

CHAPTER 12: TOWN OF BLOXOM

TOWN PROFILE

Bloxom is located west of the central spine of the Eastern Shore in Accomack County. The Town was established in the early 1800s as a farming community. The railroad was constructed in 1884 and the Town experienced significant growth. By the early 1900s, Bloxom had become a major produce shipping point on the Eastern Shore. As farm labor needs decreased in the 1930s, the population of Bloxom began to decline. By 1952, the railroad had ceased passenger service and the Town's high school had closed. The Town was incorporated in 1951 and has evolved primarily into a residential community (*Town of Bloxom Comprehensive Plan, 2000*).

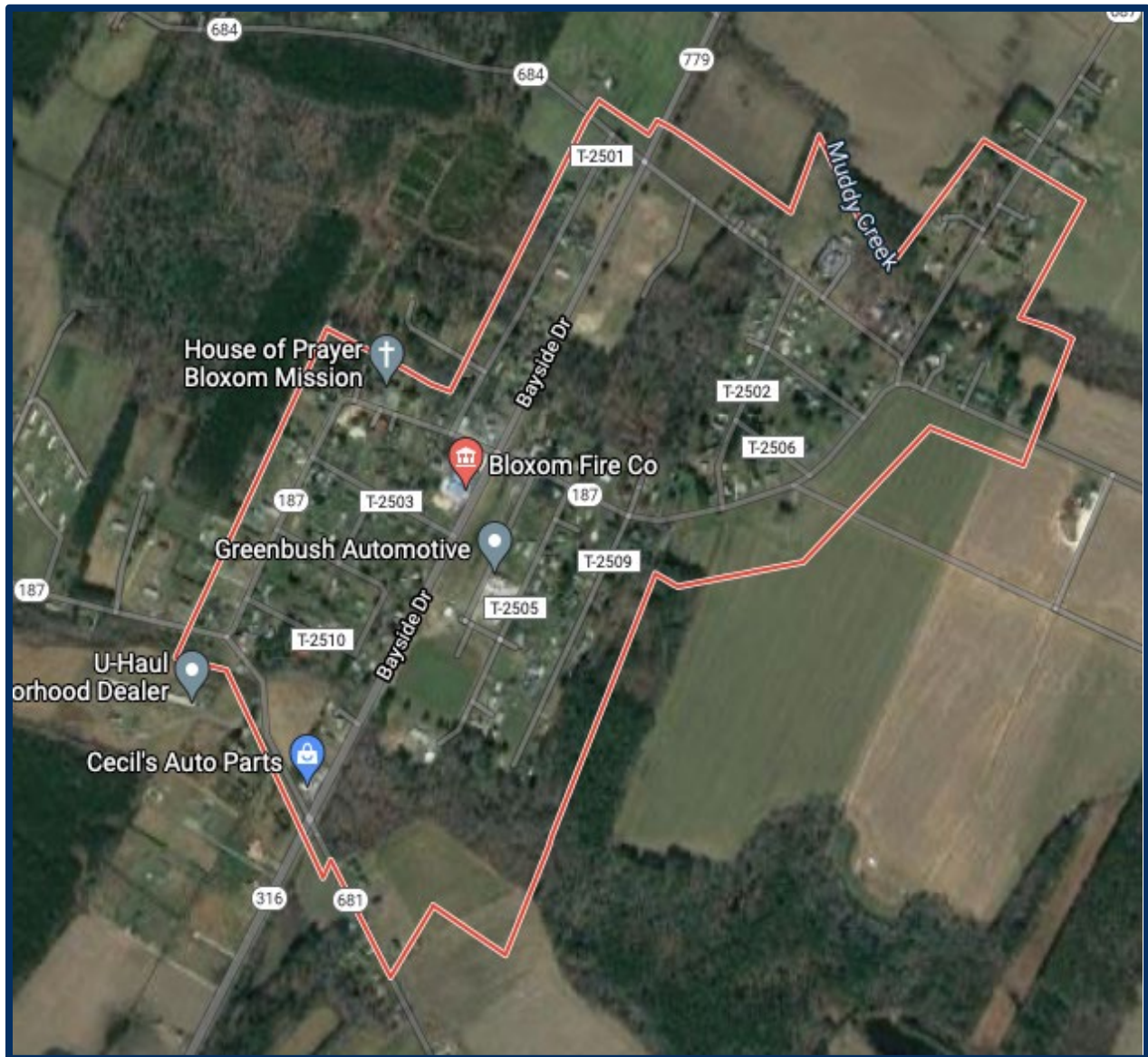


Figure 1: Bloxom Context and Google Map

SOCIO-ECONOMIC

Part of assessing hazards in relation to their risk is understanding the people affected. Not all people are affected equally. Some are affected by the factors that relate to their ability to understand risks posed by hazards, and some by their ability to remove themselves from harm's way. Those factors include age, mobility, income and the languages individuals speak and the languages in which individuals are able to access information.

DEMOGRAPHICS

In 2014, the community reached the highest population since 1980 at 422 (ACS, 2009-2014) with the minimum of 357 in 1990 (*Town of Bloxom Comprehensive Plan*, 2000). According to the American Community Survey five-year estimates, the 2019 population is at 392, which signifies a slight decrease since the previous estimates; however, the population has remained fairly stable over the last several decades. The median age for residents in Bloxom in 2019 was 39.3, which is just slightly over a year more than the national median age (ACS 2014-2019); however, the Town believes that number should be higher, as there are very few minors residing in the Town and over 20% of the population is over the age of 65 (ACS 2019; Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

