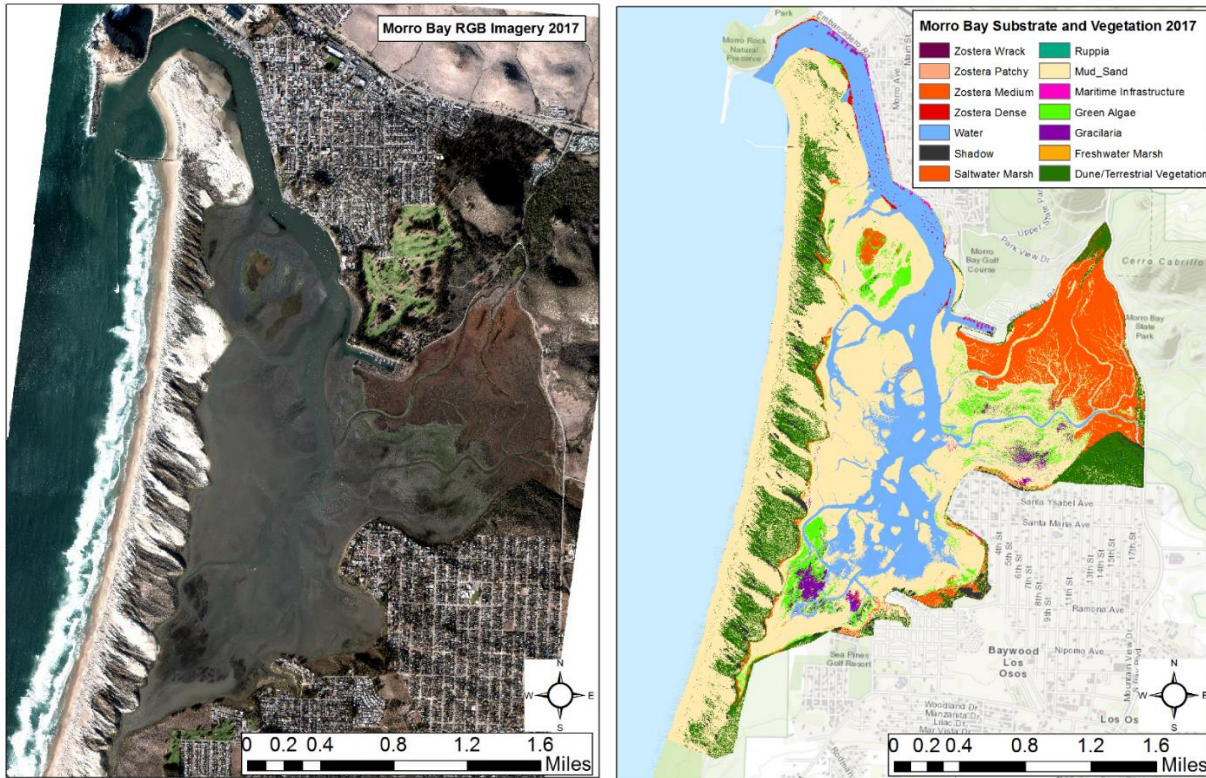
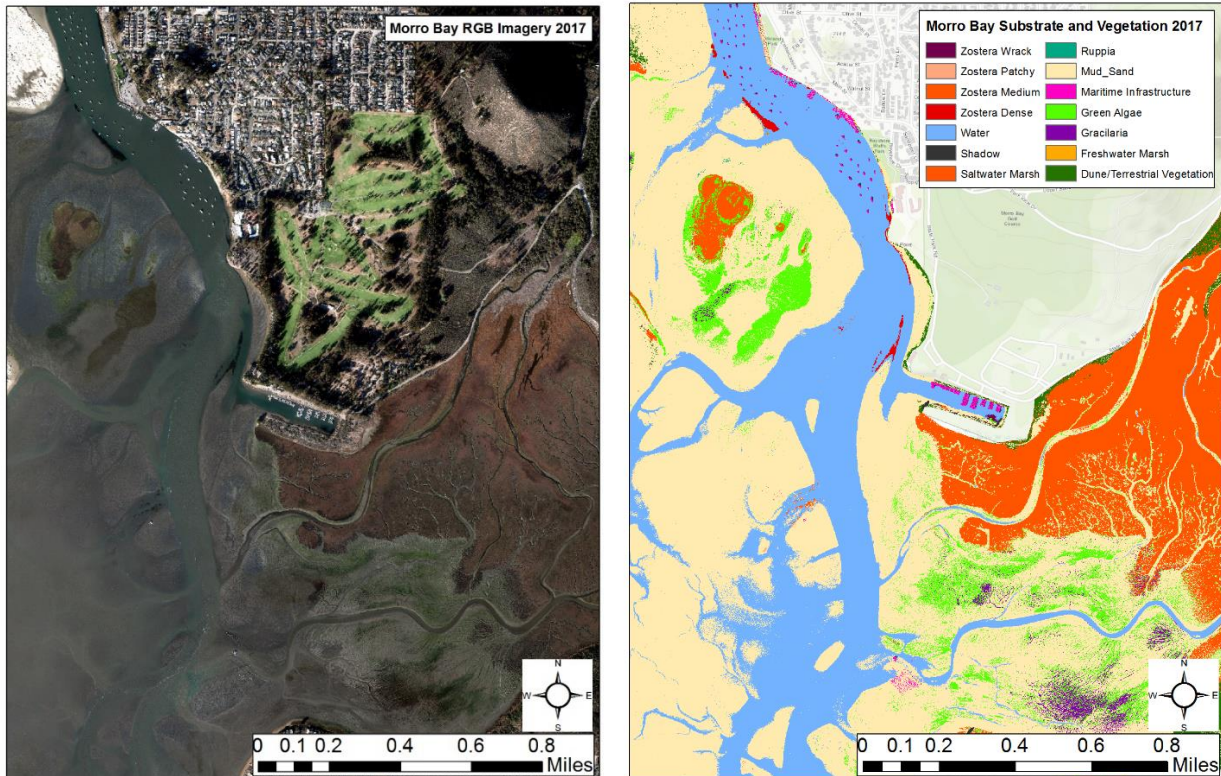


