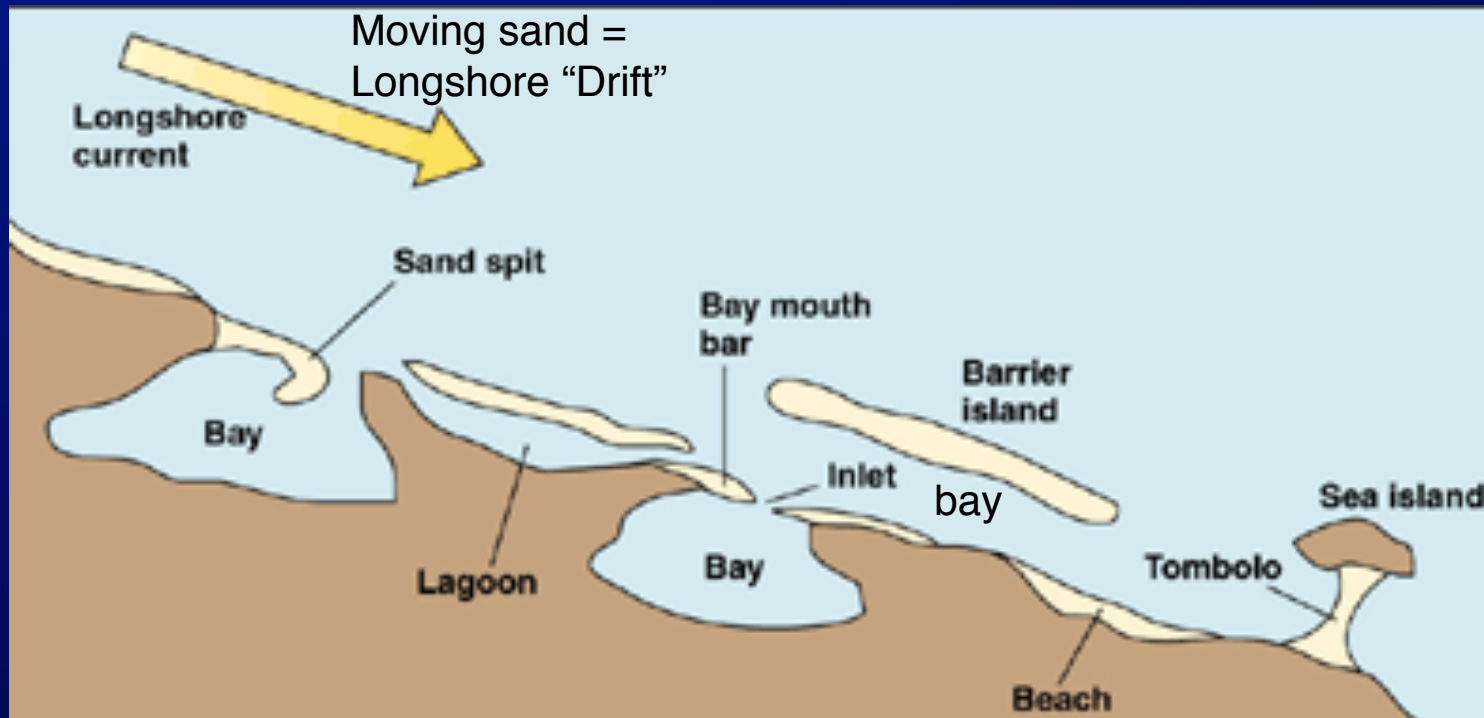


Background: Classification of Coasts

“Secondary” Coasts: Those shaped by marine (non-terrestrial) processes such as **waves**, currents, tides, and/or organisms.

