

Population Grows Slowly, but Dispersed Development Intensifies Impact

Casco Bay Estuary
PARTNERSHIP

The region's population grew over the past decade at a slow but steady pace. Between 1996 and 2010, the watershed's forested cover decreased by 16.2 square miles (declining to 65 percent of the watershed's land area) and developed areas increased by 8.53 square miles (reaching 10 percent of the watershed's land area).

Even Slow Growth Can Transform Rural Landscapes

The Casco Bay watershed is among the most densely developed in Maine, representing just 3 percent of the state's total land mass but holding nearly 18 percent of its population. As urbanization pushes outward into formerly rural areas, it fragments the landscape, leading to habitat loss and water-quality degradation as well as increased impervious surfaces. The watershed acts like a funnel, channeling water and waterborne pollution downstream into rivers, streams, lakes, and the Bay—causing potential long-term health effects on these waters.

Some Communities See Significant Growth

The region's population continues to grow at a slow but steady pace, according to the most recent US Census data. (US Census methodology does not allow for deriving accurate population counts by watershed boundaries so statistics cited here reflect populations for entire municipalities, even though some of the 48 communities have very little acreage within the watershed.)

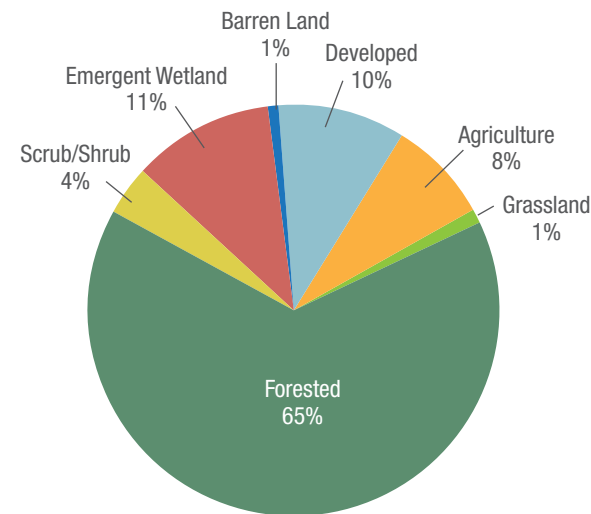
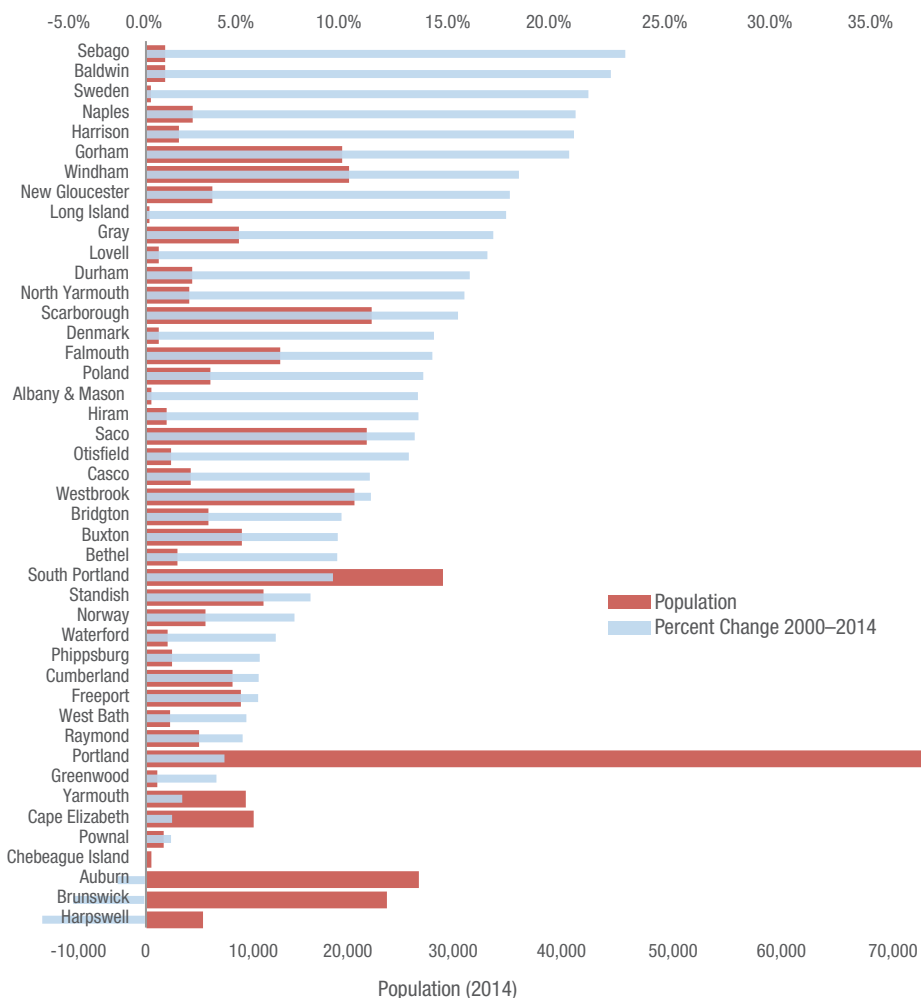
Between 2000 and 2010, the total population of communities that contribute to the watershed grew by 20,871, representing a 6.1 percent increase (from 340,574 in 2000 to 361,445 in 2010). Municipalities that contribute to the (federally designated) Urbanized Area saw 67.6 percent of that growth (14,117 people), urban core communities (Portland, South Portland, Westbrook, and Auburn) saw 23.1 percent of the population increase (except Auburn, which lost population), while 44.5 percent of growth occurred in suburbanized communities. Rural towns accounted for a larger share of total growth (32.4 percent) than might be expected based on their share of the population.



