

## Port Walk #20



### Shaped by Nature

Famous as one of the world's most beautiful natural harbors, San Francisco Bay also provides vital habitat for an amazing diversity of fish and wildlife. Two major river systems flow from the Sierra and inland valleys into the Bay, mixing with salt water to create a life-nourishing environment.

### West Coast's Biggest Estuary

More than 40 percent of California's fresh water drains into San Francisco Bay and its wetlands. The San Francisco Bay Delta is the largest estuary on the West Coast, covering about 1,600 square miles. Reaching a depth of 350 feet at the opening, the Bay's average depth throughout is only 12 feet.



### The Collision Coast

California's dramatic coast is shaped by the collision of the continental and ocean plates. As the heavy rock of the sea floor slides beneath the lighter rock of the continent, it pushes upward. When rocks along fault lines break or move, earthquakes happen. Although small movements occur daily along active faults, major earthquake-producing movements happen only every 100 or more years. Fortunately, catastrophic earthquakes are rare in the Bay Area.



### Dr. David Schwartz, Geologist

"Here, in the San Francisco Bay Area, we live on the boundary between the North American and Pacific plates. A whole series of faults pass through the area. The Bay Area has the highest density of active earthquake faults per square mile of any urban center in the country. The movements along the faults have also produced the beauty of the topography here. So, we're blessed and we're damned. You can't stop earthquakes and you want the area to be as prepared as possible."