

# BEACHES & BIOLOGY

The Kā'anapali Beach project is co-sponsored by the State of Hawai'i 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.

## Marine mammals and sea

**turtles** may experience a temporary change in prey within the sand recovery area during the project. Boat operators will be given instructions on what to do if they see protected species to avoid contact. Whale season is December 15 to May 15 each year.

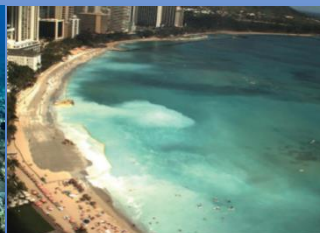


**Shorebirds** that live within the intertidal zone along Kā'anapali Beach will temporarily experience more noise and equipment within their habitat.

Benthic **infauna** within the sand recovery area are anticipated to be temporarily lost. The impact area is small relative to the regional sand field, and these species are anticipated to recover quickly after the project is complete.



**Coral** offshore of Kā'anapali Beach will experience a temporarily increase in fine sediments and turbidity in the water column. **The beach nourishment project will occur outside of coral spawning season** to reduce impacts. A coral monitoring plan is being developed for this project.



**Turbidity** will be generated at the sand recovery site and during sand placement. The fine grains will remain suspended in the water column temporarily decreasing light penetration and may reduce primary productivity. The use of silt curtains will help contain turbidity to the work area.



**Fish** may alter their distribution during the project to avoid noise and water disturbances. In addition, during sand recovery, nutrients may be released to the water column temporarily **increasing** fish abundance. These are short-term effects.

A **Best Management Practices Plan** is being developed for use during the Kā'anapali Beach project. This Plan outlines methodologies for the contractor to follow to reduce biological impacts. The Plan will be reviewed by several agencies such as the **Department of the Army, the Department of Health, the Department of Land and Natural Resources, the United States Fish and Wildlife Service, and the National Oceanographic and Atmospheric Administration**. During review, these agencies will provide input to improve the Plan and further reduce impacts.