April 2018 - Ocean Imaging Continues 15 Years of Work to Map Eel Grass in Morro Bay, California



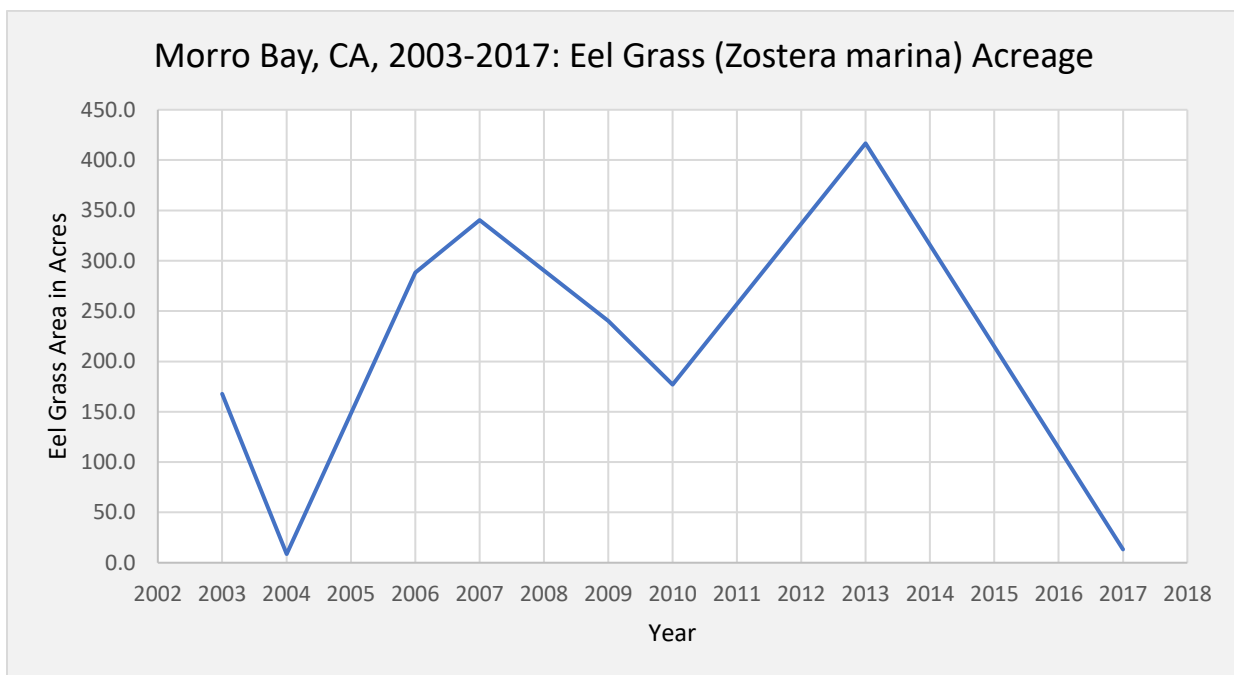
High resolution multispectral imagery of Morro Bay in California (left). The resulting substrate and vegetation thematic map derived from the classification and analysis of the multispectral data (right).

Dense stands of Eelgrass, *Zostera marina*, form meadow-like beds in the lower intertidal zone of the Morro Bay estuary. This habitat represents a critical element of the Morro Bay, California ecosystem. The Morro Bay National Estuary Program (MBNEP) in partnership with Ocean Imaging (OI) conducts submerged vegetation extent mapping as an assessment of the ecological health of the habitat within Morro Bay. Extent mapping is completed through collection of a multispectral aerial imagery and guided classification of different exposed and submerged vegetation and substrate types. The multispectral imagery and corresponding substrate/vegetation classification analyses delivered as part of this project were developed for the MBNEP to thematically map eelgrass and other ecologically important species within the estuary.



A closer look at the Red-Green-Blue true color rendition of the imagery (left) and the resulting habitat classification (right).

OI started generating habitat maps for the MBNEP in 2003 by classifying true color aerial photo imagery from 2002 and 2003. Now working with very high resolution and high-fidelity digital data, 2018 marks the fifteenth year that OI has been working with MBNEP to produce these maps critical to assessing the health of the Morro Bay ecosystem. Through the years the area of the bay populated by eel grass has ranged from 8.6 acres in 2004 to a high of 416.6 acres in 2013. This past year, 2017 showed relatively low eel grass coverage at 13.3 acres (see chart below).



Morro Bay eel grass coverage in acres throughout the years (2003-2017).