In 2016, former Mayor Callander pointed out that Table 1 does not reflect the increase in the Haitian population in the Town, which he estimates to be approximately 1%, and the Town's Haitian and Latino year-round population is increasing as well (Personal communications, Mayor Callander, January 25, 2016). This is now reflective according to ACS 2019 estimates and is important, as different language (Spanish, French and/or Creole) outreach materials need to increasingly be made available. Most households in Bloxom have at least one non-English speaking resident and the number of individuals who do not speak English should be about 5-10% higher than what is represented in Table 1 (Personal communications, Police Chief Tittermary, March 16, 2021).

Town representatives also pointed out that the estimated median household income level indicated in Table 1 is most likely too high (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021). Typically, the lower a household income the less able they are to mitigate hazards by installing, updating, or renovating their properties.

Table 1: Bloxom Demographic Information

| | 2020 | 2014** | 2013*** | 2010**** | 2000***** |
|-------------------------|-----------|----------|----------|----------|-----------|
| Population | 387 | 422 | 406 | 387 | 395 |
| Median Age | 39.3* | 35.5 | 35.0 | 36.4 | 37.7 |
| Disability | 78* | 15 | 14 | NA | NA |
| Income | | | | | |
| Median Household Income | \$48,438* | \$39,091 | \$38,068 | \$37,188 | \$25,000 |
| Poverty Level | 13.8%* | 10.9% | 14.5% | 13.3% | NA |
| Language | | | | | |
| Only English | 78.9%* | 91.7% | 86.7% | 92.8% | 89.4% |
| Other | 21.1%* | 8.3% | 13.3% | 7.2% | 10.6% |
| Spanish | 16.8%* | 8.3% | 13.3% | 7.2% | 10.6% |
| Ind-Euro | 2.7%* | 0.0% | 0.0% | 0.0% | 0.0% |
| Asian | 0.0%* | 0.0% | 0.0% | 0.0% | 0.0% |
| Other | 1.6%* | 0.0% | 0.0% | 0.0% | 0.0% |

Source: U.S. Census 2020, *ACS, 2014-2019, **Annual Estimates of the Residential Population: 2010-2014, ***ACS, 2009-2013, ****U.S. Census 2010, *****U.S. Census 2000

WORKFORCE

Employment patterns are important to examine for two reasons. It can help to identify concentrations of people for hazard information dissemination or hazard rescue and evacuation. It can also identify where disruptions in employment and income might occur in the aftermath of a disaster.

