



## MORRO BAY EELGRASS TRACKER

### Website - Eelgrass Tracker

[www.mbnep.org/eelgrasstracker](http://www.mbnep.org/eelgrasstracker)

### Background

If you are already paddling/kayaking the bay recreationally, the Estuary Program could use your support getting more eyes on the bay at low tides. Eelgrass provides critical habitat and has been recovering recently after a large scale decline. Through the use of aerial images, we track bay-wide eelgrass extent regularly. It is extremely helpful to have on the ground data to support what is also captured from the air. If you are able to volunteer, collection of photos/description of a site(s) can be visited at will with the steps below to help out.

### COVID-19

Due to COVID-19 restrictions, you must use your own personal equipment (e.g., kayak, phone or other GPS unit) to capture this information. A signed waiver(s) is also required.

### Volunteering Steps

1. Please fill out the sign-up page within the Google Document (link below) with which site(s) you are able to visit during low tides from December 2020 through January 2021. This can be completed on your own time. Low tides dates are also provided on page 2.

**Google Document Link:** [https://docs.google.com/spreadsheets/d/1bJdkZOAOh\\_nh5Wi19vu-Dj--VD8ctYbXj\\_PHpfdj4i4/edit#gid=109818509](https://docs.google.com/spreadsheets/d/1bJdkZOAOh_nh5Wi19vu-Dj--VD8ctYbXj_PHpfdj4i4/edit#gid=109818509)

2. Fill out a volunteer waiver form found on the Eelgrass Tracker webpage and email to Makenzie O'Connor at [moconnor@mbnep.org](mailto:moconnor@mbnep.org).

3. Collect eelgrass photos and field observations at one or more sites.

4. When you return from visiting the site, please go to the corresponding site tab (e.g., Site B) in this spreadsheet and upload the field photos/information.

5. If you have questions, please reach out to Makenzie O'Connor at the contact below.

### Contact

Makenzie O'Connor, Monitoring Coordinator  
[moconnor@mbnep.org](mailto:moconnor@mbnep.org), (805) 772-3834 extension 18

*Thank you for your support!*

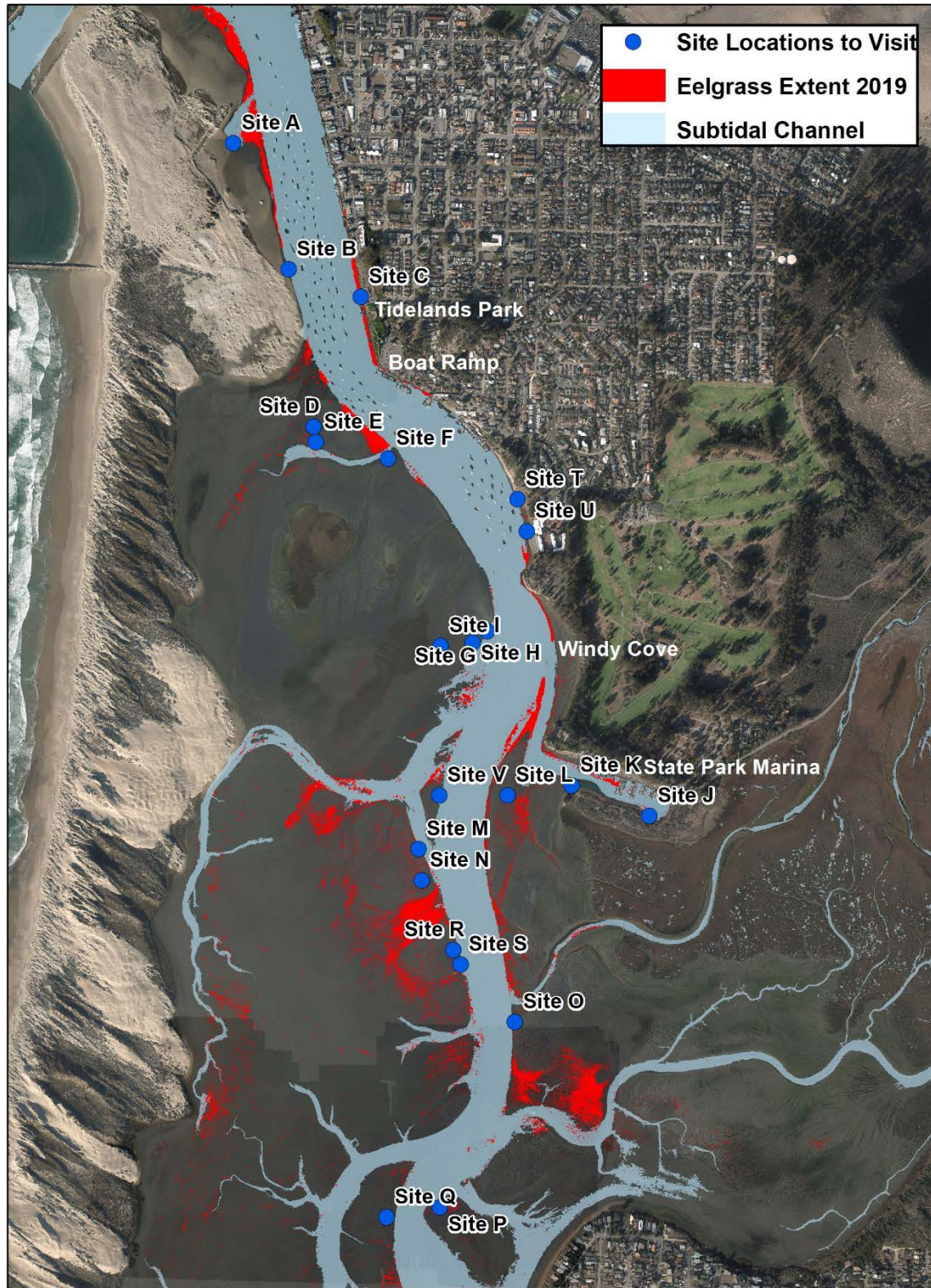
## SITE LOCATIONS *(Maps on pages 3 – 5)*

