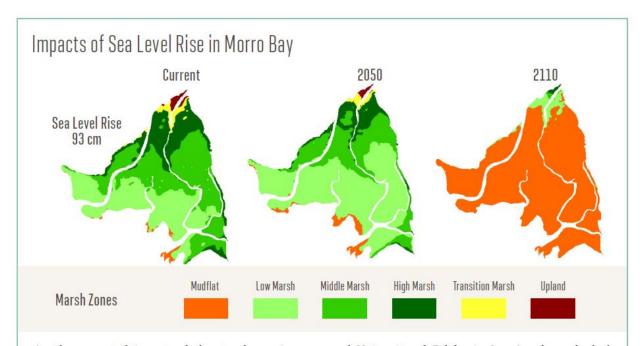
State of the Bay Report 2017 Sea Level Rise Data

Question: How will climate change likely affect the Morro Bay watershed and estuary?

Answer: Models and analyses continue to predict hotter, drier weather with more severe storm events and accelerating sea level rise.



Another expected impact of climate change is sea level rise. Global sea levels are rising due to warming temperatures and glacial ice melt. Accelerating rates of sea level rise threaten low-lying coastal habitats and the ecosystem services they provide for human communities. While modeling indicates minimum impacts to infrastructure around the bay, impacts to the natural environment are expected to be more severe. To better understand future changes to sensitive tidal marsh habitats in Morro Bay, the U.S. Geological Survey

and University of California, Los Angeles embarked on a multi-year study and modeling effort. The maps above demonstrate the shift from salt marsh habitat to primarily mudflats over the next century as sea levels rise. Models show similar impacts on Grassy Island. Loss of salt marshes means loss of habitat for fish, birds, and other animals. It also means loss of ecosystem services like protection against flooding and damage from storm events.