

An underwater photograph showing a dense field of seagrass in the foreground, illuminated by a greenish light. In the background, the water surface is visible with numerous out-of-focus city lights reflecting on it.

Tillamook Bay Seagrass Baseline Assessment

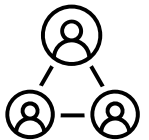
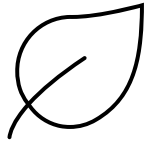
2025 Update

Flynn DeLany

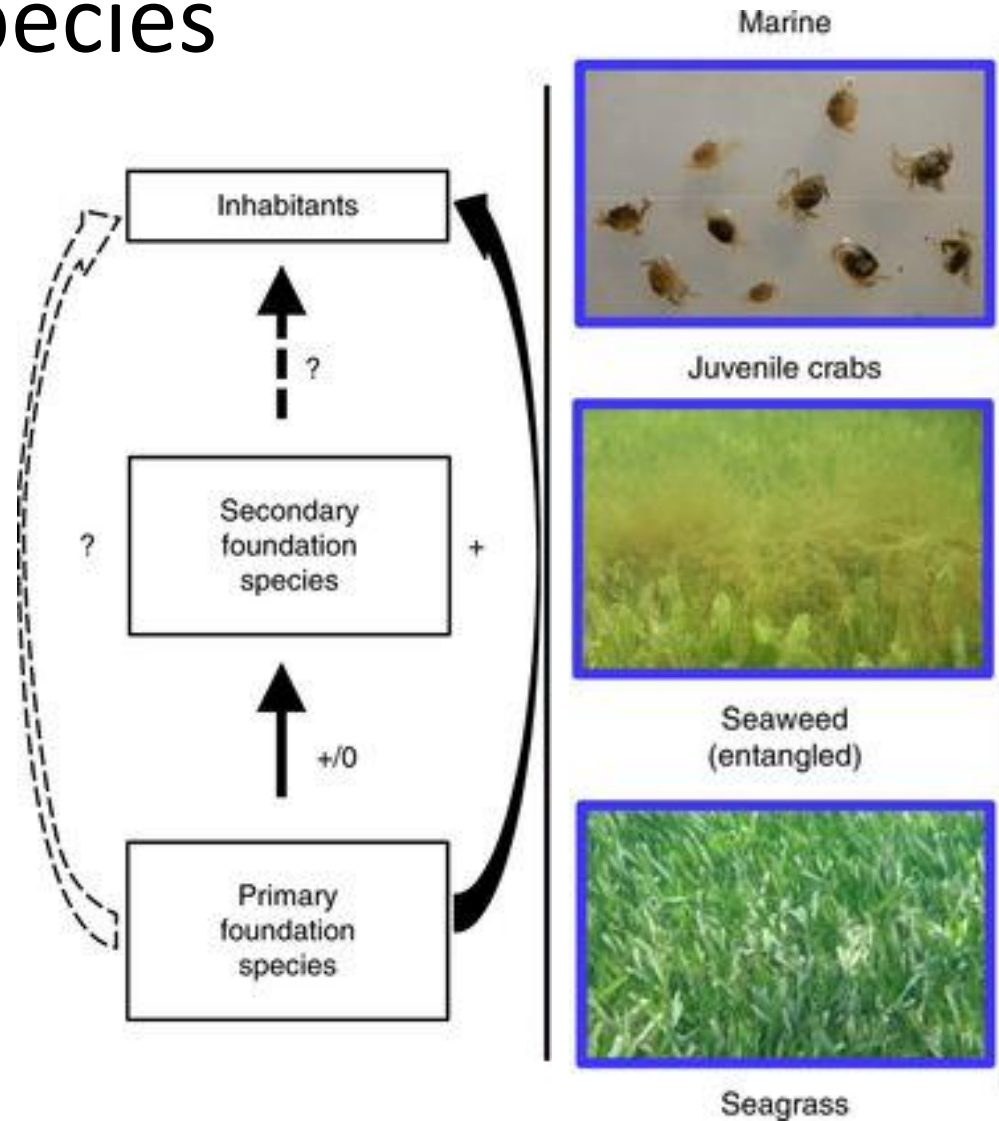
Field & Data Scientist

Tillamook Estuaries Partnership

Seagrasses

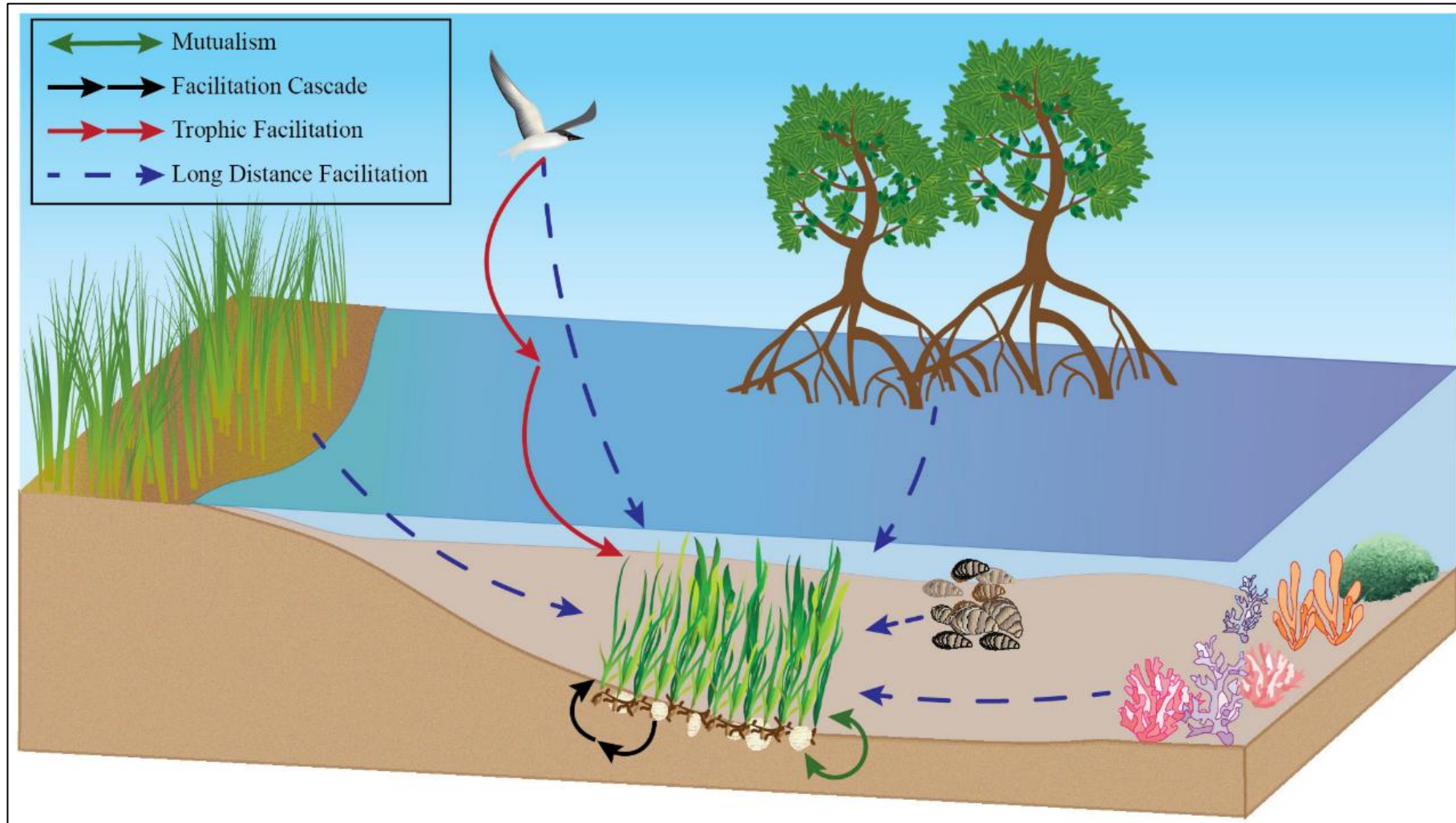


Foundation Species

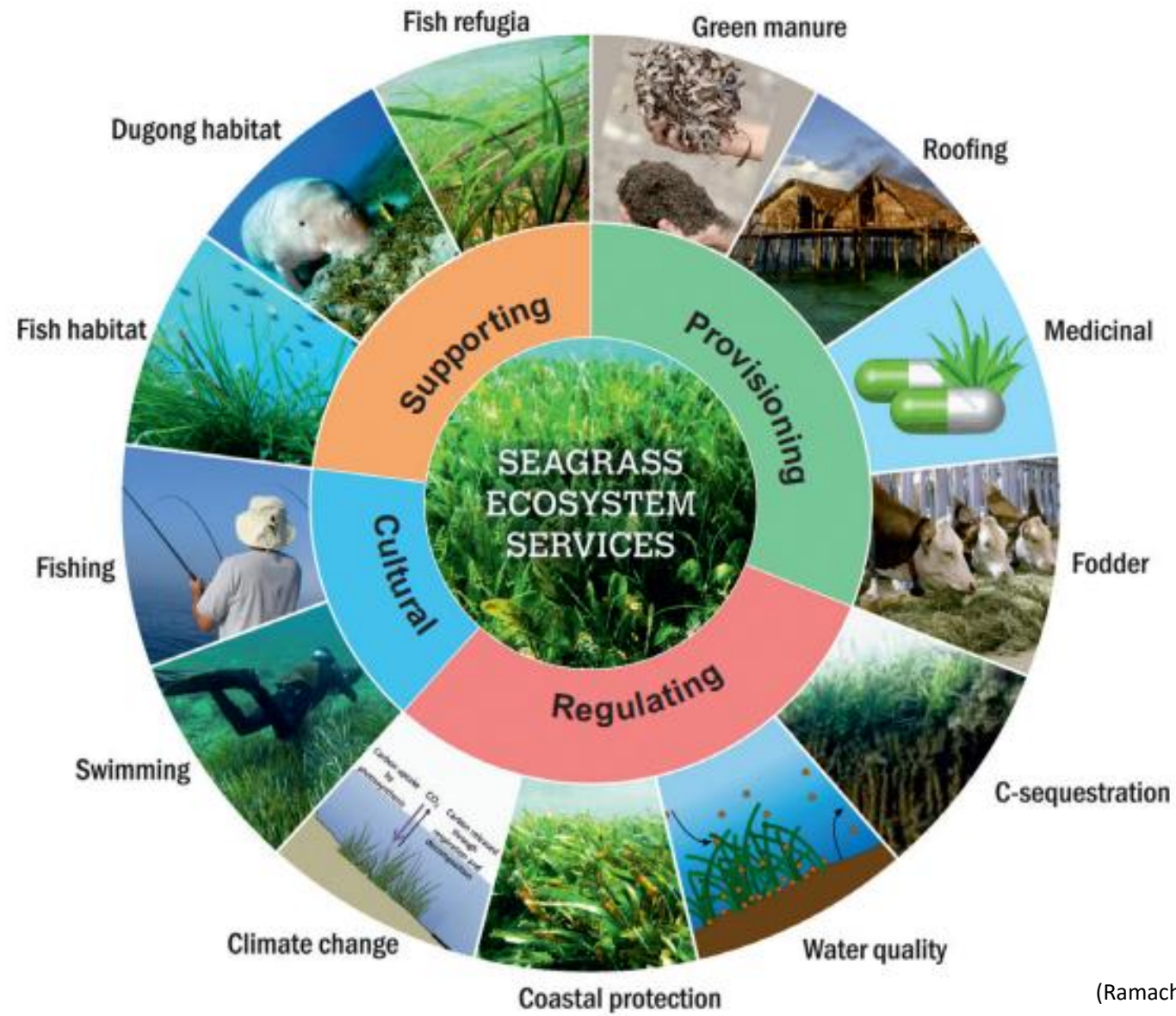


(Thomsen et al. 2018)

Positive Interactions

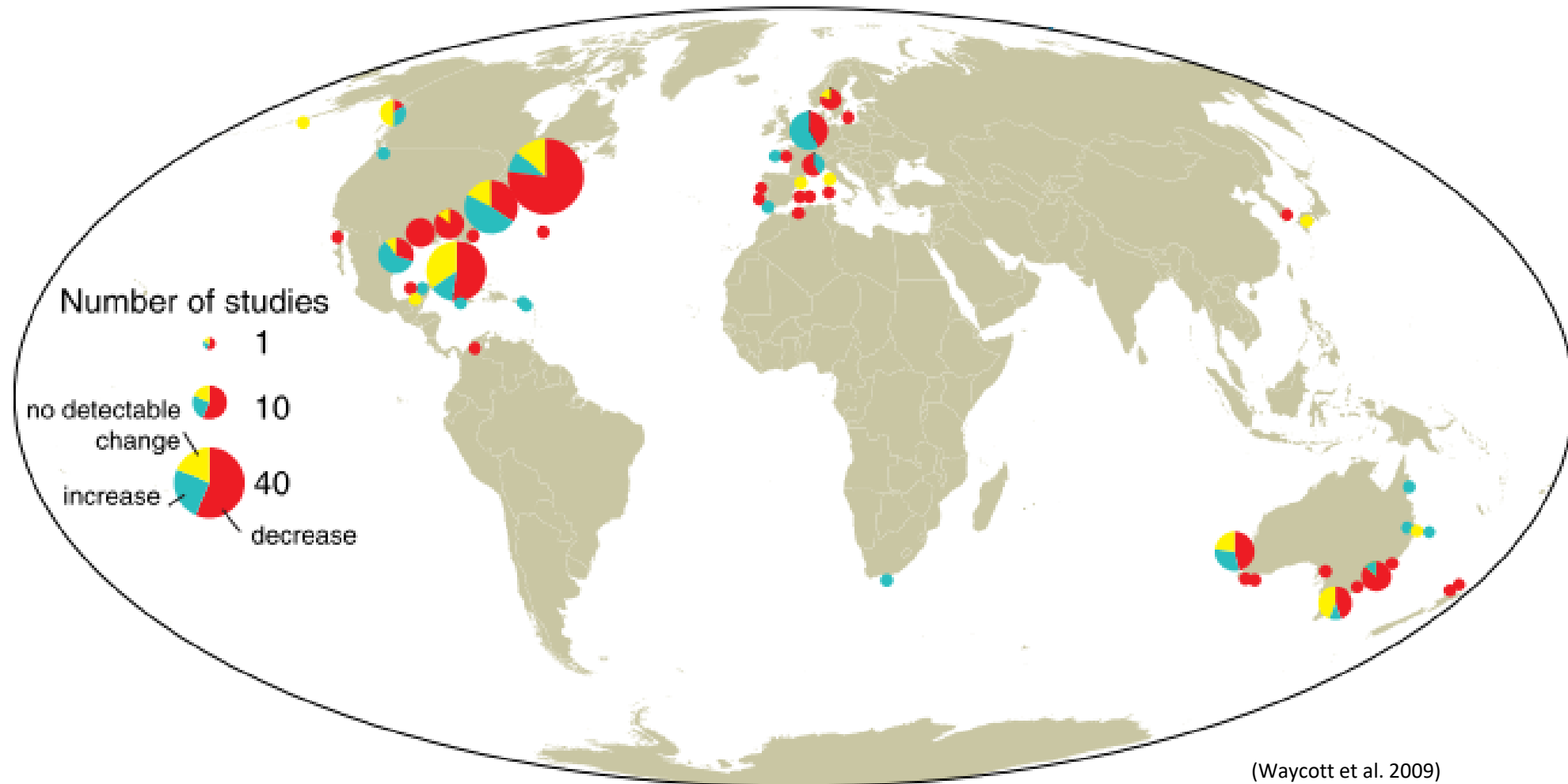


(Valdez et al. 2020)



