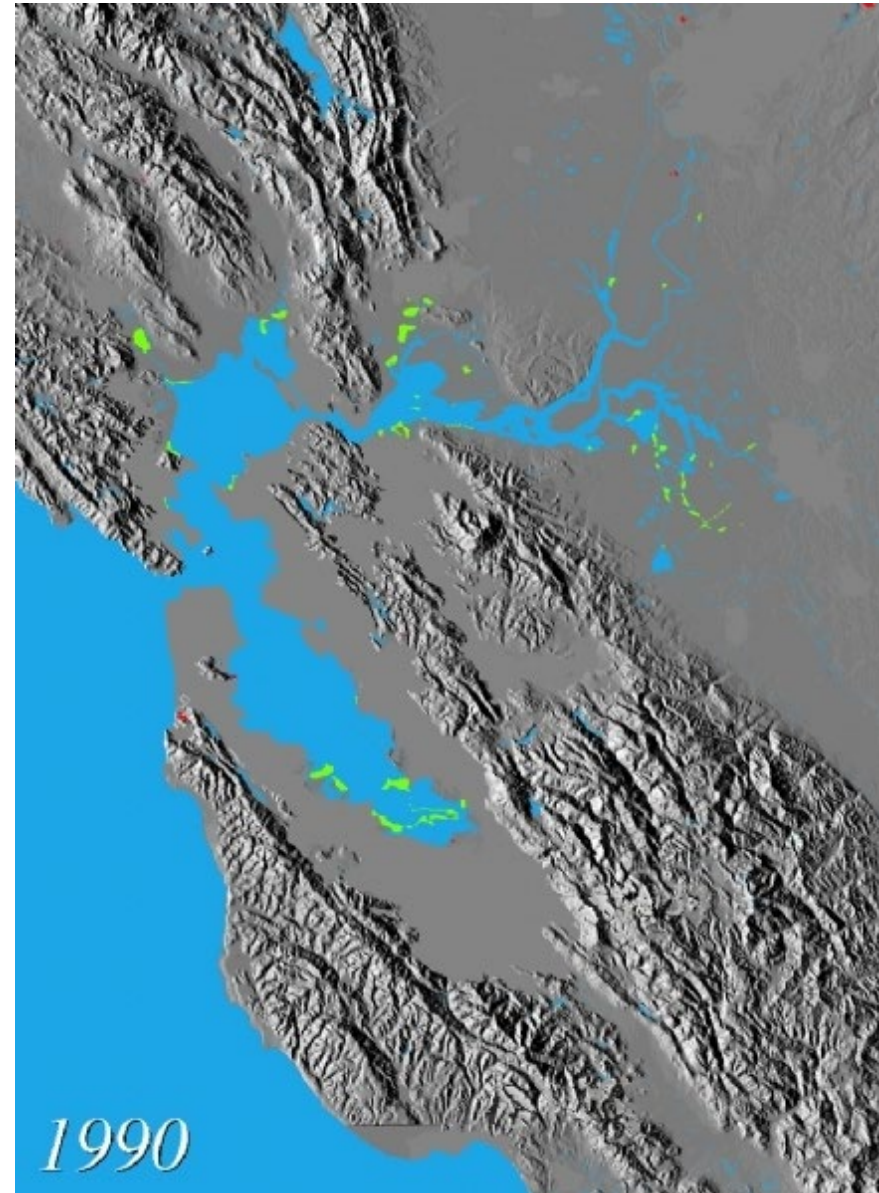
