

rounded and changes occur rapidly. As the evolution progresses, the planform anomaly begins to behave as a longer project and changes occur much more slowly.

In evaluating the performance of a beach nourishment project, it is important to note that if the sediment is of good quality, although eventually the sediment will be transported out of the region placed, it will remain within the region of active nearshore sediment transport and will continue to provide benefits to those areas to which it is transported.

Case (2) Placement Immediately Downdrift of a Littoral Barrier - This situation is fairly common due to the aforementioned adverse impact of inlets modified or constructed for navigational purposes. As intuition would suggest, if the longshore sediment transport deficit is large, the life of the beach nourishment project will be short and in such cases, rather than considering the longevity of the project as a measure of its performance, it may be more appropriate to regard the nourishment as a "feeder beach" placed to reinstate the longshore sediment transport.

Profile Equilibration After Nourishment

In addition to planform evolution, the profile will change from that initially placed to one that approaches equilibrium with the incoming wave characteristics and sediment size. The quality or size of sand used in nourishment governs the shape of the equilibrium beach profile. Sand of the same size characteristics as the original beach will have an equilibrium profile the same as the pre-nourished beach. Sand coarser or finer than the original will have equilibrium profiles steeper or milder, respectively, than the original profiles.

Relative Benefits of Offshore Sand Placement at Various Depths

In some cases, it may be less expensive to place the sand in the nearshore region than on the dry beach. Questions have arisen regarding the effectiveness of this approach. There have been several attempts to place substantial quantities of sand in the nearshore region and to carry out monitoring to determine whether the sand was transported shoreward. The field test programs and the experience with each is summarized in Table 2. As can be seen, only the