Population by Coastal Watershed

Watersheds are geographic areas defined by natural hydrology and provide a sensible foundation from which water and coastal resources can be managed. In an attempt to provide population information in geographic units that are useful to coastal managers and planners, NOAA has produced population estimates for coastal watersheds (Estuarine Drainage Areas (EDAs) and Coastal Drainage Areas (CDAs)) of the contiguous United States. Population estimates for coastal watersheds for 1980 were created by determining the Census tract centroids (and their associated population estimates) that fell within each watershed.[5] The same method was applied to 1990 and 2000 population data with the use of Census block groups (National Ocean Service/NOAA, 2000). The land area covered by coastal watersheds and their total population in 2000 are smaller than that of coastal counties by almost 145,000 square miles and 21 million people (not including Alaska and Hawaii).

The total population of coastal watersheds in 2000 was approximately 127 million people or 45 percent of the national population. This is a growth of 24 million people since 1980. The 10 most populated coastal watersheds in 2000 along with their population densities are shown in Figure 20.

Ventura County, CA;©Rich Reid / Colors of Nature.com

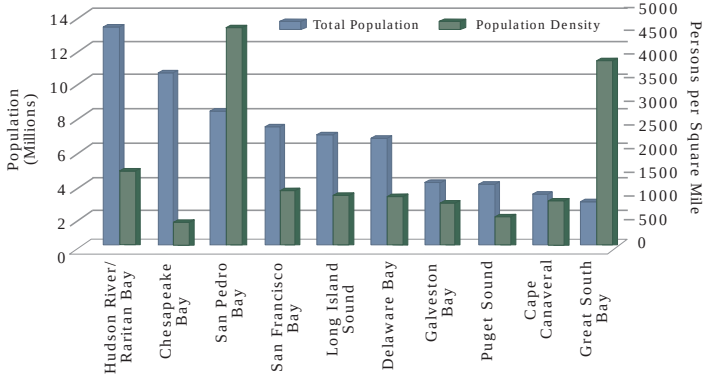

FIGURE 20. Ten most populated coastal watersheds with their associated population density for 2000.

Source: National Ocean Service/NOAA, and U.S. Census Bureau

Five of the 10 most populated watersheds are located from southern Virginia to New England. The Hudson River/Raritan Bay and Chesapeake Bay watersheds were the most populated overall, with over 13 million and 10 million people, respectively. However, San Pedro Bay was the most densely populated coastal watershed with 4,634 persons per square mile.

Population change from 1980 to 2000 was greatest in the Chesapeake Bay, which grew by over two million. It was closely followed by San Francisco Bay, which grew by 1.8 million, and San Pedro Bay, which grew by 1.7 million. Areas of the country where growth was heaviest during this period are shown in Figure 21. Of the 10 most populated coastal watersheds, the greatest percent population changes are found in the Southeast and Pacific regions. The populations in St. Johns River, FL, Cape Canaveral, FL, and Santa Ana, CA, all grew by over 70 percent.

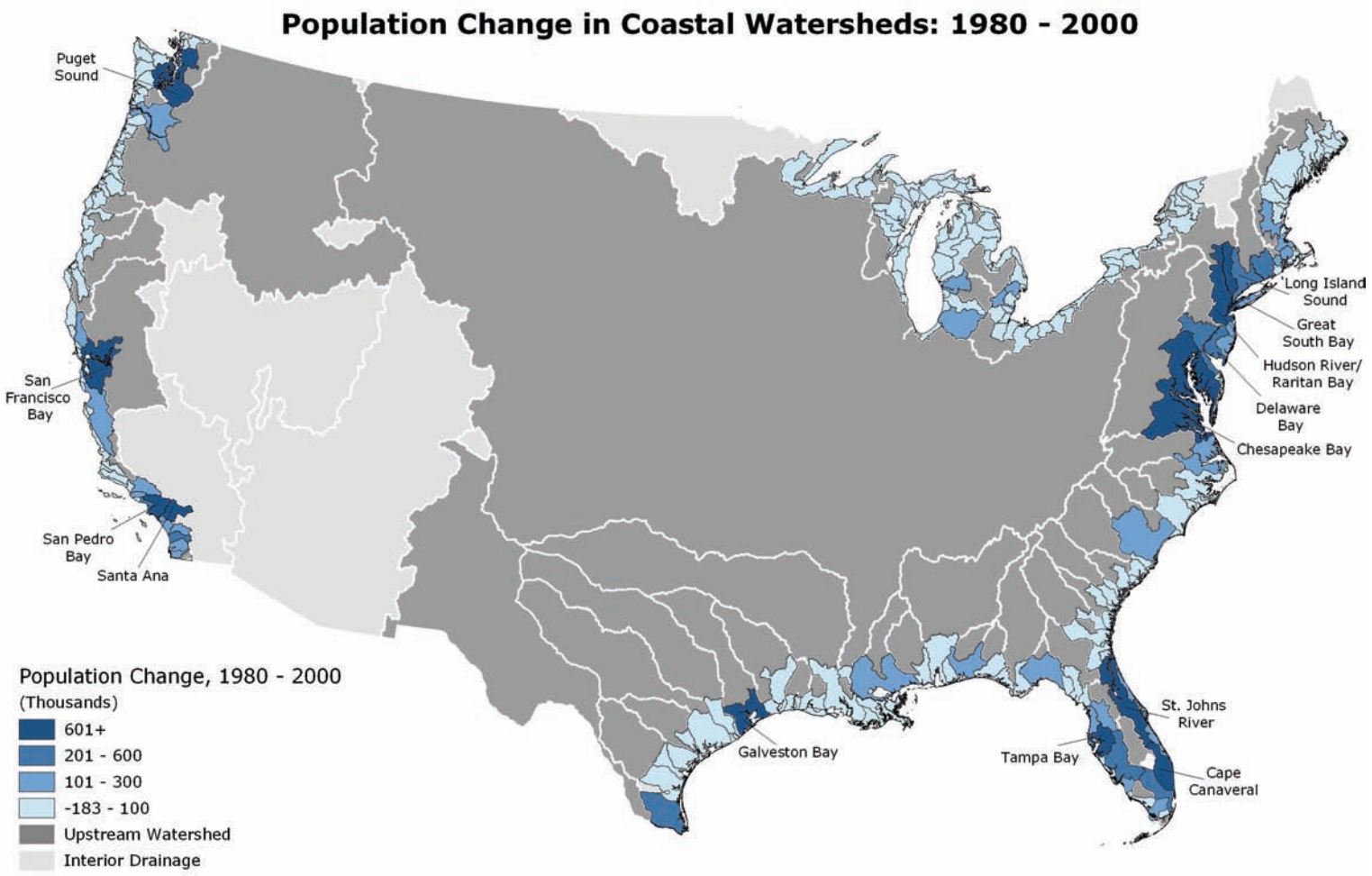

FIGURE 21. Population change in the coastal watersheds: 1980-2000

Source: National Ocean Service/NOAA, and U.S. Census Bureau