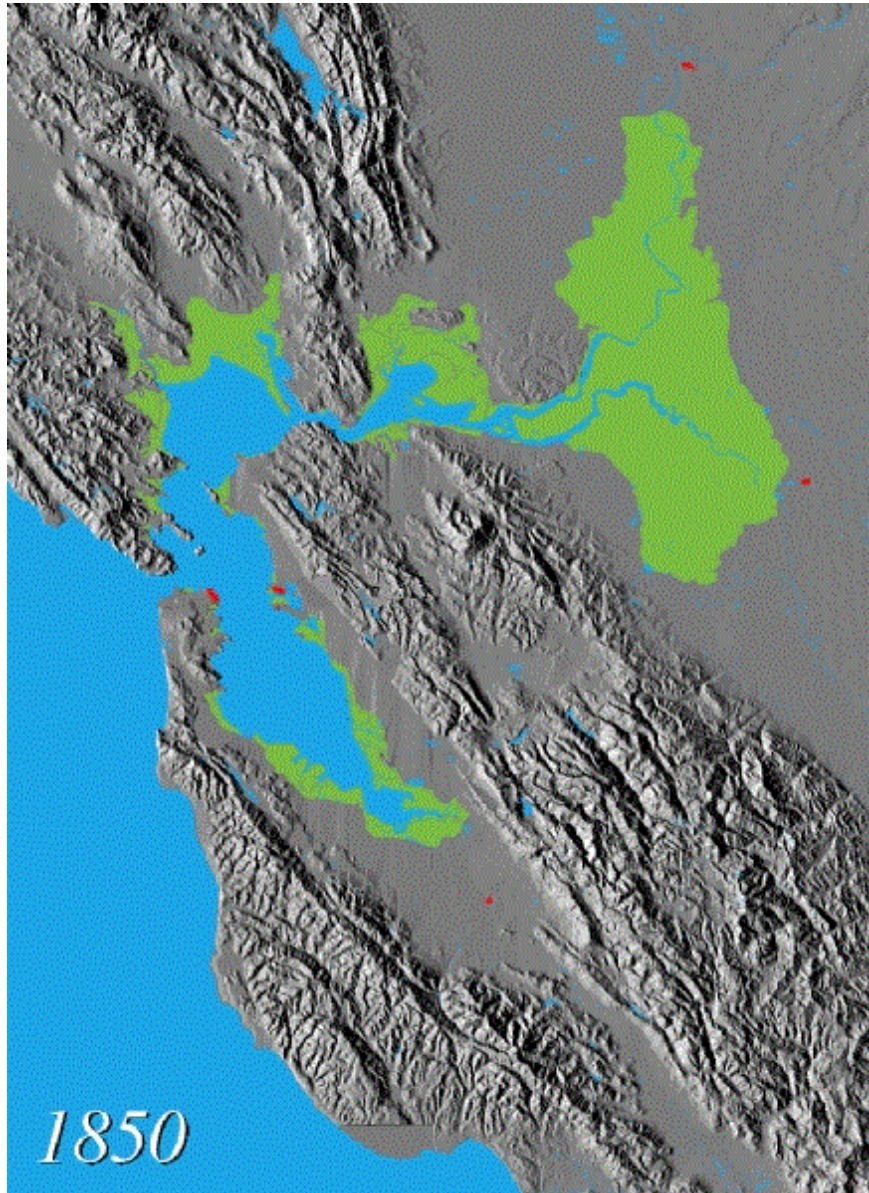