(Ramachandran et al. 2019)

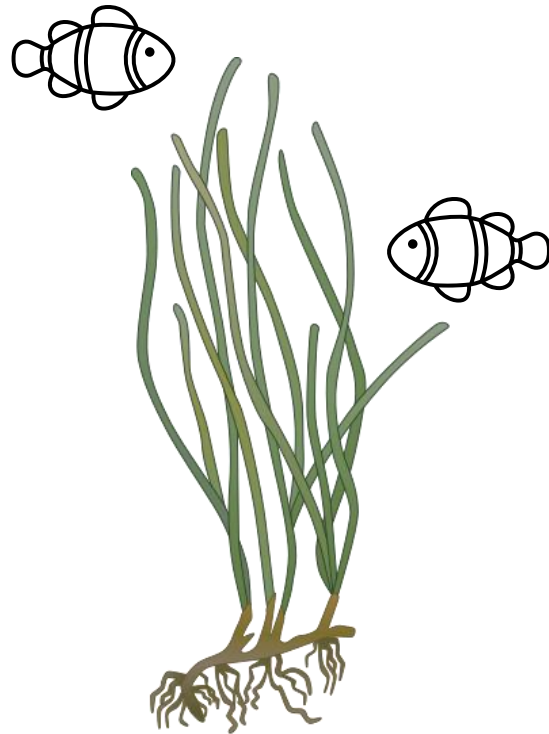
Seagrass Declines



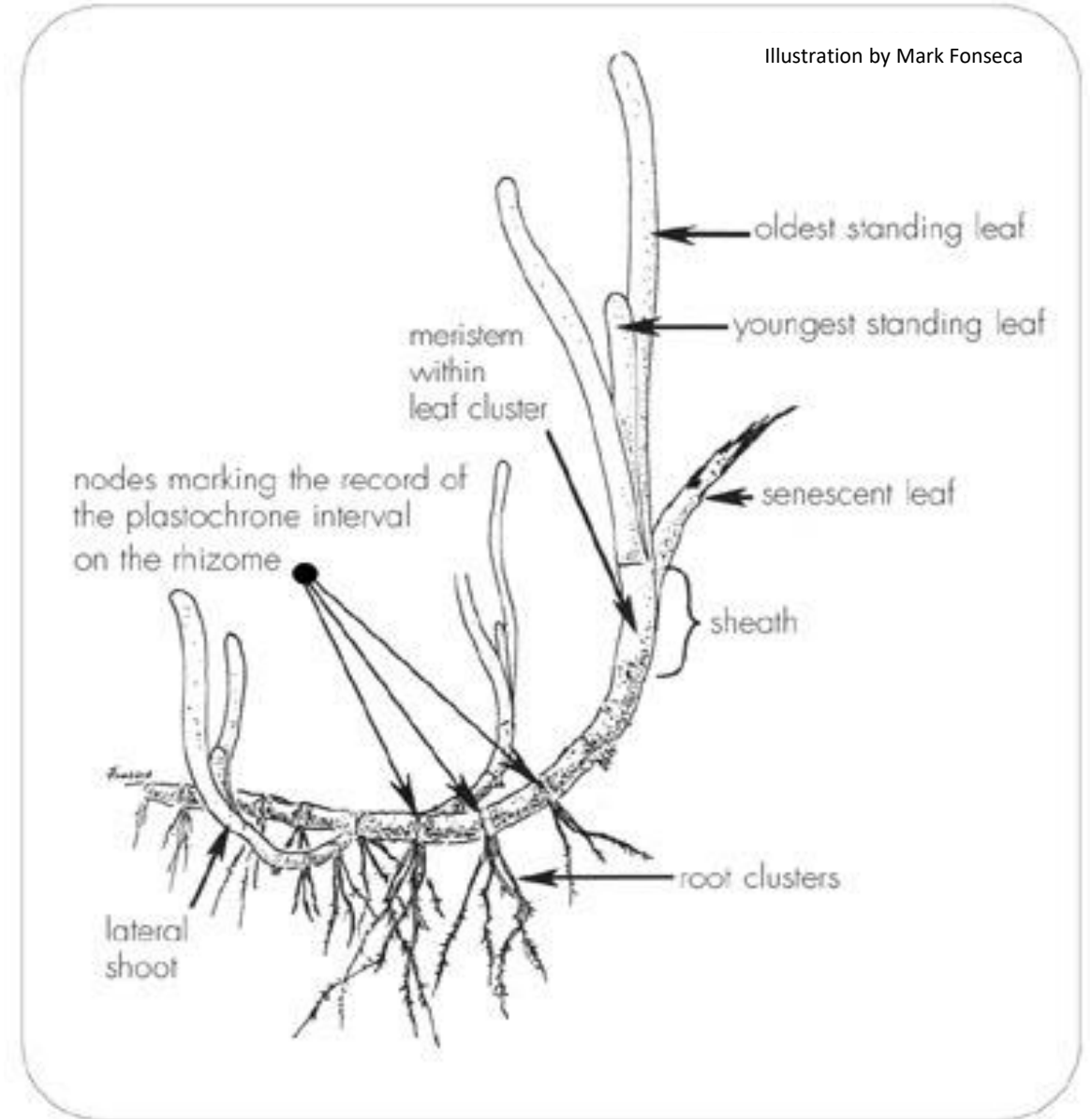
Eelgrass (*Zostera marina*)