The town is primarily a residential community with the majority of employed residents commuting out of Town to work. NASA, Accomack County Public Schools, the seafood industry, and Tyson and Perdue poultry processing plants are several major employers located near Bloxom (*Town of Bloxom Comprehensive Plan*, 2000); these are reflected in Table 2 below, primarily in the manufacturing and educational industries. The Retail industry employs the highest percentage of the workforce in Bloxom at 21.6% (ACS 2014-2019). Companies like Tyson and Perdue often have policies in place to mitigate the economic impact for both the company and the employees; however, long-term closures would have strong negative impacts on the Town. Town representatives believe the total number of the Civilian Employed Population is too low and about 75-80% of residents in Bloxom are employed either full- or part-time (Personal communications, Chief Tittermary, March 16, 2021).

Table 2: Bloxom Local Workforce Industry

| Civilian Employed Population | | | | | | | | | | |
|---|-------|---------|--------|---------|--------|---------|--------|---------|---------|---------|
| Industry | 2019* | | 2014** | | 2012** | | 2010** | | 2000*** | |
| | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| Agriculture, forestry, fishing/hunting, or mining | 3 | 1.6% | 7 | 3.7% | 25 | 10.3% | 12 | 4.3% | 15 | 8.8% |
| Construction | 14 | 7.4% | 7 | 3.7% | 16 | 6.6% | 14 | 5.0% | 17 | 10.0% |
| Manufacturing | 30 | 15.8% | 23 | 12.2% | 27 | 11.1% | 10 | 3.6% | 17 | 10.0% |
| Wholesale trade | 1 | 0.5% | 20 | 10.6% | 18 | 7.4% | 24 | 8.6% | 9 | 5.3% |
| Retail trade | 41 | 21.6% | 36 | 19.1% | 28 | 11.5% | 48 | 17.1% | 34 | 20.0% |
| Transportation and warehousing, and utilities | 14 | 7.4% | 13 | 6.9% | 14 | 5.8% | 21 | 7.5% | 9 | 5.3% |
| Information | 5 | 2.6% | 0 | 0.0% | 0 | 0.0% | 19 | 6.8% | 2 | 1.2% |
| Finance, insurance, real estate, and rentals | 5 | 2.6% | 0 | 0.0% | 0 | 0.0% | 6 | 2.1% | 14 | 8.2% |
| Professional, scientific, waste management | 7 | 3.7% | 1 | 0.5% | 4 | 1.6% | 9 | 3.2% | 8 | 4.7% |
| Educational, health care, social services | 26 | 13.7% | 19 | 10.1% | 43 | 17.7% | 71 | 25.4% | 15 | 8.8% |
| Arts, entertainment, recreation, food | 22 | 11.6% | 13 | 6.9% | 26 | 10.7% | 40 | 14.3% | 11 | 6.5% |
| Public Administration | 17 | 9.0% | 27 | 14.4% | 19 | 7.8% | 12 | 4.3% | 13 | 7.6% |
| Other | 5 | 2.6% | 22 | 11.7% | 23 | 9.5% | 13 | 4.6% | 6 | 3.5% |
| TOTAL CIVILIAN EMPLOYED POPULATION | 190 | - | 188 | - | 243 | - | 280 | - | 170 | - |

Source: *ACS, 2014-2019, **ACS, 2010-2014, ***U.S. Census, 2000

BUSINESSES

Business data provides basic information used in projecting potential economic losses from business and employment disruption, along with wage losses to employees. It can also serve as an indicator of community recovery resources. Finally, it can help to prioritize restoration of utility and infrastructure functions following a high-intensity hazard.

Town of Bloxom

Bloxom has stayed relatively stable with the small number of businesses located in the town, keeping 10 establishments between 2009 and 2013. As shown in Table 3 below, the Town has seen some growth in employees. Knowing the number of people employed here aids rescue workers in the estimate of the dispersal of persons within the Town. The Town estimates they give out only 7-8 business licenses per year (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021). Some of the businesses in Bloxom include an auto shop, a convenience store/gas station, a thrift store, and a cellular shop.