# San Pablo Baylands Vision



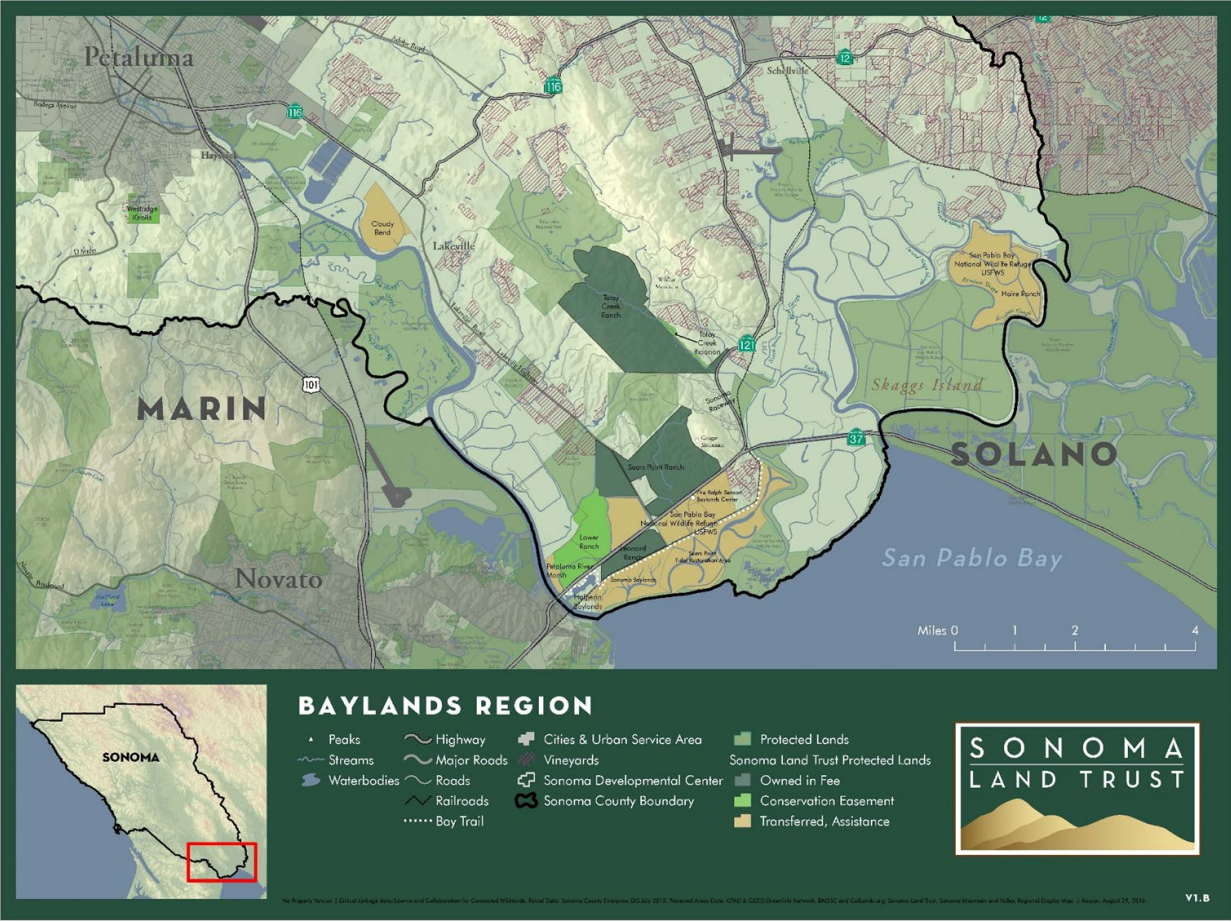