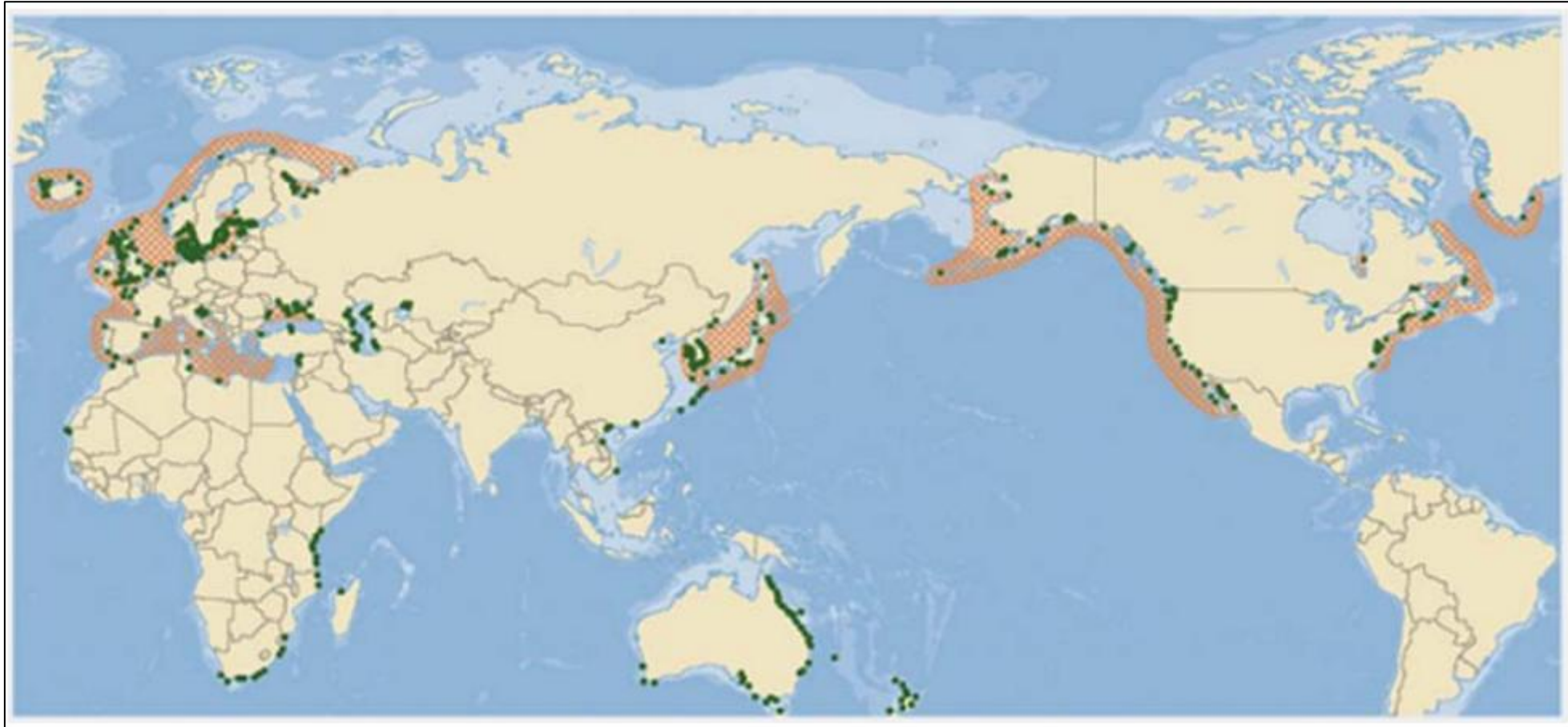
Ruppia maritima



Eelgrass

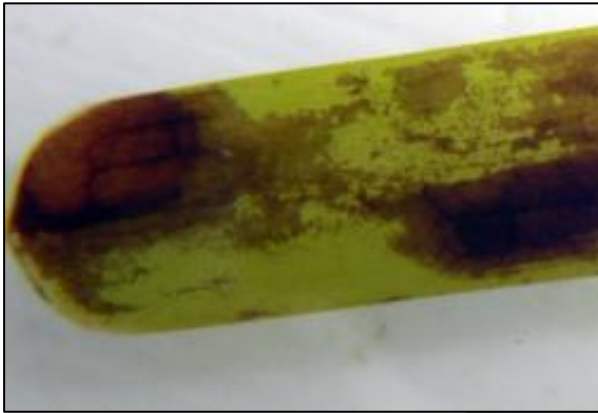


Eelgrass (*Zostera marina*)



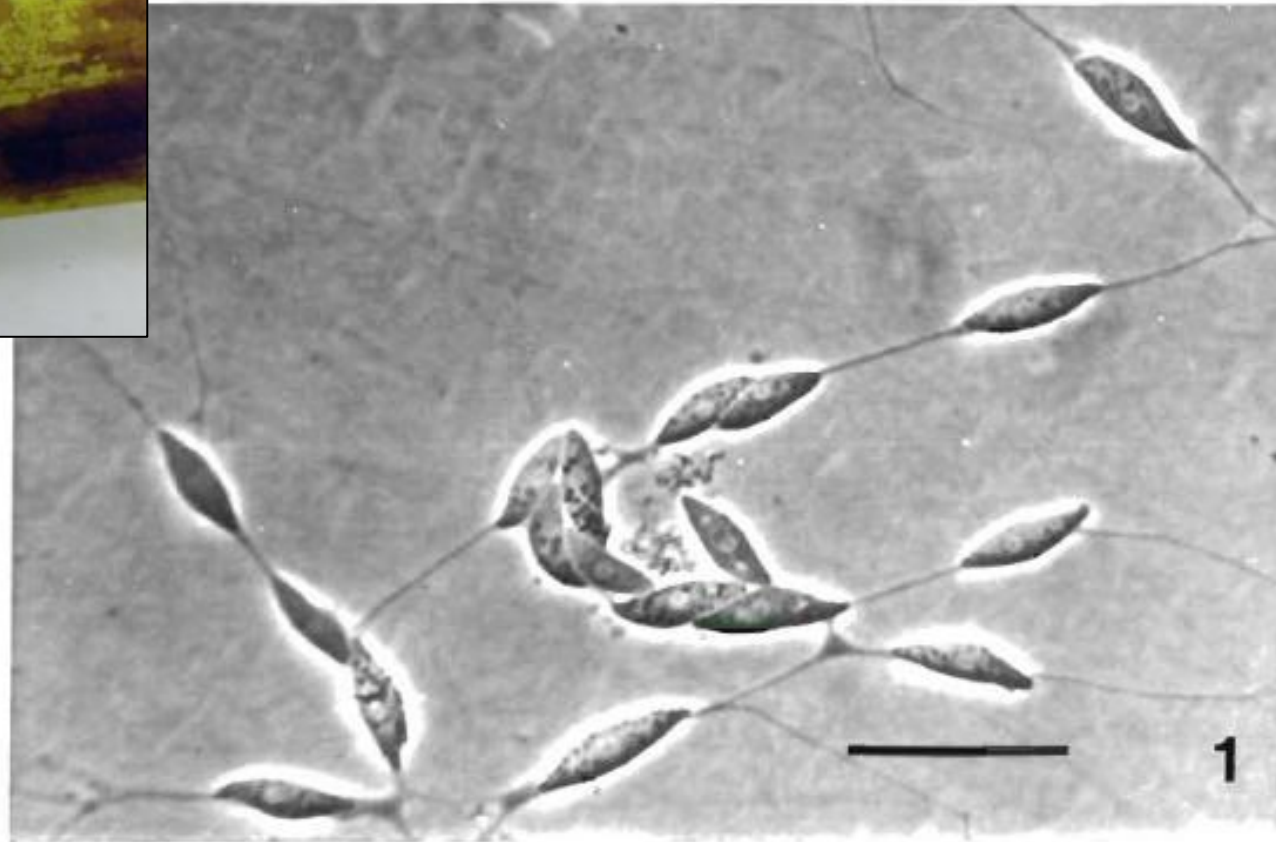
(Moore and Short 2006)