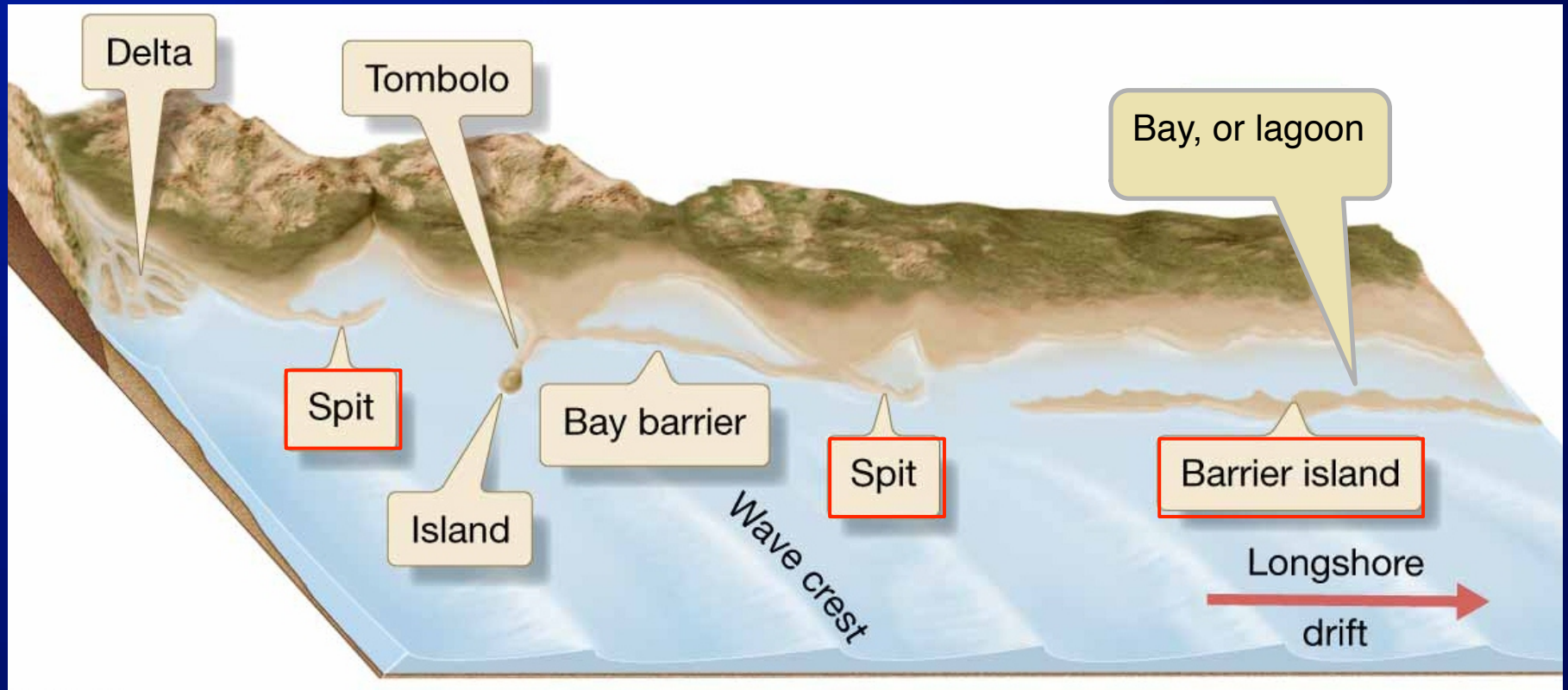
Examples:

- Marine deposition coasts (“barrier coasts”, including **barrier islands**, sand spits, tombolos, baymouth bars, tidal inlets, etc.)



Veg?

Coastal Depositional Features



Barrier spit (BS) – connected to mainland (like Fenwick “Island” – Bethany/OC)
Barrier island (BI) – disconnected from mainland (like Assateague Island)

**A “Barrier” to Oceanic Wave Energy,
Protecting the Mainland**

Barrier Islands:

Holocene phenomenon (<6 ka); tectonically “passive” coasts; abundant shelf sand

Many Mid-Atlantic & Gulf Coast barrier islands



US has ca. 295 extremely dynamic barrier islands spread over 2,700 mi, dissected by *dynamic inlets*, with mixed-salinity (brackish) bays/sounds/lagoons behind them.

