

# Can an endangered plant help wildlife escape rising seas?

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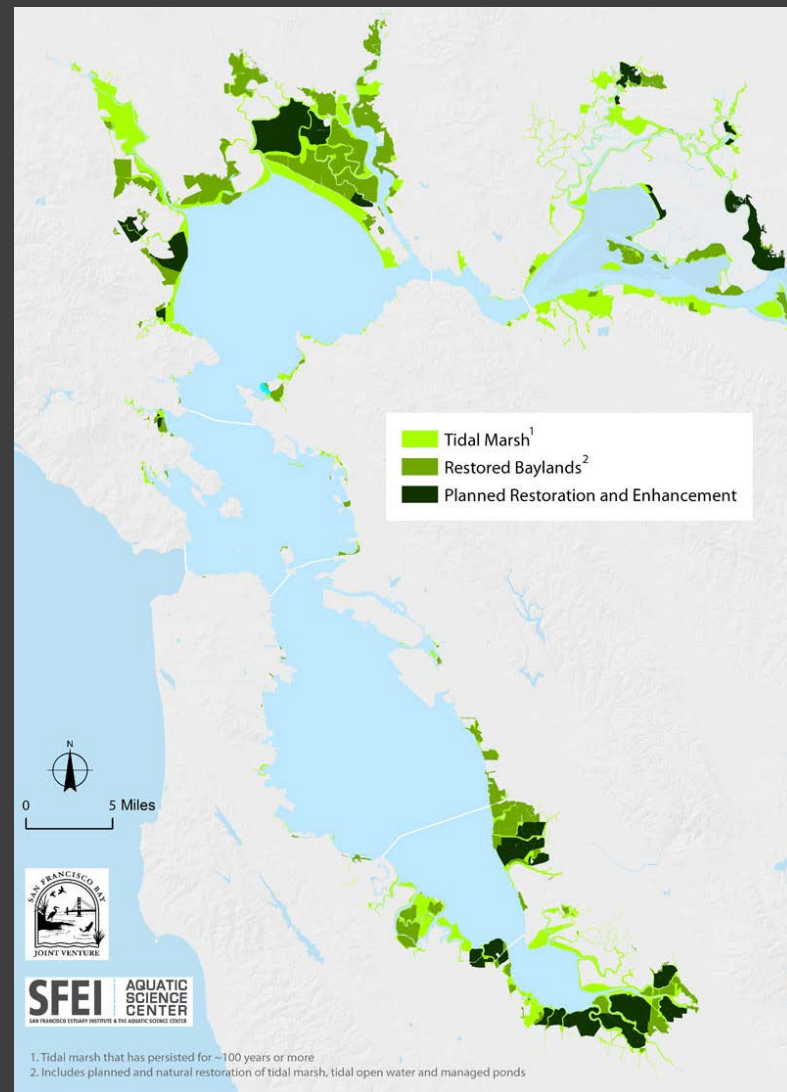


# Tidal marsh in SF Estuary has been reduced by 90%

~1800



Current





# Sea level rise

## Where chronic flooding will occur

With rapid sea-level rise, many parts of the Bay Area will become more difficult to live in because of flooding, and many residents might choose to move, according to a new report from the Union of Concerned Scientists.