1930s Wasting Disease



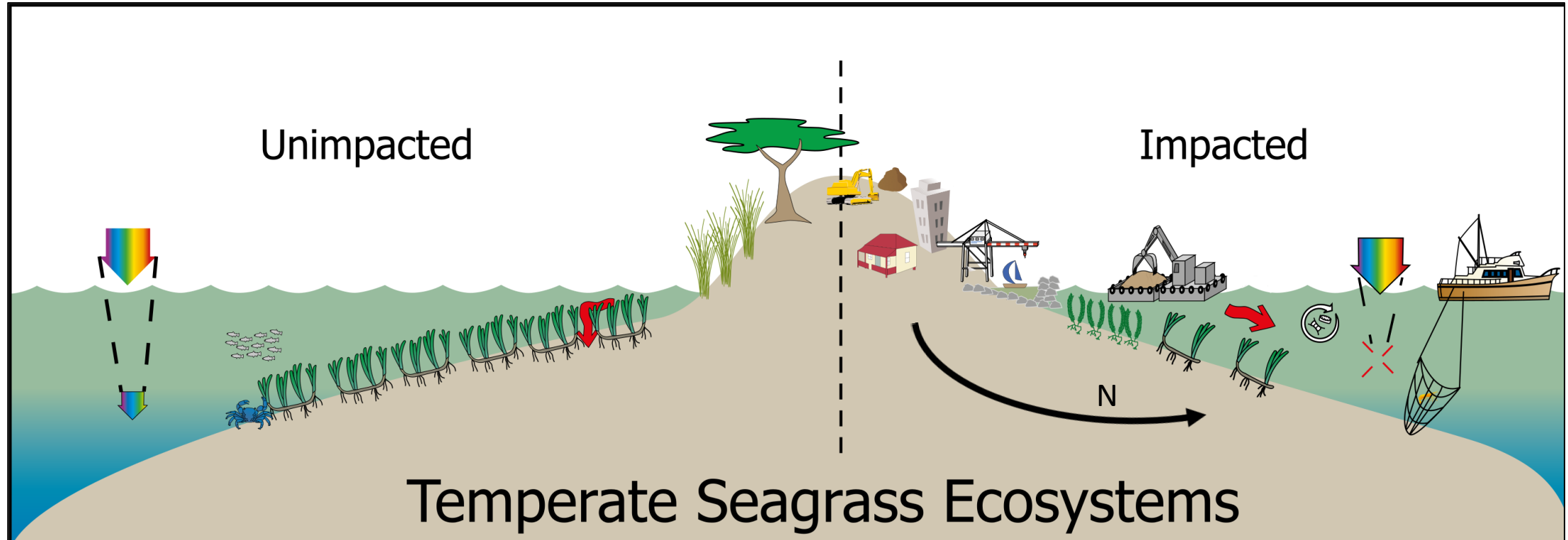
<http://www.seagrassli.org/>

> 90% Loss
across Atlantic

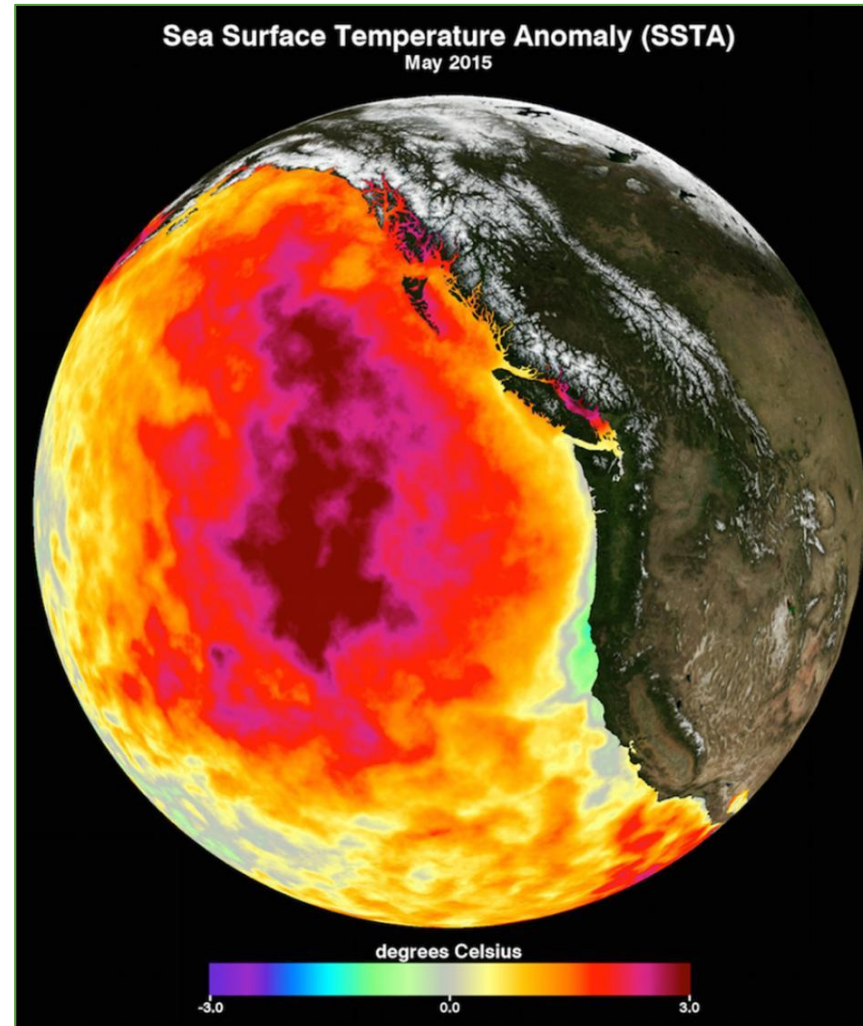


(Muehlstein 1989)

Causes of Declines



Marine Heatwaves



Continued Declines

Accelerating
rates of loss

0.9% before 1940
7% since 1990

(Waycott et al. 2009)

63%

Restoration efforts since
1930 resulting zero survival

(Van Katwijk et al. 2016)

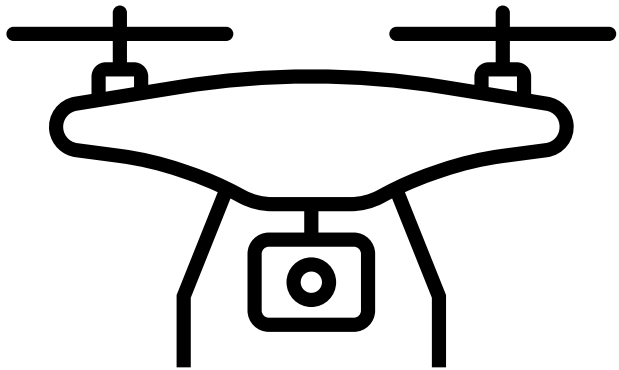
Restoration
Disparity

```
graph LR; A[Accelerating rates of loss  
0.9% before 1940  
7% since 1990  
(Waycott et al. 2009)] --> C((Restoration Disparity)); B[63%  
Restoration efforts since 1930  
resulting zero survival  
(Van Katwijk et al. 2016)] --> C;
```