The auto shop in Town experiences regular storm water flooding. The shop is located near the main ditch in Town where the railroad tracks have previously washed out due to flooding (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

Table 3: Bloxom Business Establishment Types

| Industry Code Description | Total Establishments | | | |
|--|----------------------|-------|-------|-------|
| | 2021 | 2013* | 2011* | 2009* |
| Construction | 1 | 2 | 1 | 2 |
| Wholesale Trade | 1 | 2 | 2 | 2 |
| Retail Trade | 2 | 1 | 2 | 2 |
| Transportation and warehousing | 1 | 0 | 0 | 1 |
| Professional, Scientific, and Technical Services | - | 1 | 1 | 1 |
| Health Care and Social Assistance | - | 2 | 1 | 1 |
| Other Services (Except Public Admin) | 2 | 2 | 1 | 1 |
| Total, All Establishments | 7-8 | 10 | 10 | 10 |
| Total Employees | - | 44 | 30 | 29 |

Source: Personal Communications, Jeanette Eby, Town Clerk, *Census Zip Code Business Patterns, 2013, 2011, 2009

BUILT INFRASTRUCTURE

[§201.6\(d\)\(3\)](#) Housing units, community facilities, and transportation are all important factors when considering hazard resiliency. They provide the social services necessary during hazardous scenarios, safe cover for those wanting to stay, and a way to leave towards safety.

HOUSING UNITS

Knowledge of a community's housing base contributes to hazard and vulnerability analysis by identifying how many homes are at risk.

Bloxom is predominantly residential. According to the American Community Survey five-year estimates in 2019, there are 188 total housing units in Bloxom; however, the Town Clerk believes the number from 2010 is more accurate, at 184 (Personal communications, Jeanette Eby, March 16, 2021). Out of these housing units, 31 were vacant in 2019 (ACS, 2014-2019); however, Chief Tittermary estimates the number of vacant units is way too high and the number is actually closer to 5 (Personal communications, March 16, 2021). The majority of homes in Bloxom are in good condition, with the exception of some areas on the west side of Town (*Town of Bloxom Comprehensive Plan*, 2000).

Table 4: Bloxom Housing

| | 2019* | 2014** | 2010*** | 2000**** |
|-----------------------------|-----------|----------|---------|----------|
| Total Housing Units | 188 | 198 | 184 | 175 |
| Occupied | 157 | 170 | 156 | 160 |
| Vacant | 31 | 28 | 28 | 15 |
| Owner-Occupied | 99 | 118 | 112 | 119 |
| Renter-Occupied | 58 | 52 | 44 | 41 |
| Median Housing Value | \$102,500 | \$91,800 | NA | NA |

Source: *ACS, 2014-2019, **ACS, 2009-2014, ***U.S. Census 2010, ****U.S. Census 2000

TRANSPORTATION

Bloxom is served by a sufficient road system. Route 316 and 770 provide north-south access for the Town, and Route 187 provides east-west access. U.S. Route 13 is located two miles east of the Town and provides regional access (*Town of Bloxom Comprehensive Plan*, 2000). The former Bay Coast Railroad runs through the Town of Bloxom, although the rail is no longer in use today. There are ongoing plans to convert the abandoned railroad into a rail-to-trail as a multi-use path.

Vehicles available to households is one indicator of a household's ability to evacuate when necessary. American Community Survey five-year estimates indicate that about three households in Bloxom are without a single vehicle, which was confirmed by Police Chief Tittermary (Personal communications, March 16, 2021). For those in need of public transportation, Star Transit serves the Town on their silver, orange, gold, and blue lines and would assist in the event of an evacuation. Shore Ride also offers trips up and down the Eastern Shore.