Site Name	GPS Location (Decimal Degrees)
A	35.364662, -120.856871
B	35.36086, -120.854678
C	35.360102, -120.85193
D	35.356104, -120.853509
E	35.35565, -120.853493
F	35.35259, -120.850732
G	TBD
H	35.349752, -120.847424
I	35.349615, -120.848661
J	35.344672, -120.840618
K	35.34549, -120.843631
L	35.345154, -120.84597
M	35.343455, -120.84924
N	35.34255, -120.849077
O	35.338327, -120.845417
P	35.33266, -120.848074
Q	35.332312, -120.84999
R	35.340459, -120.847763
S	35.340031, -120.847537
T	35.354117, -120.845858
U	35.353173, -120.845508
V	35.345051, -120.848529

**To find GPS locations:** *Due to COVID-19 restrictions, the Estuary Program cannot supply GPS units or any other gear.*

- Use a mobile device with GPS software like Google Maps or Google Earth. Copy and paste GPS locations from above into your device.
- Use a handheld GPS device, and enter coordinates as seen above, using decimal degrees.

## Full Bay Extent (All Sites)



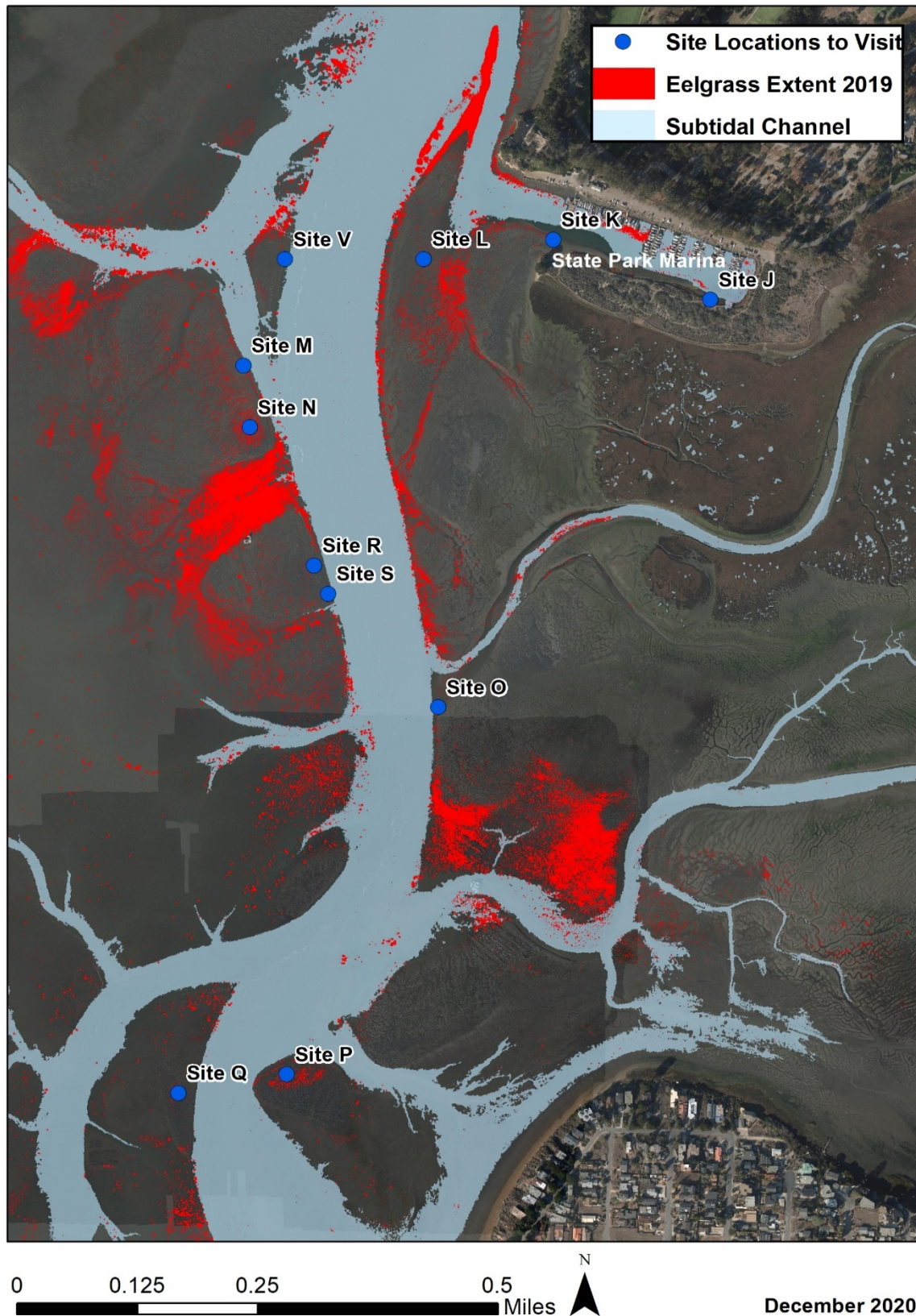


## Forebay (Zoom in)





## Midbay (Zoom in)



## LOW TIDES

Please check tides and weather conditions before heading out. Lowest tides in December are listed below, and more information can be found on the NOAA website. Low tides in January are also suitable.

**NOAA Website:** <https://tidesandcurrents.noaa.gov/noaatidepredictions.html?id=9412110&legacy=1>

Date	Time	Tide	Sunset
