Local Geology

Looking north along the coast from here, you can see the entire Santa Monica Bay dune system. Scientists believe that two major events shaped these dunes. First, during the last glacial period that peaked about 20,000 years ago, low sea level exposed the floor of Santa Monica Bay. Streams flowing across the exposed sea floor deposited sediment that was blown onshore by winds to form extensive dunes. Then, as the sea rose about 5,000 years ago, fresh sand was blown onto these older dunes forming the recent sand dunes.

To the south, the staircase of cliffs and wave-cut platforms of the Palos Verdes Peninsula was created by changing sea levels that occurred long before the dune building began.