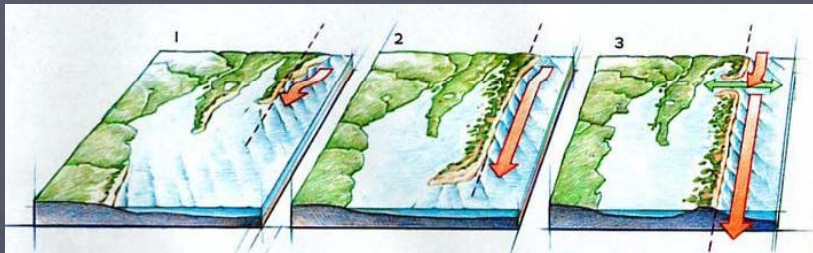


# Long-Term, Barrier Island Processes

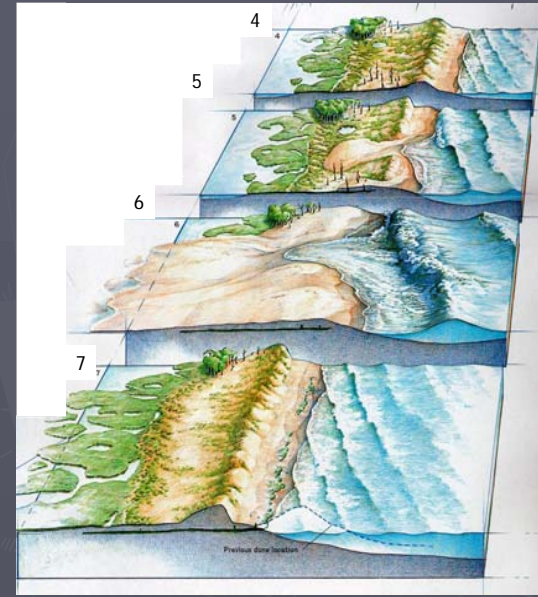
How our barriers and their beaches form:



National Geographic, 1997

1. Mainland spit expands
2. Spit is elongated by longshore transport of sand westward
3. Elongated spit is breached by storm waves, forming an island

## Barriers are Dynamic Systems



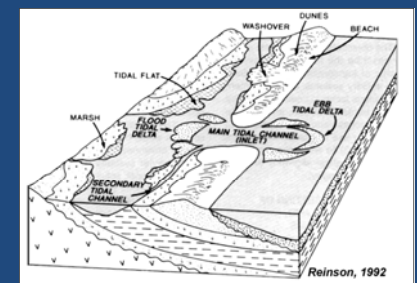
National Geographic, 1997

4. Sediment transported onshore builds up island beaches and dunes
5. Island overwhelmed by storm waves
6. Sediment transported through overwash buries vegetation
7. Island migrates landward



On the Long Island barrier-island system, inlet formation and overwash are important in terms of moving sand landward, forming saltmarsh, and driving barrier island migration.

Interruption of these processes may destabilize the barrier, over time.



Reinson, 1992