- *Maryland and Virginia blessed with ca. 13 BI's spread over 140 miles of coastline.*

Coastal Barriers of the Mid-Atlantic Coast

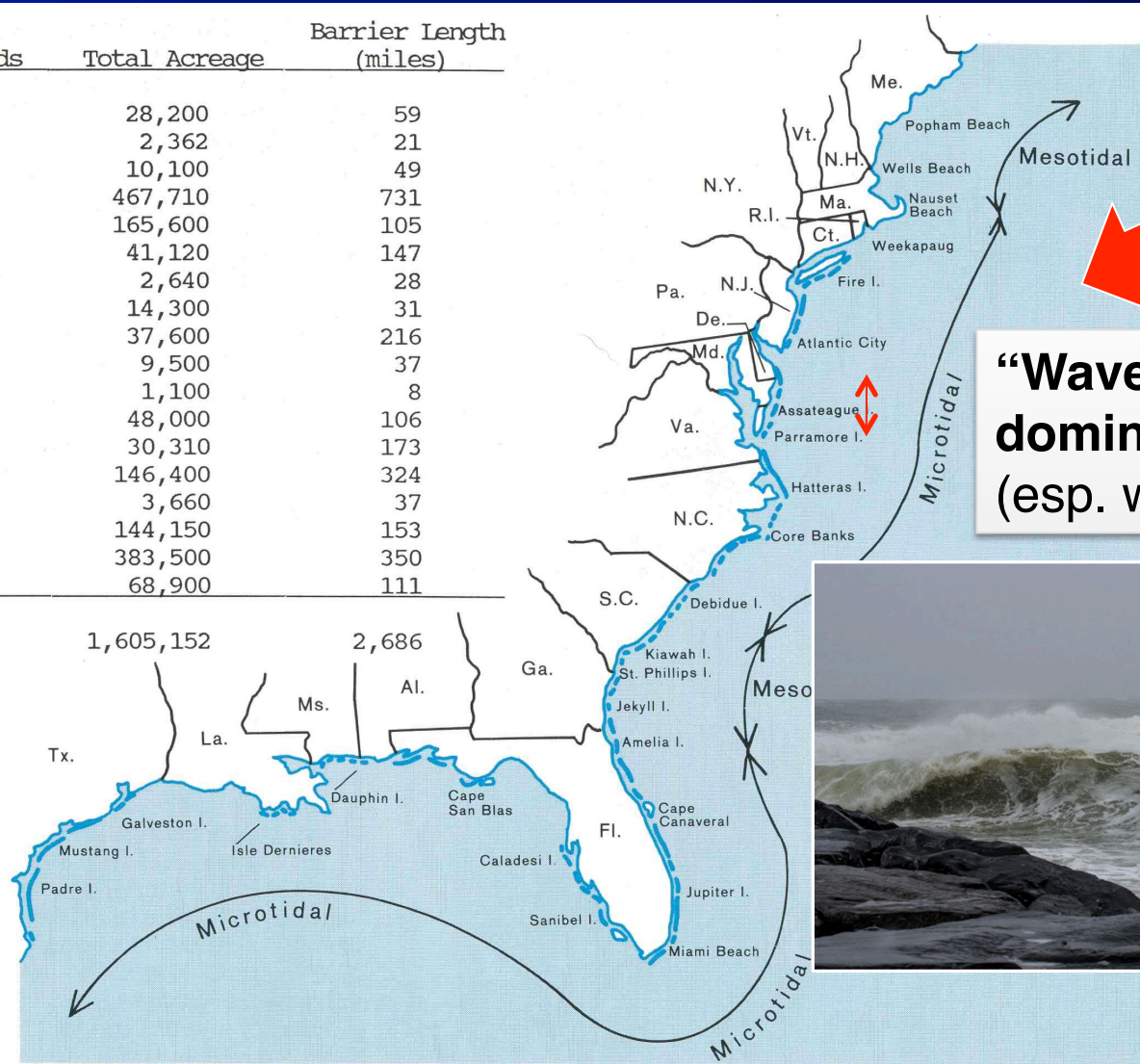
State	Number of Islands	Total Acreage	Barrier Length (miles)
Alabama	5	28,200	59
Connecticut	14	2,362	21
Delaware	2	10,100	49
Florida	80	467,710	731
Georgia	15	165,600	105
Louisiana	18	41,120	147
Maine	9	2,640	28
Maryland	2	14,300	31
Massachusetts	27	37,600	216
Mississippi	5	9,500	37
New Hampshire	2	1,100	8
New Jersey	10	48,000	106
New York	15	30,310	173
North Carolina	23	146,400	324
Rhode Island	6	3,660	37
South Carolina	35	144,150	153
Texas	16	383,500	350
Virginia	11	68,900	111

18 States

295

1,605,152

2,686



“Wave-dominated”
(esp. winter)



Microtidal = < 2 meter tidal range (narrow energy focus, transient inlets)