Source: Union of Concerned Scientists



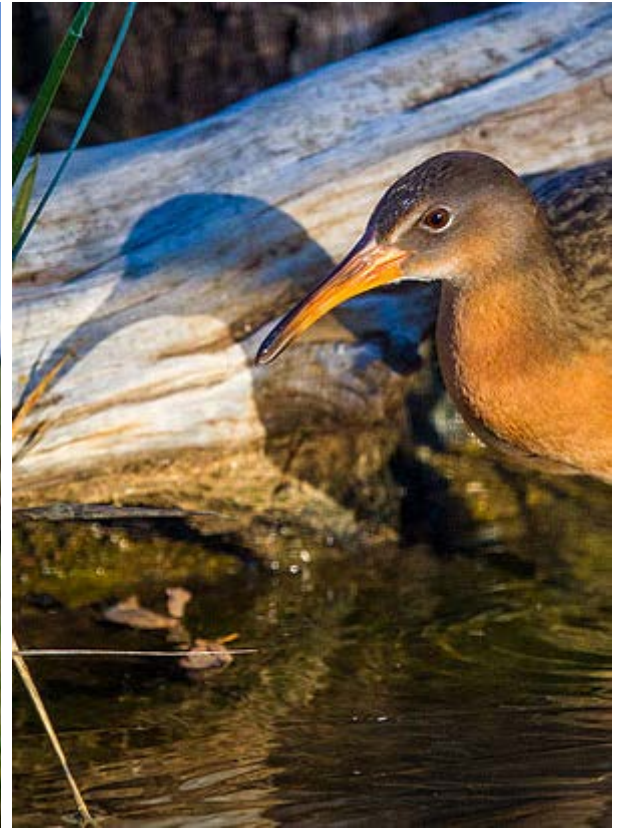
John Blanchard / The Chronicle



Marshes are eroding







Department of Interior, Wikipedia, USFWS/ Rinus Baak

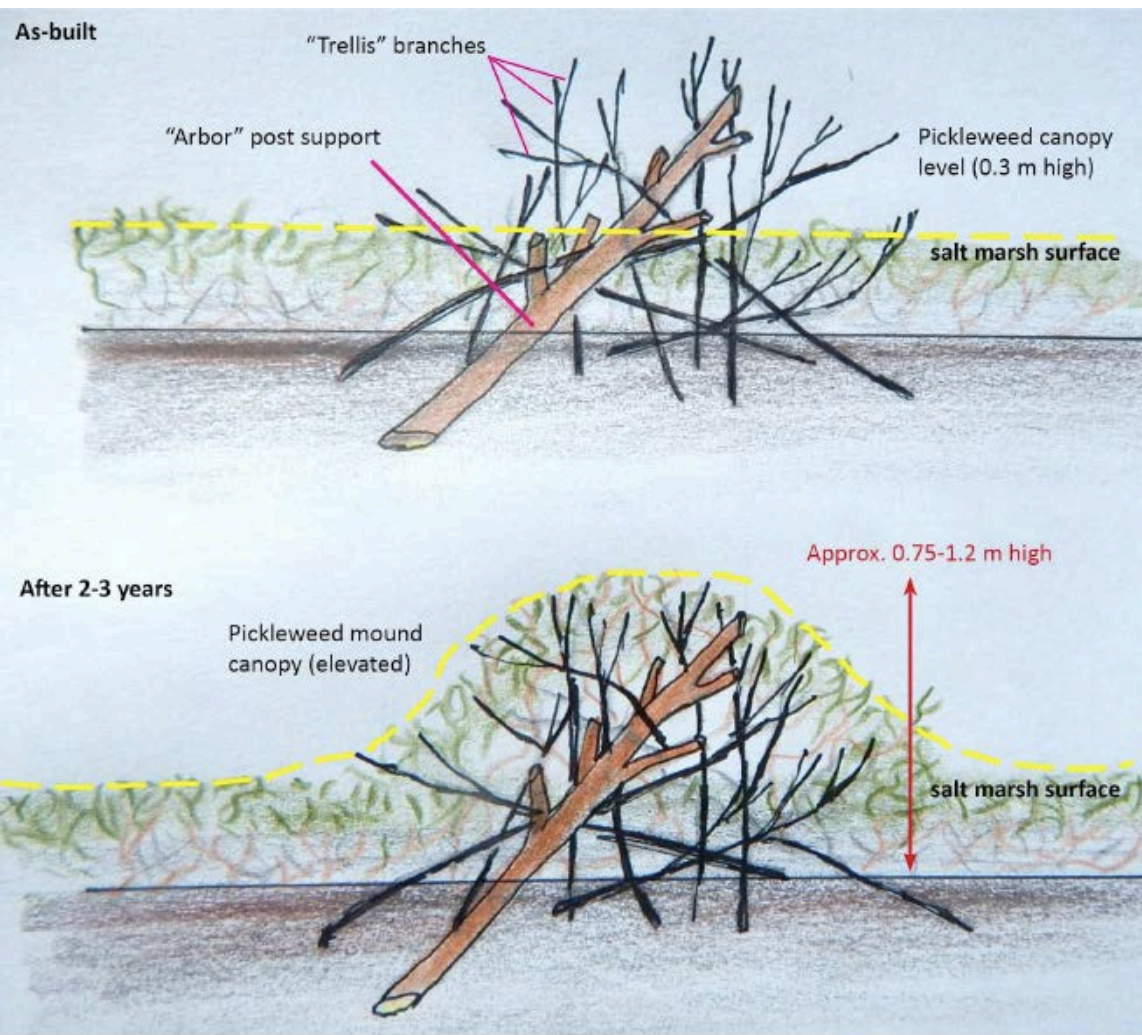