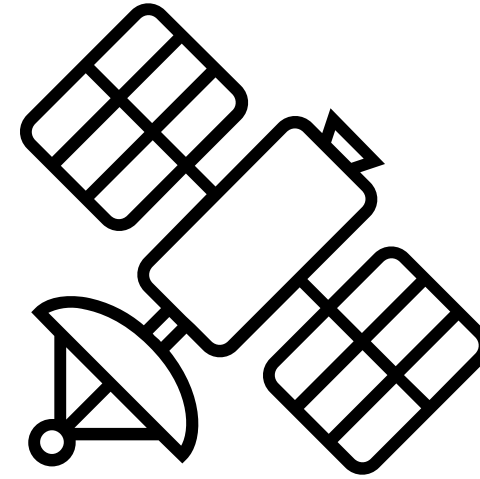
Tillamook Bay



Remote Imagery

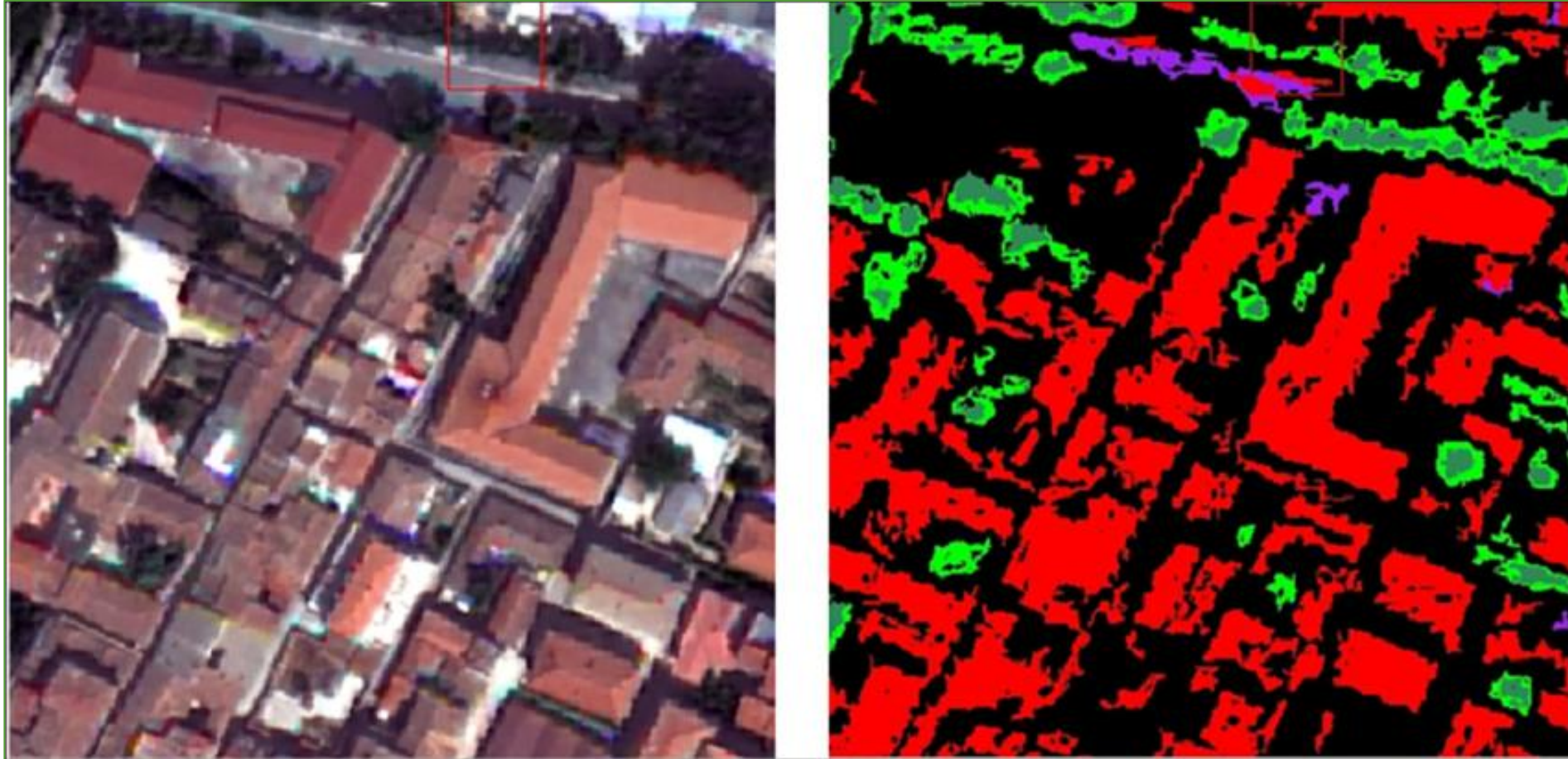