Peter Taylor

By 2014, the 48 watershed municipalities had an estimated population of 367,969, a 1.8 percent increase in four years. The population growth rate within watershed communities exceeds that of the State as a whole. In 2000, these communities held 26.7 percent of Maine's population. By 2014, that figure had grown to an estimated 27.7 percent.

Large suburban communities close to Portland (e.g., Gorham, Windham, Scarborough, and South Portland) are seeing robust population increases, with population increases exceeding 10 percent from 2000 to 2014. Portland's population also began to increase again, with an estimated 3.8 percent increase between 2010 and 2014.



2010 Casco Bay Watershed Land Cover

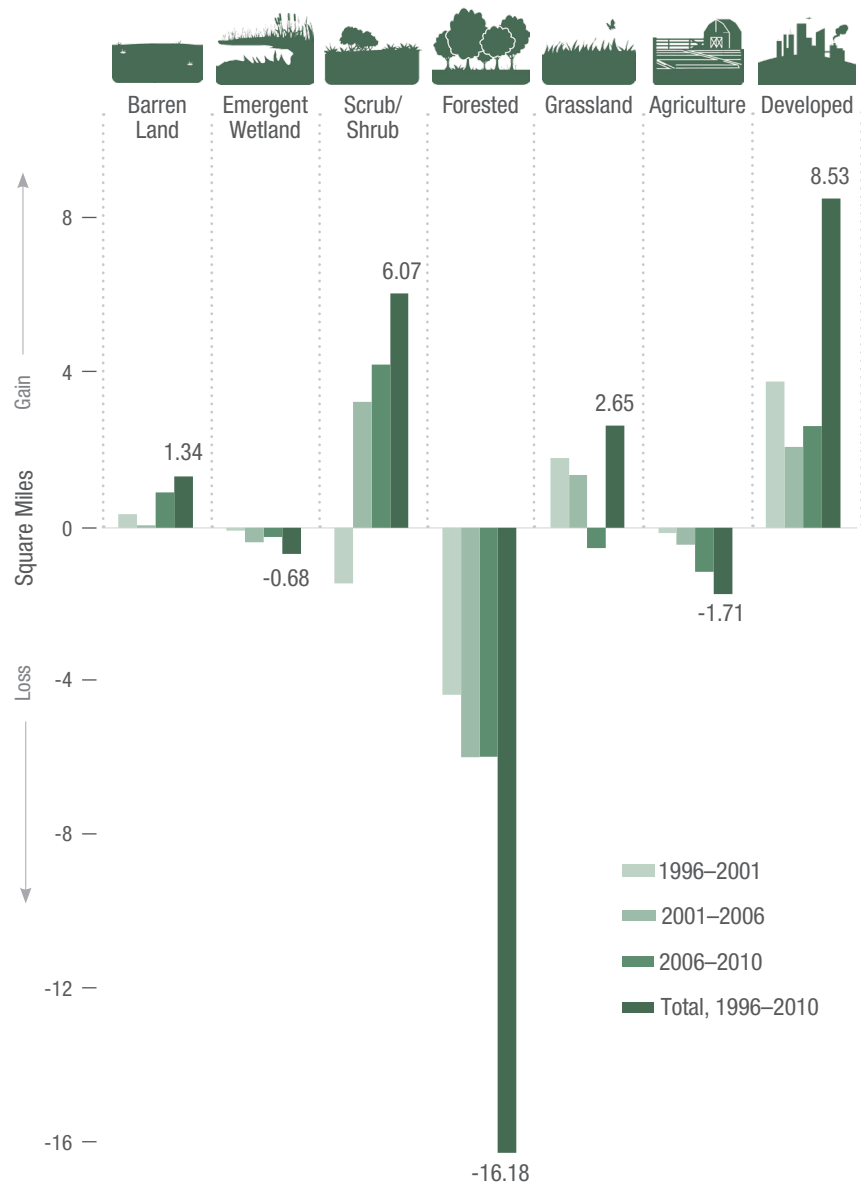
Modest Declines in Forests and Farmlands