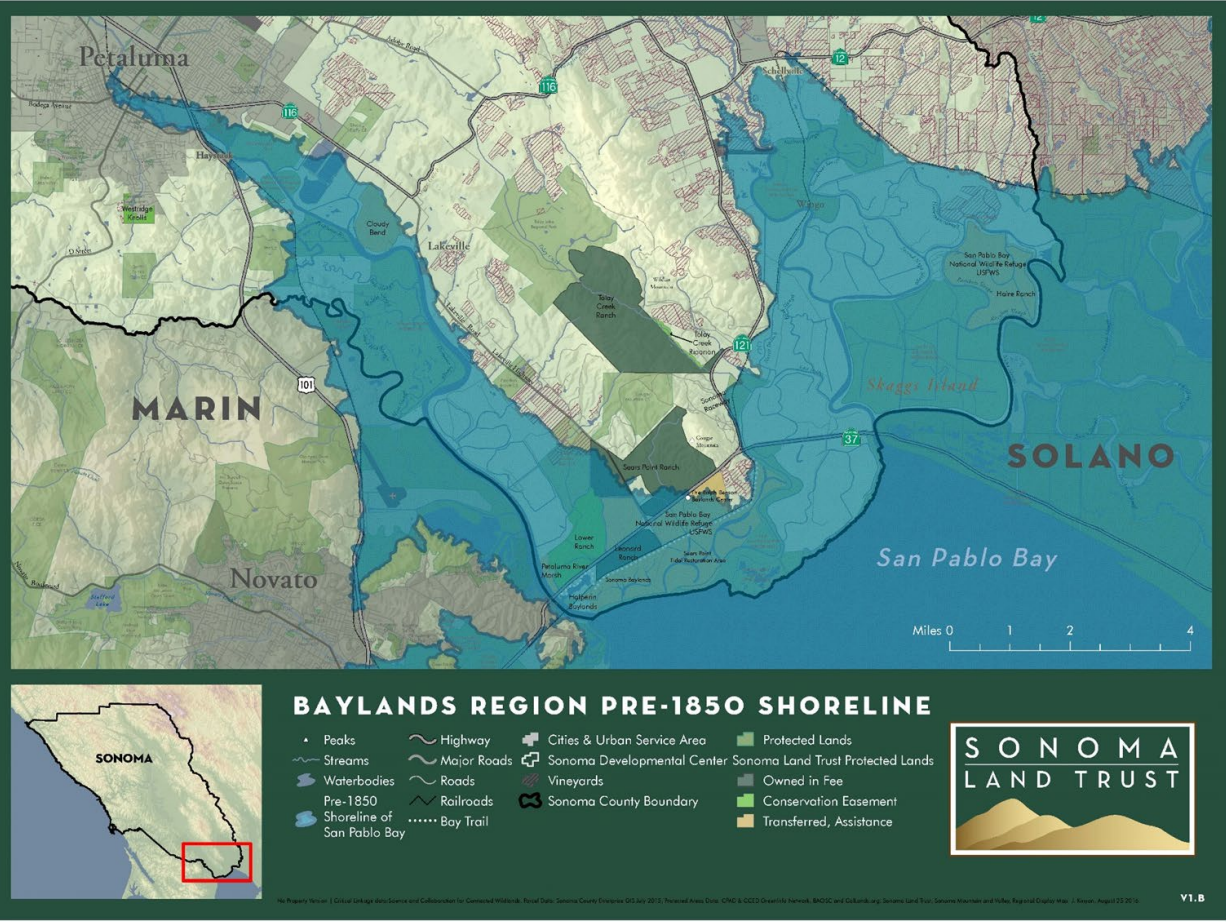