Annual Drone Flights
2024-present

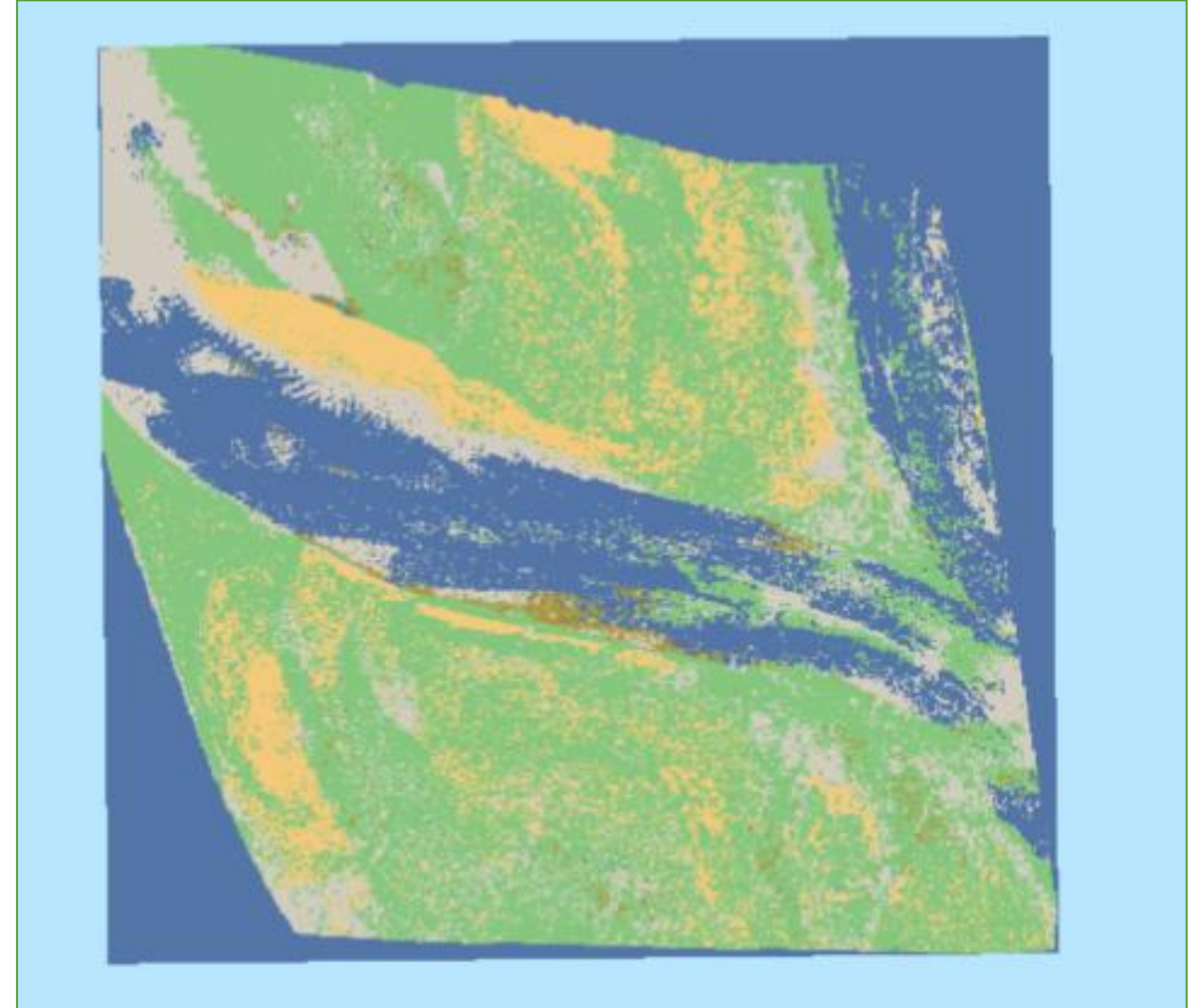
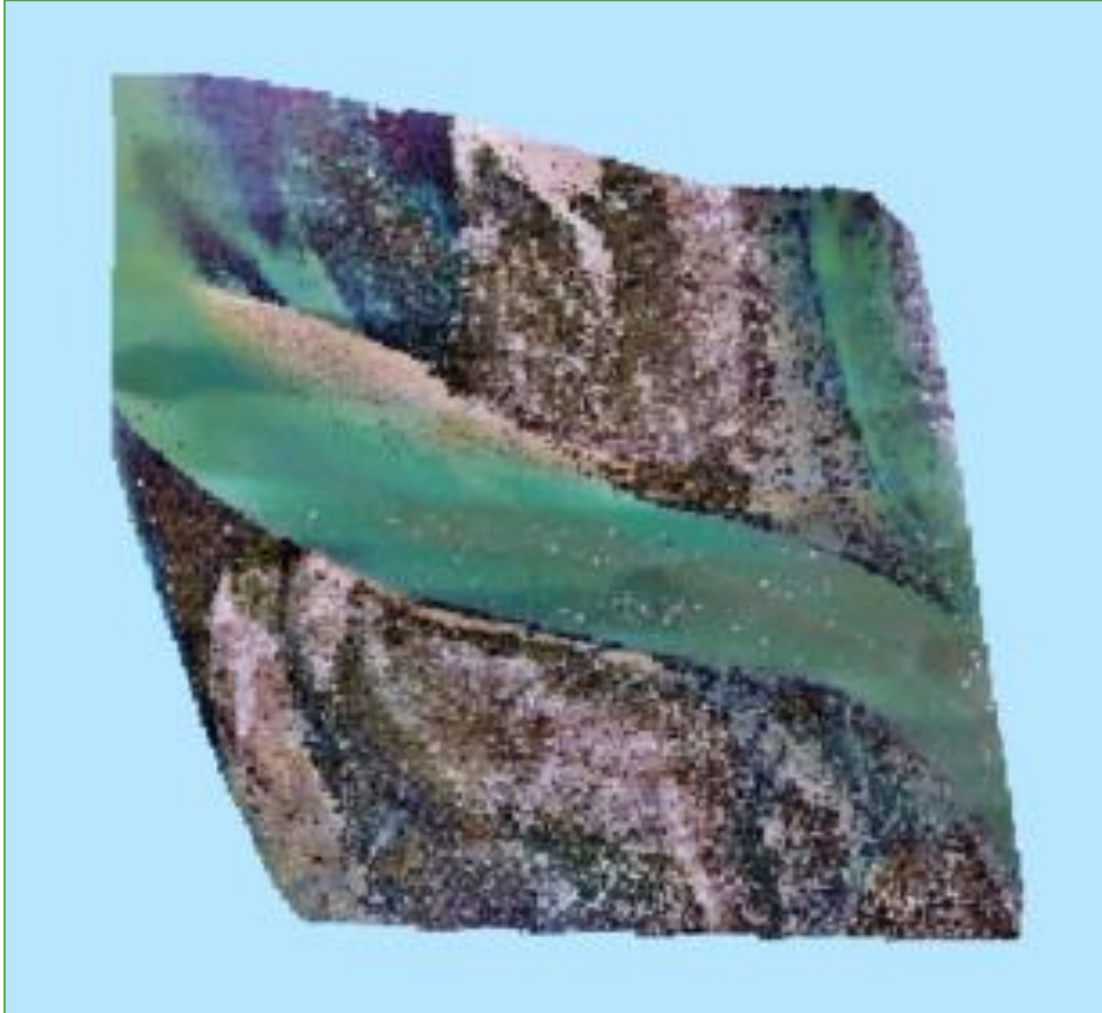


