

Conclusion

Although population increase and coastal development give rise to numerous economic benefits, they also may result in the loss of critical habitat, green space, and biodiversity. Public policymakers and coastal managers are confronted with the daily task of finding a balance between benefiting from economic growth while mitigating the effects of this growth on coastal environments. This task is becoming ever more challenging as the coastal population continues to grow in a limited space.

Population estimates and projections should be used cautiously as uncertainty and limitations are inherent to the data. However, these data provide critical information for coastal decision makers about recent and projected demographic trends along the coast. Characteristics such as age and income data provide information about who is living on the coast and why. Planning for and managing increased demands on infrastructure and resources are becoming increasingly complex and require analyses of demographic data.

As the coastal population continues to grow (at the same rate as the rest of the nation), attention is brought to the methods by which the coastal environment is managed and studied. A change in paradigm is taking place, moving away from management based on political boundaries and toward an ecosystem-based management approach to population growth, urban sprawl, and their interactions with the sensitive coastal environment. Recently, the U.S. Commission on Ocean Policy (2004) highlighted the need to manage coastal resources in the framework of the watersheds that affect them, ultimately recognizing the crucial connection between coastal and upland areas and the effects of a growing population.

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⁴ Total number of vehicles for coastal counties was quantified using the “1-car per household,” “2-car per household,” and “3-car per household” fields in the 2000 Census. Numbers of households were multiplied by the number of cars they contained and totaled (households with more than three cars were not used in this calculation).

⁵ A Census Tract is a statistical subdivision of a county or county equivalent area containing between 1,500 and 8,000 persons. A Census block group is an aggregation of Census blocks (the smallest Census geographic unit) containing between 600 and 3,000 persons. In the standard hierarchy of Census geographic entities, block groups lie just below Census tracts (U.S. Census Bureau, 2000). For further information on Census geographies, visit <http://www.census.gov/geo/www/reference.html>.

Endnotes

¹ Hydrologic units are classified at four levels: regions, sub-regions, accounting units, and cataloging units. Cataloging units are the smallest hydrologic unit in this hierarchy (U.S. Geologic Survey, 1987). There are 2,150 cataloging units in the United States, with an average cataloging unit size of 703 square miles (Virginia Department of Conservation and Recreation, 2003).

² Principal ports are defined by the U.S. Army Corps of Engineers (2002). The five-year period of study was 1998 to 2002.

³ Water consumption represents “that part of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment” (U.S. Census Bureau, 2001).