Saturday, December 12, 2020	2:32 PM	-0.9 ft.	4:51 PM
Sunday, December 13, 2020	3:20 PM	-1.4 ft.	4:51 PM
Monday, December 14, 2020	4:07 PM	-1.7 ft.	4:52 PM
Tuesday, December 15, 2020	4:55 PM	-1.7 ft.	4:52 PM
Sunday, December 27, 2020	2:58 PM	-0.3 ft.	4:50 PM
Monday, December 28, 2020	3:32 PM	-0.6 ft.	4:50 PM
Tuesday, December 29, 2020	4:07 PM	-0.8 ft.	4:50 PM
Wednesday, December 30, 2020	4:43 PM	-0.9 ft.	4:50 PM



## EELGRASS vs. ALGAE



**Eelgrass  
(*Zostera  
Marina*)**



**Sea  
lettuce  
(*Ulva* sp.)**



**Red algae  
(*Gracilaria  
sp.*)**

## FIELD DATA COLLECTION SHEET

(Information to be uploaded to Eelgrass tracker [Google document spreadsheet.](#))

Name(s):	
Date Visiting Site:	
Time Visiting Site:	
Daily Low Tide:	
GPS Location (lat, long):	

	Further Questions (Optional)			
	Photo ID	Photo Description	<i>Do you see eelgrass in this direction? If yes, describe.</i>	<i>Do you see algae in this direction? If yes, describe (e.g., sea lettuce, red algae).</i>
Facing North:				
Facing South:				
Facing East:				
Facing West:				
At Feet/Looking Down:				

Google Document Link:

[https://docs.google.com/spreadsheets/d/1bJdkZOAOh\\_nh5Wi19vu-Dj--VD8ctYbXj\\_PHpfdj4i4/edit#gid=109818509](https://docs.google.com/spreadsheets/d/1bJdkZOAOh_nh5Wi19vu-Dj--VD8ctYbXj_PHpfdj4i4/edit#gid=109818509)