Table 5: Bloxom Vehicles Available per Household

| Vehicles Available | 2019* | 2014** | 2010** | 2000*** |
|--------------------|-------|--------|--------|---------|
| None | 3 | 1 | 9 | 13 |
| One | 52 | 72 | 94 | 61 |
| Two | 62 | 66 | 74 | 52 |
| Three or more | 40 | 31 | 59 | 28 |

Source: *ACS, 2014-2019, **ACS, 2009-2014, ***U.S. Census 2000

COMMERCIAL AREAS

The majority of commercial land is located along Bayside Drive and Shoremain Drive. Commercial land uses have previously included a florist shop, a grocery store, a go-cart racetrack, a used furniture store, a nursery, and a deli, but now are limited to the Mini-Mart, two auto shops, a thrift store, post office, and a hair stylist. The furniture business was destroyed by a fire in March of 2009, the go-cart track is now a soccer field, and the others have closed and not relocated (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

COMMUNITY FACILITIES

Community facilities are facilities required to support the services and functions provided by the Town government or in coordination with other public and private entities. These facilities enhance the overall quality of life for the Town and its citizens. It's important to note what facilities are available in case of a hazard, and it's important to make an inventory of facilities that could be affected by a hazard. Bloxom has a Police Department, a Town Hall located within the Police Department, a Fire and Rescue Department, and a Post Office. The Town of Bloxom does

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not have its own Public Works Department, but rather, relies on the County and private facilities in regards to water, drainage and road systems, parks, and boating facilities.

PUBLIC SAFETY

Police protection is provided by the Bloxom Police Department which currently has one car and one full-time police officer. The Bloxom Volunteer Fire Company provides fire and EMS and is equipped with two full-time employees, several volunteers, four bays, two engines, one tanker, one brush truck, and three ambulances (Personal communications, Tyler Marshall, Fire Medic, 3/16/2021). All of these are capable of sourcing water from the refill pond behind the Firehouse. The Town Firehouse is equipped with a generator to supply back-up power in the event power is lost during a storm event and also houses two HazMat vehicles.



Figure 2: Bloxom Fire and Rescue Department. Photo by Ashley Mills

Use of the Bloxom Town Hall pictured to the left in Figure 3 has been discontinued and the Town has been operating out of the Police Department building, converting one bay into the Town Council chambers (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

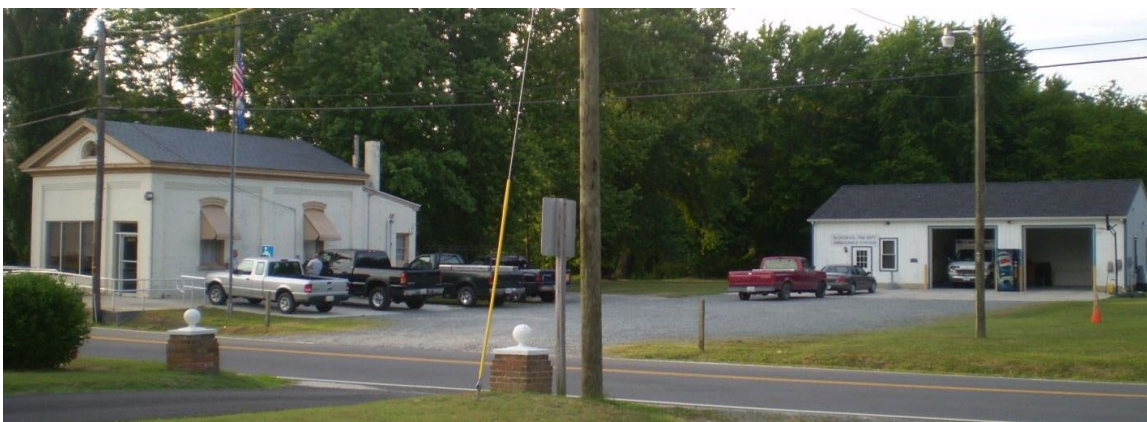


Figure 3: Bloxom Town Hall (Forefront) and Police Department (Behind).

WATER SUPPLY & SEWAGE DISPOSAL

Bloxom residents rely on private wells for potable water supply. In the past several years, there have been about 8 wells drilled to a deeper aquifer level than the existing wells, which is due to the thought that the water level could be lowering. See the Natural Environment, Groundwater section for more information.

