Life on the Shifting Sands

The hopes of beachfront promoters have repeatedly washed away. Maybe it's time to put some brakes on seashore development.

BY DIETRICK E. THOMSEN

It may be, as Assistant Secretary of the Interior Robert L. Herbst says, that it is not wise to fool with Mother Nature, but in Atlantic City they are likely to be laying odds against her. Herbst's advice was given in the course of a talk on the future of the barrier islands of the United States' eastern and southern coasts, which he delivered at the Barrier Islands Conference in Savannah in December. Atlantic City is an example of what many barrier islands have become.

Atlantic City is one of the oldest developed communities on the barrier islands. It grew because Absecon Island, on which it stands, was the end of the railroad from Camden, and the Camden and Atlantic Railroad was built because people from Philadelphia wanted to go to the seashore. The whole thing was a package deal. For a long time Atlantic City had a monopoly on America's idea of what a proper resort should be. In recent years she has fallen on evil days, but as soon as casinos are licensed, local boosters believe, she'll be back where she once was, on a par with Las Vegas and Bimini.

Barrier islands occupy a large portion of the United States coastline. Long, narrow and flat, they constitute the actual ocean beach along most of the Atlantic and Gulf Coasts. Behind them lie bays, lagoons, swamps and finally the mainland. Since the seashore became popular in the 19th century, many islands have been subject to extensive economic development. Very few remain in their natural state.

From the point of view of scientists who have studied the barrier island environment, this development is generally a bad thing, not only for the natural state of the islands, but in the long run also for the people who inhabit them. The main reason is that the islands are a very unstable environment. This is the territory of instant geological processes—just add water and mix. A single storm is enough to change the shoreline appreciably. Furthermore, there is a long-range process that is gradually moving the islands back toward



Before a winter storm, sand on Ocean City's beach reached to the top of the seawall.

the mainland (SN: 6/17/72, p. 396). Storm surges take sand from the ocean side and drop it on the bay side. This movement, coupled with a gradually rising sea level, moves the islands generally toward the mainland while the mainland shore also recedes.

This means that eventually present seashore communities will be underwater. Herbst cites the example of Broadwater, Va. This was a town that once existed on Hog Island off the Virginia Coast. The town consisted of 40 or 50 houses, a church and 250 people. After continual encroachment by the ocean, the townsite was abandoned in the late 1930s. Now the site of Broadwater is somewhere out under the ocean. Other examples could be cited: One of the most expensive is the disappearance of beach at Miami Beach.

For years scientists have urged a policy of letting nature take its course on the barrier islands. Attempts to rebuild the beach are in vain, they say. No amount of sand kicked in the ocean's face can stop the water from winning in the end. So why not relax and let it happen?

The federal government has begun to listen to this advice. It has gained title to several of the undeveloped islands and intends to leave them undeveloped. It has encouraged state governments and private foundations to do the same. Now, says Herbst, it is time to adopt a policy of discouraging further development on the barrier islands.

To do so would mean swimming against a current that has been running for more than a century and hardly seems to be slackening now. In the 1950s Bogue Banks off the North Carolina coast was wilderness. An absence of hurricanes in the 1960s may have encouraged developers to believe the climate had changed. In any case, Bogue Banks is now heavily built up (SN: 10/11/75, p. 237). In recent years a go-go condominium boom has flattened miles of dunes at Ocean City, Md., and lined the shore with high rises. One of the features of recent development has been

that builders try to get as close to the water as they can. The next hurricane in any of those places is probably going to be a disaster.

A policy of discouraging further development requires some intragovern-mental coordination. There are a lot of federal programs that encourage development, on the barrier islands as well as elsewhere. "Whether it be access to the island, insurance against the expected floods, the creation of dryland out of wetlands, the restoration of eroding beaches, the provision of community services, Federal programs ease many of the inherent physical, economic and psychological drawbacks to barrier island construction,' says Herbst. "We encourage on one front the very thing we are trying to prevent on another.... We must mend our ways." The mending would include making the barrier islands exceptions to the application of a number of federal programs that are eminently sensible elsewhere, such as highway financing, sewer grants, home financing and flood insurance.

But even if the government does adopt a consistent policy of discouraging development, the existing communities on the barrier islands will remain. They represent too large an investment to be abandoned easily. And they will probably continue to shove sand at the ocean.

It doesn't take a hurricane. A winter storm of much lesser intensity washed away much of the beach at Ocean City, Md., leaving the town "flat as a pancake," as its mayor, Harry W. Kelly, told the Washington Star. Immediately, bulldozers were put to work trying to restore the beach, and one of Maryland's senators, Charles McC. Mathias, was busy obtaining federal help for the project. In summer 1978 there may still be sand on the beach at Ocean City, but where will Ocean City's condos be a century from now? Ocean City prides itself on being a devout "family" resort. Apparently it hasn't read its family Bible - the passage in the Gospel that warns against building houses on sand.

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