# CONTEXT





# CONTEXT



# CONTEXT: Why do we need wetlands?

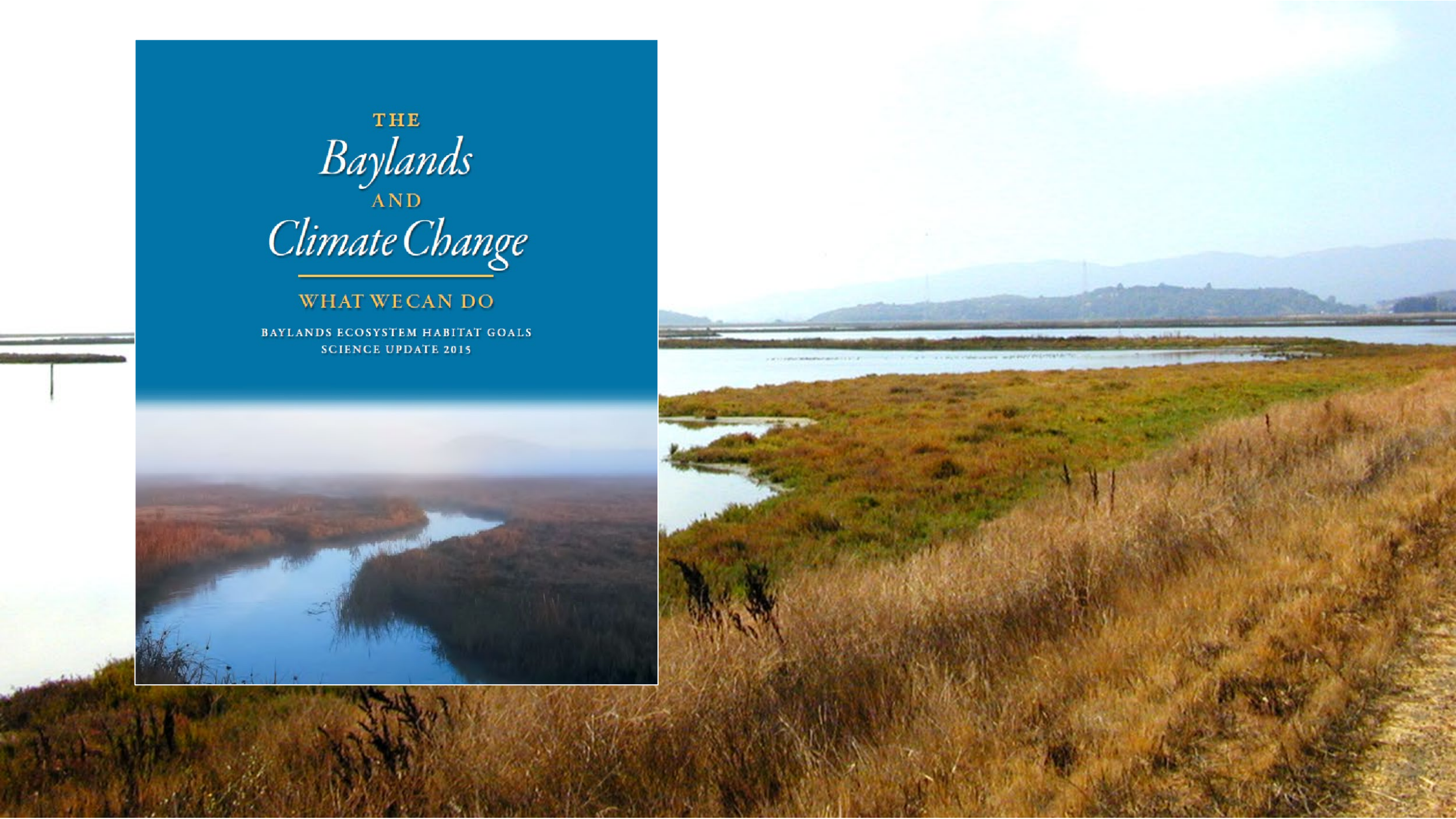




THE  
*Baylands*  
AND  
*Climate Change*

WHAT WE CAN DO

BAYLANDS ECOSYSTEM HABITAT GOALS  
SCIENCE UPDATE 2015









# PETALUMA RIVER BAYLANDS STRATEGY





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# PETALUMA RIVER BAYLANDS STRATEGY

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# SONOMA CREEK BAYLANDS STRATEGY

## Purpose and Goals

- Implement the Baylands Ecosystem Habitat Goals
- Restoration: Support property acquisition and restoration design
- Infrastructure: Recommendations for protection
- Public Access: Establish guidelines