CSDA Program
2009-Present

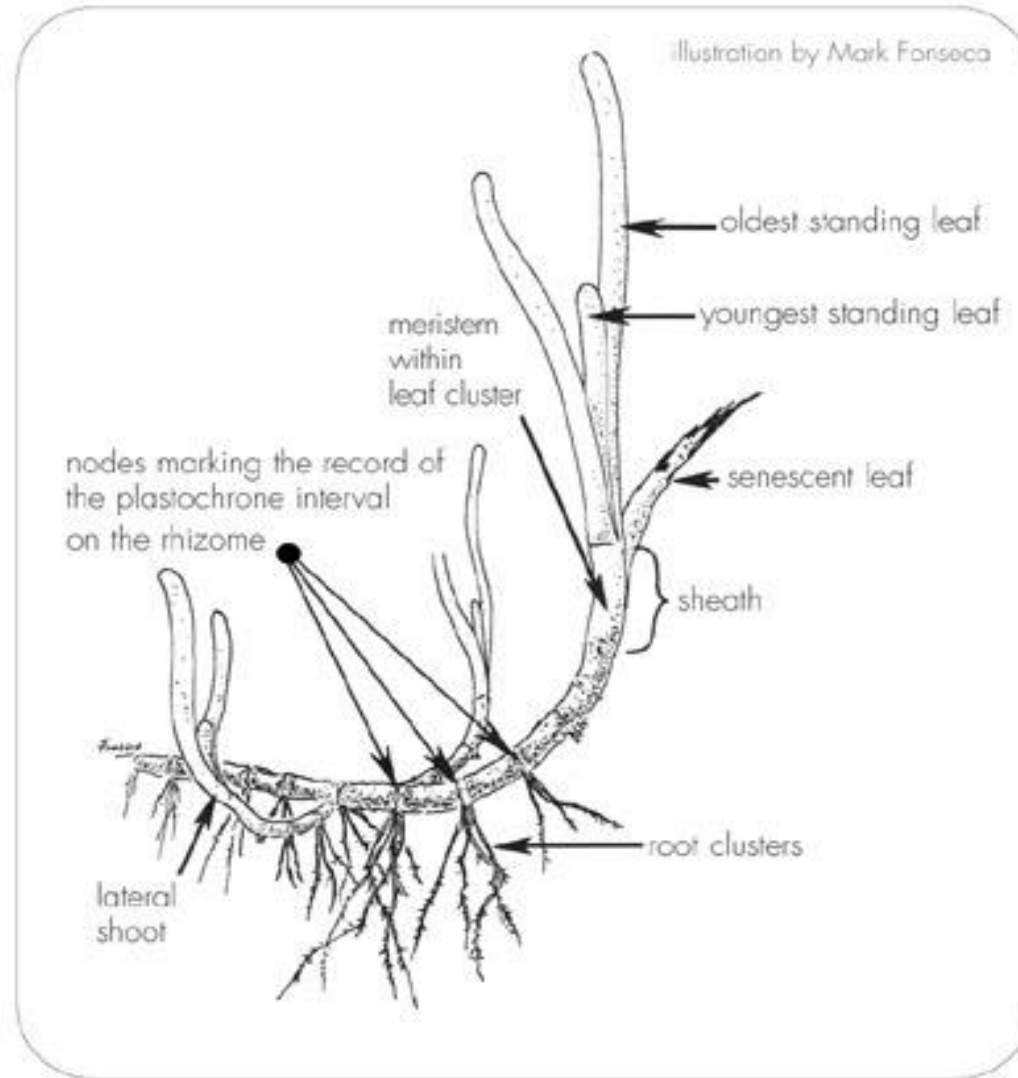
Remote Imagery



Remote Imagery



Morphometrics



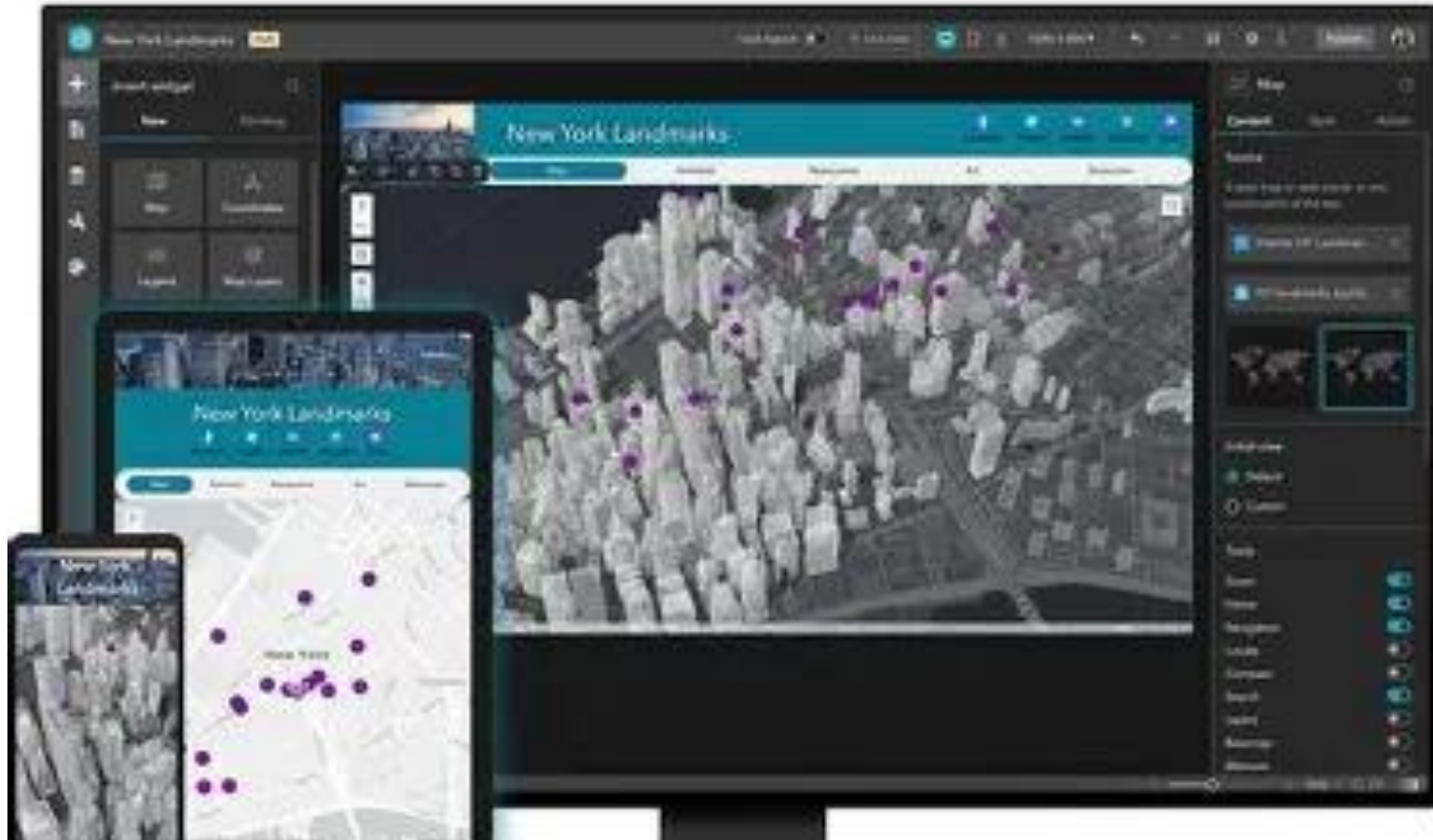


794 Acres
2024



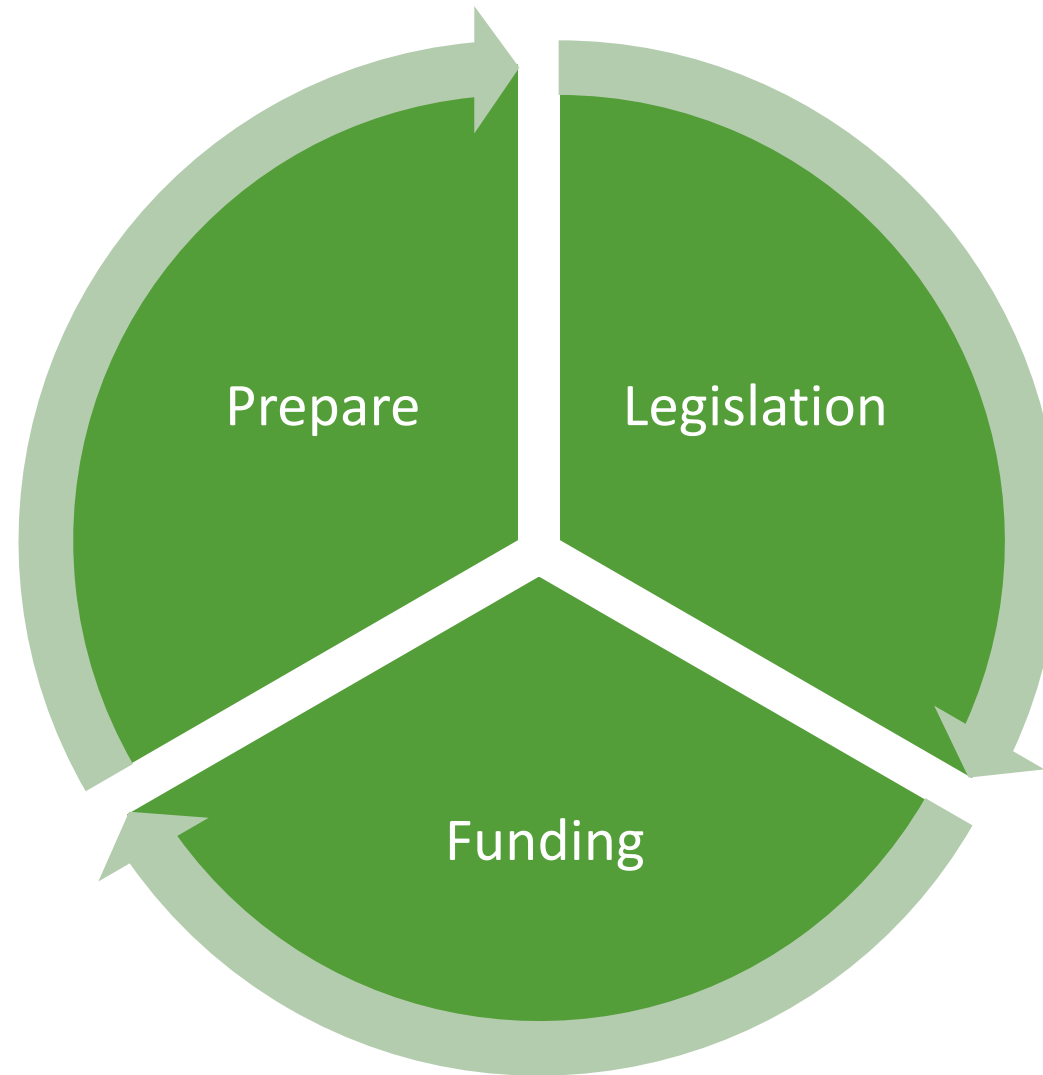
765 Acres
2025

Data Dashboard



www.tbnep.org/project/tillamook-bay-seagrass-monitoring/

Next Steps





Questions?
