

# BEACH CHANGE

The Kā'anapali Beach project is co-sponsored by the State of Hawaii and the Kā'anapali Operators Association. The proposed project includes beach restoration activities along nearly 7,500 feet of beach. Approximately 50,000 c.y. of sand would build the beach wider between Hanaka'ō'ō Beach Park and Hanaka'ō'ō Point, and nearly 25,000 c.y. of sand would be placed on the dry beach between Hanaka'ō'ō Point and Pu'u Keka'a.

Beach change along Kā'anapali is unique in the Kā'anapali Littoral Cell (KLC) and the Hanaka'ō'ō Littoral Cell (HLC).

In the KLC, the beach changes seasonally. In the winter, waves from the north work away at the sand near Pu'u Keka'a, transporting it south towards Hanaka'ō'ō Point. In the summer, waves from the south transport the sand from Hanaka'ō'ō Point north towards Pu'u Keka'a. The project would place sand near Pu'u Keka'a in the fall allowing for the winter waves to naturally distribute the sand southward. The project would place sand at Hanaka'ō'ō Point later into winter, so the summer waves from the south can distribute it to the north.

In the HLC, the beach is chronically eroding as waves constantly inundate the shoreline. Sand placement would be during the winter when the summer waves from the south are small.

Sand placement will change the elevations and width of the beach. The color of the beach and the grain size may be slightly different than existing conditions. As the sand interacts with waves and currents, some sand will wash into the nearshore and may change the bottom. The volume of sand moved offshore is anticipated to be small and will have small impacts on the surf breaks. Suspended sediment may impact corals. With sea level rise, wave action, and storms, Kā'anapali Beach will continue to erode landward, even after the project.