# SONOMA CREEK BAYLANDS STRATEGY

## Study Area



Aerial Imagery NAIP 2020

San Pablo Bay



J. Kinyon Oct. 2021



# SONOMA CREEK BAYLANDS STRATEGY

## Infrastructure

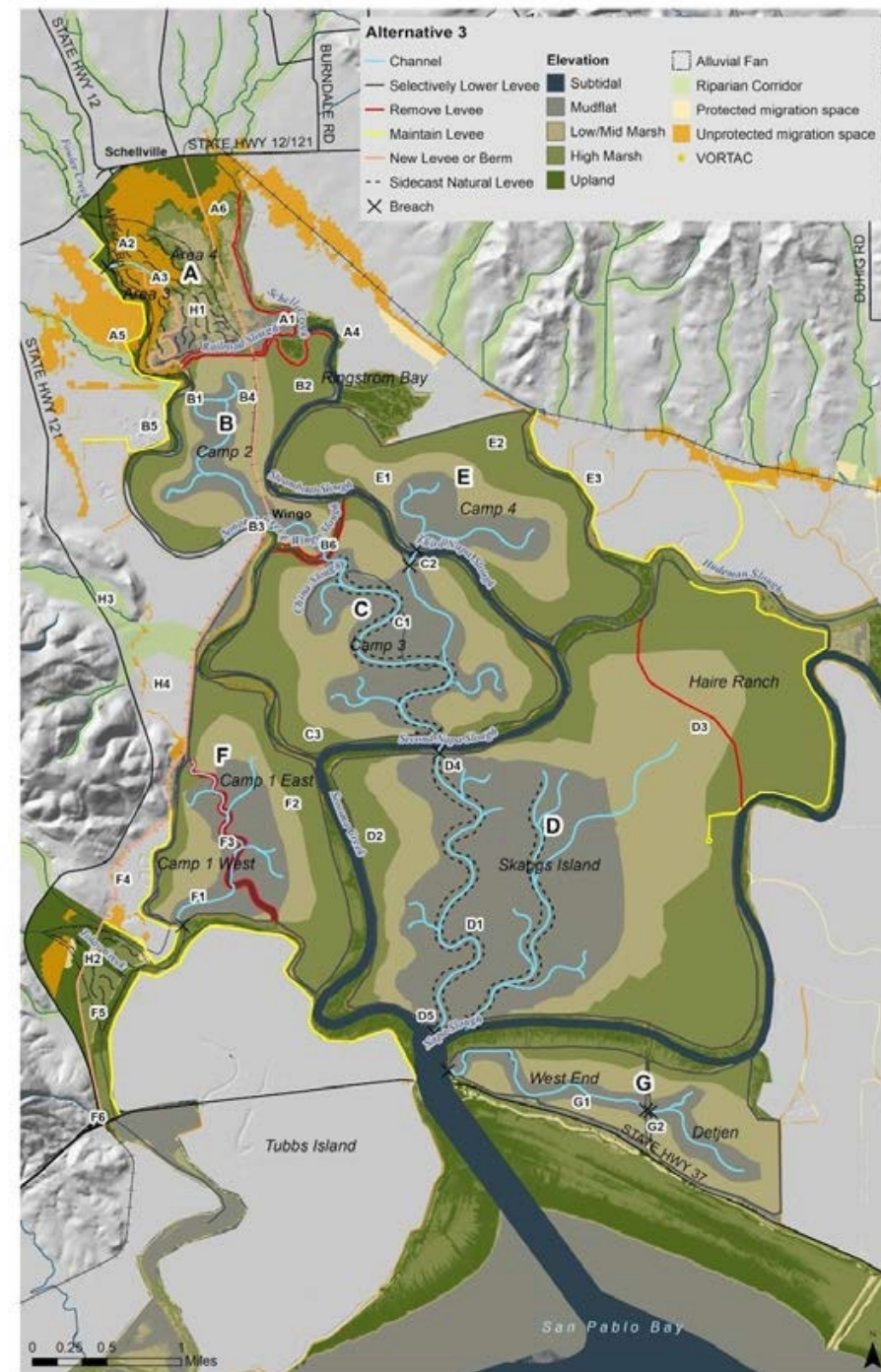




# SONOMA CREEK BAYLANDS STRATEGY

## Design Alternative

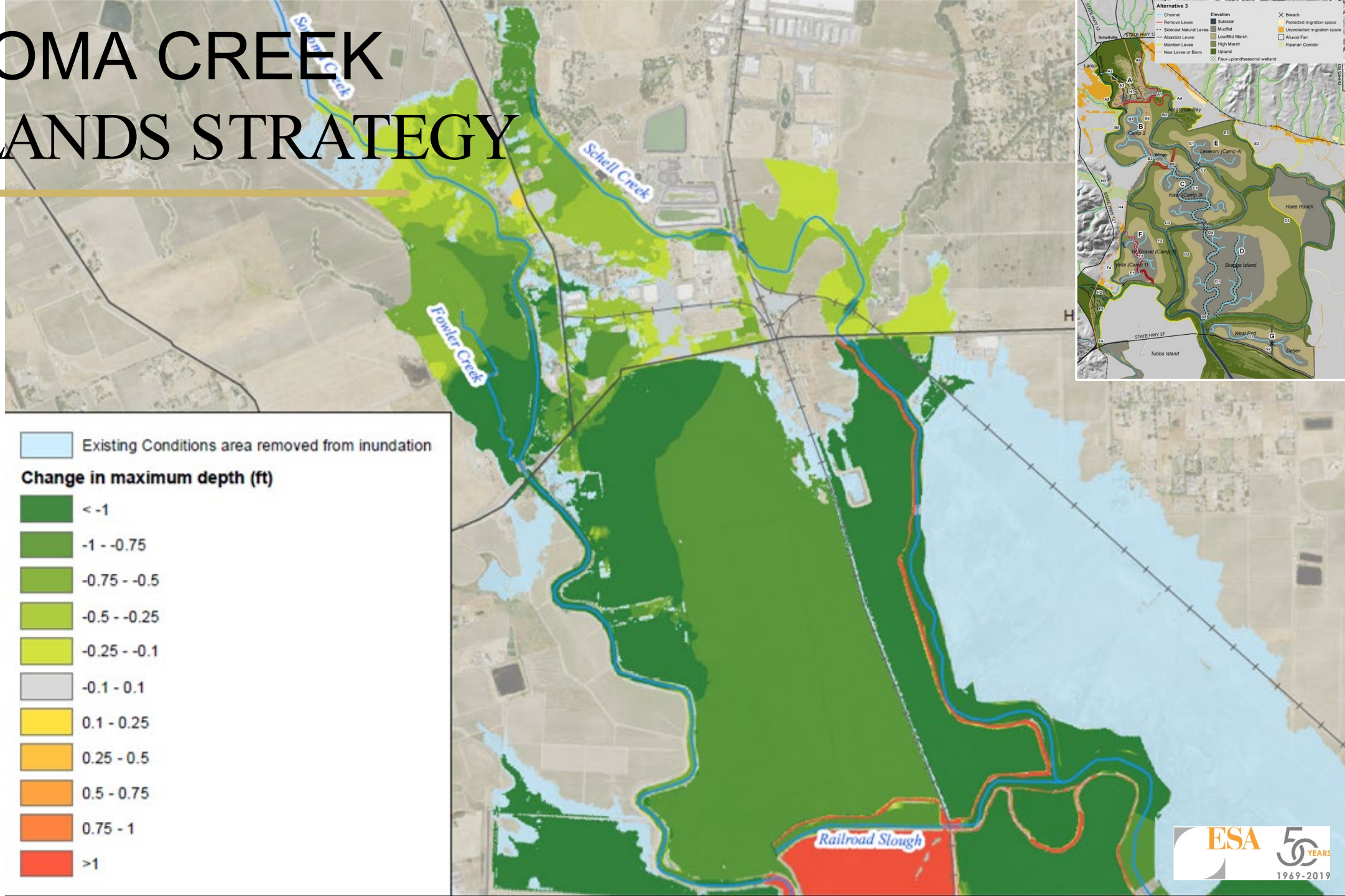
- Remove levees to alleviate flooding.
- Excavate new channels across diked baylands.
- Place fill next to existing channel marshes.
- Use existing marsh in channels as nucleus of new marshes.
- Focus on alluvial fans.





# SONOMA CREEK BAYLANDS STRATEGY

1% Flow,  
Storm Surge,  
2050 SLR





# LAND OF OPPORTUNITY

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