# High tide refuge

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California sea-blite (*Suaeda californica*)



# Arboring

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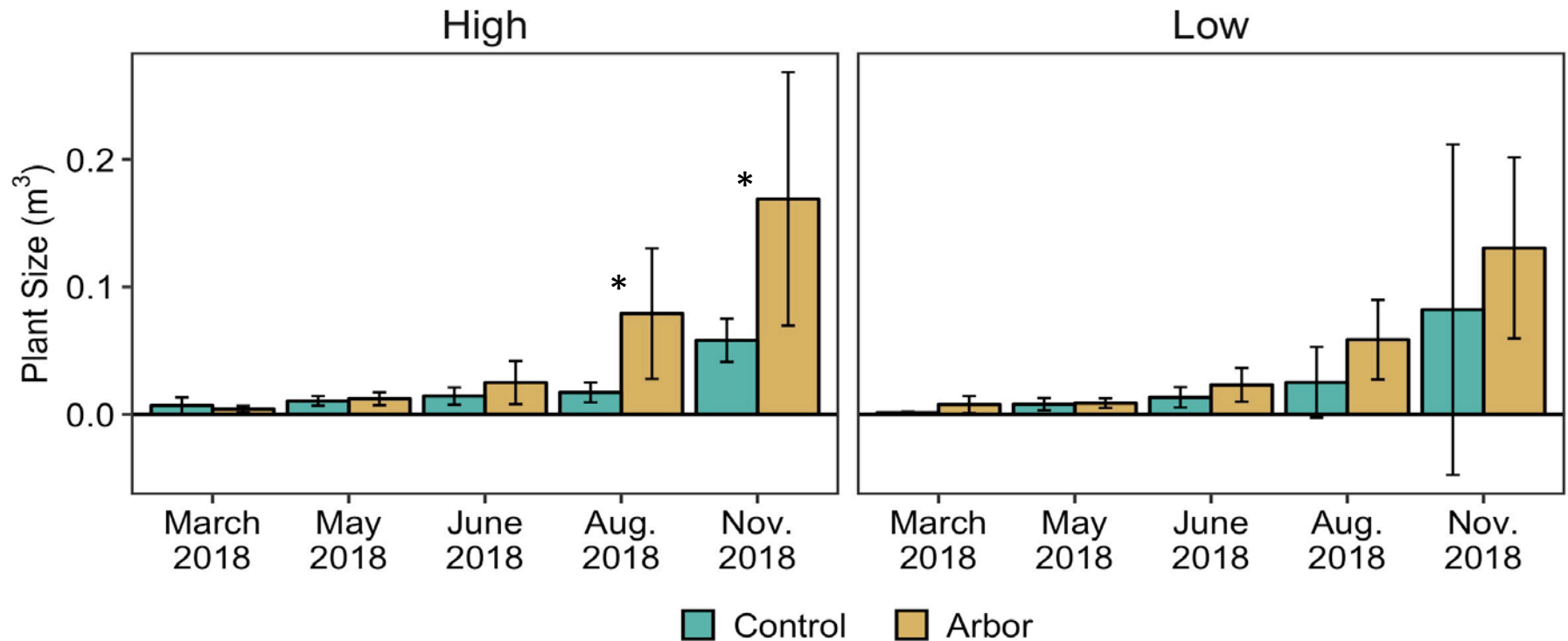
Drawing by Peter Baye







