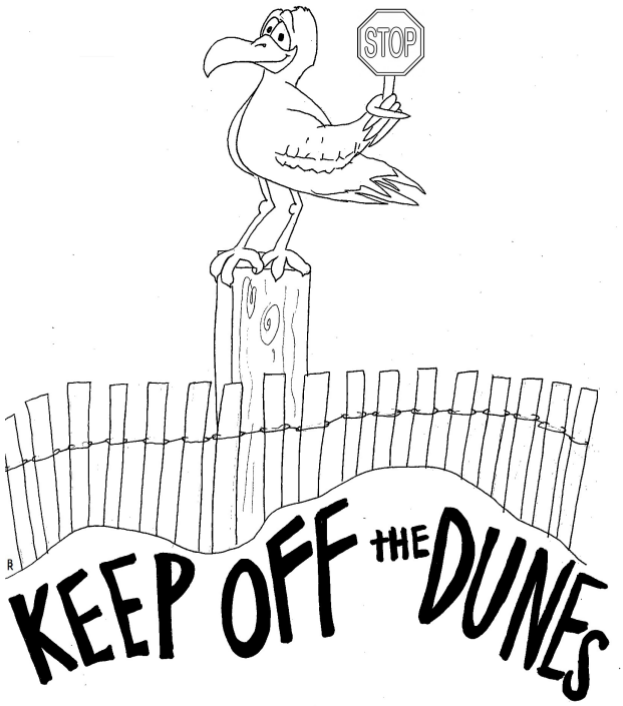

Facts About Beach Replenishment.

What is beach replenishment? The taking of sand or gravel from an outside source (off-shore or from another beach or part of a beach) & dumping it along a shoreline to widen a beach. Projects do not generally include monitoring or dune building.

Does replenishment have other names? Yes, it is also called beach nourishment, beach fill, dredge-and-fill, artificial beach creation, beach reclamation, & coastal storm-damage-reduction project.

What is the history of US replenishment? It took hold in the US in 1965 after the 1962 Ash Wednesday storm, but the 1st project took place in Coney Island in 1922. Now, over 469 projects using more than 370 million cubic yards of sand costing about $3.7 billion have been carried out in the US.

What is the cost of replenishment in dollars? Sand price varies, but a good rule of thumb is $14.50 per cubic yard of sand. Replenishment costs minimum $866,000 per mile, equating to $5.2 billion to replenish the developed NJ coast each year. It also encourages further development.

Who pays for replenishment? Replenishment is cost-share where 65% is federally paid & the remaining 35% is split 75% state & 25% local such that locals pay 8.75% of the total cost - $87,500 for every million spent. NJ represents less than 1% of the total US coastline, but has used 37% of all replenishment money spent nationally.

What is the cost of replenishment to the beach environment? Replenishment is a death sentence for the beach habitat. Replenishment has cascading negative effects: small invertebrates can survive & anticipate temporary storm burial, but cannot recover from instant burial under tons of sand & are reduced → foraging birds & crabs have nothing to eat → clams & other invertebrates reduced → small fish have nothing to eat in shallow waters → larger offshore fish like flounder & mackerel have less to eat → less fish for recreation & commercial uses, plus the beach comes to resemble an engineered 'stepford' strip lacking the natural elements that draw us to the coast.

How long will the sand stay? Replenishment is a continual investment & each project is a temporary solution, a 'band-aid.' It generally last 2-7 years, but erosion depends on the weather & the beach & replenished beaches erode at least 2x faster than natural beaches.

For more info, we recommend reading:

The Last Beach **by Orrin Pilkey & Andrew G. Cooper**
The Beach Book: Science of the Shore **by Carl Hobbs**
Beach & Dune Restoration **by Karl Nordstrom**

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