3.8.2. NEW CASTLE COUNTY, DE

Population Density	1246 per sq. mi.
Form of Government	City
Category	Suburban Bayfront
CRS Rating	Not Participating

Median Household	Median Per Capita				2000-2010 Pop Growth			% Seasonal
Income	Income	Occ	Population	Rate	% White	% Hispanic	Minority	Housing
62050	31439	64.1	538479	0.74	65.5	9%	38.4%	0.3

Adaptations	Status	Incorpora tes CC	Туре	Impact	Standard	Costs	Funding Source
FEMA Cooperative Mapping Project	Completed	No	Procedural	Mandatory	Unique	Very Low (< \$1,000)	FEMA
Freeboard - 1.5 Ft	Implemented	No	Accommodati on	Mandatory	Unique	Very Low (< \$1,000)	NA
Hazardous Materials Prohibited in Floodplain	Implemented	No	Prevention	Mandatory	Unique	Low (< \$10,000)	NA
Floodplain Setbacks / Prohibits new subdivisions in floodplain	Implemented	No	Prevention	Mandatory	Above Required	Very Low (< \$1,000)	NA

CONTACTS

New Castle County Department of Land Use 87 Reads Way New Castle, DE 19720 (302) 395-5400

Michael Clar, Asst. County Engineer John Gysling, PE

Gerald Kaufmann, Univ. of Del., Water Resources Agency, Institute of Public Administration

POPULATION AND GEOGRAPHY

New Castle County, called the first county in the first state, encompasses the northern third of the State of Delaware. Its northern reaches include the cities of Wilmington and New Castle, and the southern half is largely rural and sparsely settled. Although the county is the smallest of the three Deleware counties, it has the highest population. The county is considered a part of the 6-million-person Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Area and the Philadelphia-Camden-Vineland, PA-NJ-DE-MD Combined Statistical Area. I-95 and Amtrak's northeast corridor pass through the county. Delaware is known for its favorable corporate taxes and corporation laws, particularly in the banking sector. Many of these industries are clustered in Newark and Wilmington. The largest employer is home-town chemical company DuPont, followed by MBNA Bank. Hospitals and the University of Delaware are also large employers. Taxes and cost of living are generally low.

The northern boundary of New Castle County is the State of Pennsylvania. To the west, the county borders Maryland and to the south, the County of Kent. The Delaware River and the Delaware Bay separate the county from New Jersey to the east.

The county has a total area of 493.51 square miles of which 426.27 square miles is land and 67.24 square miles is water. Unlike all of its northern neighbors, the state of Delaware does not have all of its land divided into municipalities. As such, the county is an important governing body and has primary control over the use of a significant amount of unincorporated land. The county has its own extensive planning staff, comprehensive plan, and land use controls.

New Castle County has a population of just under 540,000 and is growing rapidly, with a growth rate of 7.23% from 2000 to 2010. Its diverse population is 38.4% minority. Median per capita income is just over \$31,000 and median household income is \$62,050. The county is a year-round community with very little seasonal housing and a mixed housing stock of rentals and owner-occupied residences.

COASTAL ISSUES

Coastal risks in New Castle are similar to those in the rest of the Northeast and include tropical and nor'easter coastal storms, inland flooding, wind, and shoreline erosion.

New Castle County has many types of land uses and various coastal hazard risks. Flooding is a significant problem in the county, with losses in the tens of millions of dollars annually. (New Castle County, Del., 2012, Comprehensive Plan) New Castle County's Comprehensive Plan focuses extensively on inland stormwater flooding, which the county has made significant strides in addressing through technology and regulatory tools. Much of New Castle's Delaware Bay shoreline is developed. The northern reaches, in particular, have extensive heavy industry along the immediate banks. This presents unique challenges to coastal adaptation. The County has considered this and modified requirements for the redevelopment of brownfields in floodplains. The City of New Castle, addressed separately in this report, has unique vulnerabilities as it is protected by a series of 300-year-old dykes that are in disrepair.

ADAPTATIONS

FEMA Cooperative Mapping

New Castle County sought and received a FEMA grant (passed through State of Delaware) to update the floodplain maps for the Red Clay, White Clay, and Mill Creeks. The FEMA floodplain maps for the entire County were updated on January 17, 2007.

Floodplain Setbacks

The county adopted the groundbreaking Unified Development Code in 1997 to establish zoning setback and use regulations. The county describes the code as providing "100% protection of floodplains, wetlands, riparian buffers and Class A wellhead water resource protection areas, as well as protection of various other natural resources which indirectly affect the quality of our water" (New Castle County, Del., Stormwater System). The code was further amended in 2003 by the Environment First Ordinance to further protect natural resources and allow flexibility in subdivision design to promote more environmentally sensitive development. The goal was to not allow degradation of water quality, to encourage open space linkages, and to improve maintenance requirements for homeowners associations.

The code prohibits development in any floodplain with few exceptions that include site design standards to minimize debris trapping and 18 inches of freeboard. It only permits field crops, orchards, pastures, ball fields, fishing areas, natural areas, and trails. Uses that are allowed pursuant to an Art. 10 permit include horticultural nurseries, golf courses, day camps, playgrounds, pools, and playing courts.

The code also defines Riparian Buffer Areas (RBA) as 100 feet on either side of perennial or intermittent streams, lakes, and tidal wetlands. Revegetation is required when development occurs in and around riparian buffer areas.

These provisions apply to new construction only. Reconstruction or repair of non-conforming structures is permitted, pursuant to specific standards specified in the code, including elevation of the structure 18 inches above base flood. (New Castle County, Del., Code, Sec. 40.10.313, 316, 317). The code also provides an exception for brownfield sites to encourage redevelopment of contaminated land.

Environment First is a series of requirements added to the UDC in 2003 that requires low-impact development; 50% open space required. With the addition of these new requirements, the county has a comprehensive stormwater management system.

Hazardous Materials Prohibited in Floodplain

The county has strong language in its flood law prohibiting the storage of hazardous materials in the floodplain.

"The storage or processing of materials within the floodplain that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal, or plant life, is prohibited. Storage of other material or equipment may be allowed

if not subject to major damage by floods, if firmly anchored to prevent flotation, or if readily removable from the area within the time available after a flood warning" (Sec. 40.10. 311 (C))

It also prohibits the "maintenance, use, or sale of substances listed in 40 CFR 116..." in "floodplains, floodways, wellhead class A, B or C, the Cockeysville Formation, drainageways, recharge areas, steep slopes, critical natural areas, wetlands, riparian buffers and sinkholes, unless such substances are used in the process of public water supply and treatment and sewer treatment facilities" (Sec. 40.10.600 (B)) The prohibition includes all petroleum products. The only exception is for replacement of existing storage facilities, which are further restricted to only those upgrades required by law.