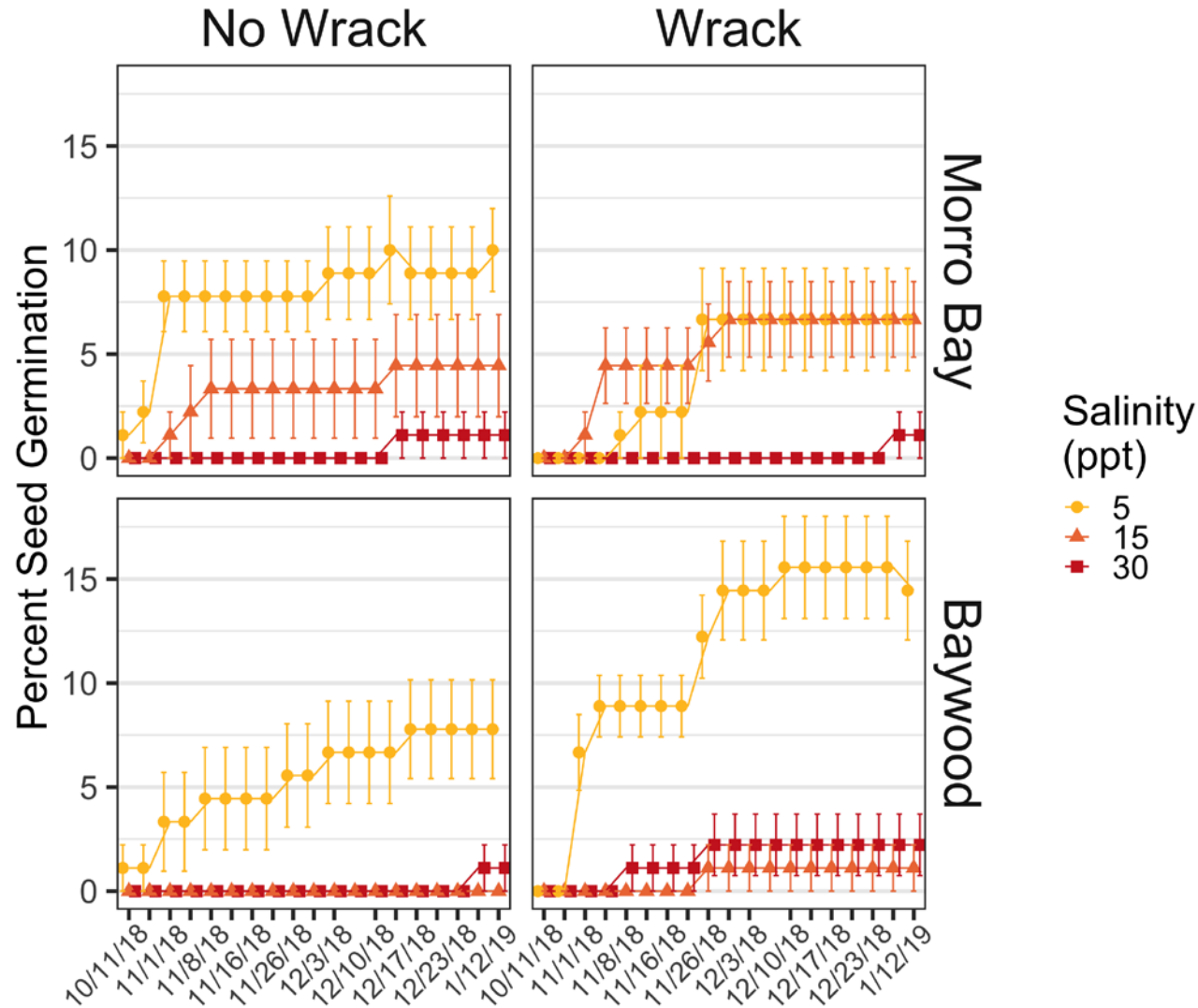
# *Suaeda californica* planted at Blackie's Pasture in Tiburon



Arbors are helping *S. californica* grow taller and wider, especially in the high transect.



# *Suaeda californica* seed germination experiment



Salinity showed a significant effect on germination



## Next Steps

- Understand more about *S. californica* reproduction, germination, and persistence
- Prioritize high tide refuge habitat in salt marshes using *Suaeda californica*



# **THANK YOU!**

## **Boyer Lab**

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## **Thesis Committee**

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## **Questions?**

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