NOAA launched the Coastal Change Analysis Program in 1995 to develop a standardized database on land cover and habitat change along the nation's coast. C-CAP has analyzed satellite imagery to classify land cover at 30-meter pixels in 1996, 2001, 2006, and 2010.

The most recent C-CAP data show that if open water and submerged lands are excluded, the watershed remains primarily covered by forest (65 percent) with wetlands representing 11 percent and agricultural land 8 percent. The footprint of developed areas rose from 77.1 square miles in 1996 to 85.6 square miles in 2010, an increase of 8.5 square miles (11 percent growth), while the forested area in that time period decreased by 16.2 square miles. Agricultural land cover also declined, by 1.7 square miles, with the loss appearing to accelerate between 2006 and 2010. Areas of scrub/shrub, barren land, and grassland all increased over that time.

The rapid loss of forest cover was noted by a U.S. Forest Service report that ranked the Casco Bay watershed (using a different watershed boundary than used in this report) first among 33 Eastern and Midwestern watersheds studied for risk of development to private forests near drinking water supply areas (Barnes *et al.*, 2009).

Changes in Land Cover of Casco Bay Watershed (1996–2010)

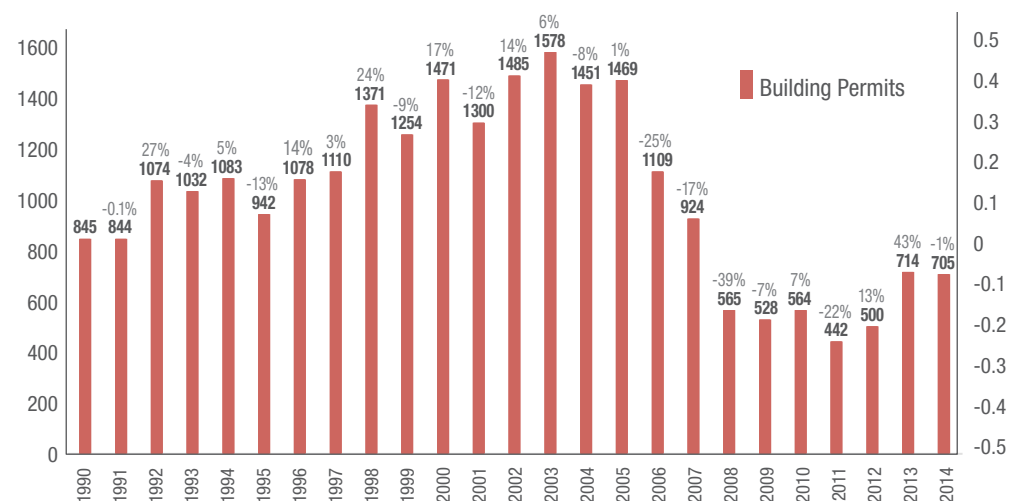


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Residential building permits can be used as a proximate indicator of development. Although the number of building permit applications dropped sharply beginning in 2006, reaching a low in 2011 following the Great Recession, permit applications are increasing again.

For additional references and information, please view the Bibliography of the full *State of the Bay 2015* report at www.cascobayestuary.org/state-of-the-bay-2015.

Total Residential Building Permits, Cumberland County



Data: 30-meter pixel land cover analysis by NOAA C-CAP (2010)
This graph does not include open water and submerged tidal lands data.

Data: U.S. Census Bureau