Bloxom does not have a public sanitary sewer system, so sewage disposal is by septic systems. In addition, residential water supplies can be threatened by failing septic systems, which the majority of residences operate for waste disposal. Under the Chesapeake Bay Preservation Act, septic tanks are required to have pump-out service at least every five years. They are currently in the process of being updated (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

SOLID WASTE DISPOSAL

The Town contracts David Disposal for weekly household disposal of solid waste; however, businesses are responsible for their own solid waste disposal and can take their refuse to an Accomack County convenience center. The closest convenience centers to Bloxom are located at Fisher's Corner to the south and Makemie Park to the north (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

POWER AND COMMUNICATIONS INFRASTRUCTURE

The Town is serviced by multiple substations, none of which are located within Town limits, and thus are less likely to lose electric services. A Broadband tower and Neubeam were installed at the Town Hall/Police Station, which will improve information access options for residents. There are three separate providers offering service in Town (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

PARKS AND RECREATION

Although there are no Town-owned parks, the Town has a 99-year lease for the Town Square area from Canonic Atlantic, Co. and uses this area along the railroad for the annual Bloxom Family Fun Festival, which took place last in 2018 due to flooding of the property and the COVID-19 pandemic. The Bloxom Town Square is also used for car shows, and the Town intends to host a circus in the near future (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

STORM WATER DRAINAGE

In 2010, the Town petitioned the County to have the drainage ditches dredged. They had to have notarized permission from every homeowner along the drainage, then the appropriate permits from the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) were obtained. The ditches were finally serviced in 2012, with payment being made by Accomack County. Since that time, there has been very little problem with drainage and the roads no longer have rushing water during and following rain events. A nor'easter in November of 2013 and Hurricane Matthew in September of 2016 are the main two events that caused some minimal flooding in the recent years (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021). It is crucial for drainage ditches to be frequently and properly maintained in order to continue mitigating stormwater flooding.

SCHOOLS

There are no schools or daycares within the Town of Bloxom.

NATURAL ENVIRONMENT

Bloxom lies within the Chesapeake Bay watershed and is drained by Muddy Creek and Guilford Church Branch, which drain the northern and southern parts of the Town, respectively. The elevation ranges from 15-feet to 35-feet with an average slope of 1%. This results in flooding due to poor drainage. Adding to the drainage problems are the soil types in Bloxom being largely hydric (*Town of Bloxom Comprehensive Plan, 2000*).

LAND USE LAND COVER

Bloxom is mainly composed of low-density residential land uses. There is minimal agricultural land use and a small portion of wetlands within the Town. These non-tidal wetlands are located on the banks of Muddy Creek and Guildford Church Branch. There is also an area of non-tidal wetlands located to the east of Route 316. Wetlands are important to protect due to assisting with flood control and serving as groundwater discharge and recharge areas (*Town of Bloxom Comprehensive Plan, 2000*). In the past, Bloxom has been limited in its development due to most of the soils being unsuitable for septic tank filter fields (*Town of Bloxom Comprehensive Plan, 2000*); however, new technologies in alternative (above ground) septic systems may help to change this.

GROUNDWATER

The Town does not provide public water services, so all residents rely on individual private wells for their potable water supply. Most of the Town's water supply is withdrawn from the upper Yorktown aquifer. The Town lies slightly west of the important spine recharge area. Bloxom is located in Wellhead Protection Area C – Perdue Area. Major water withdrawers in this area are Perdue, the towns of Onancock and Parksley, and the Riverside Shore Rehabilitation Center (*Town of Bloxom Comprehensive Plan, 2000*), now known as Saber Shore Health and Rehabilitation Center. There have been a few times when the water has been too low and the wells have “sucked up sand”, which most likely spurred the drilling of deeper wells in the last (ten) years (Personal communications, Mayor Callander, January 25, 2016).

HAZARD PREPAREDNESS & COMMUNITY CAPABILITIES

PREVIOUS HAZARD MITIGATION PLANS

§201.6(b)(3), §201.6(c)(3), §201.6(d)(3) The Town of Bloxom has participated in the hazard mitigation planning process since 2011. Bloxom has not updated their comprehensive plan since 2000.

Table 6: Town of Bloxom Hazard Mitigation Resources

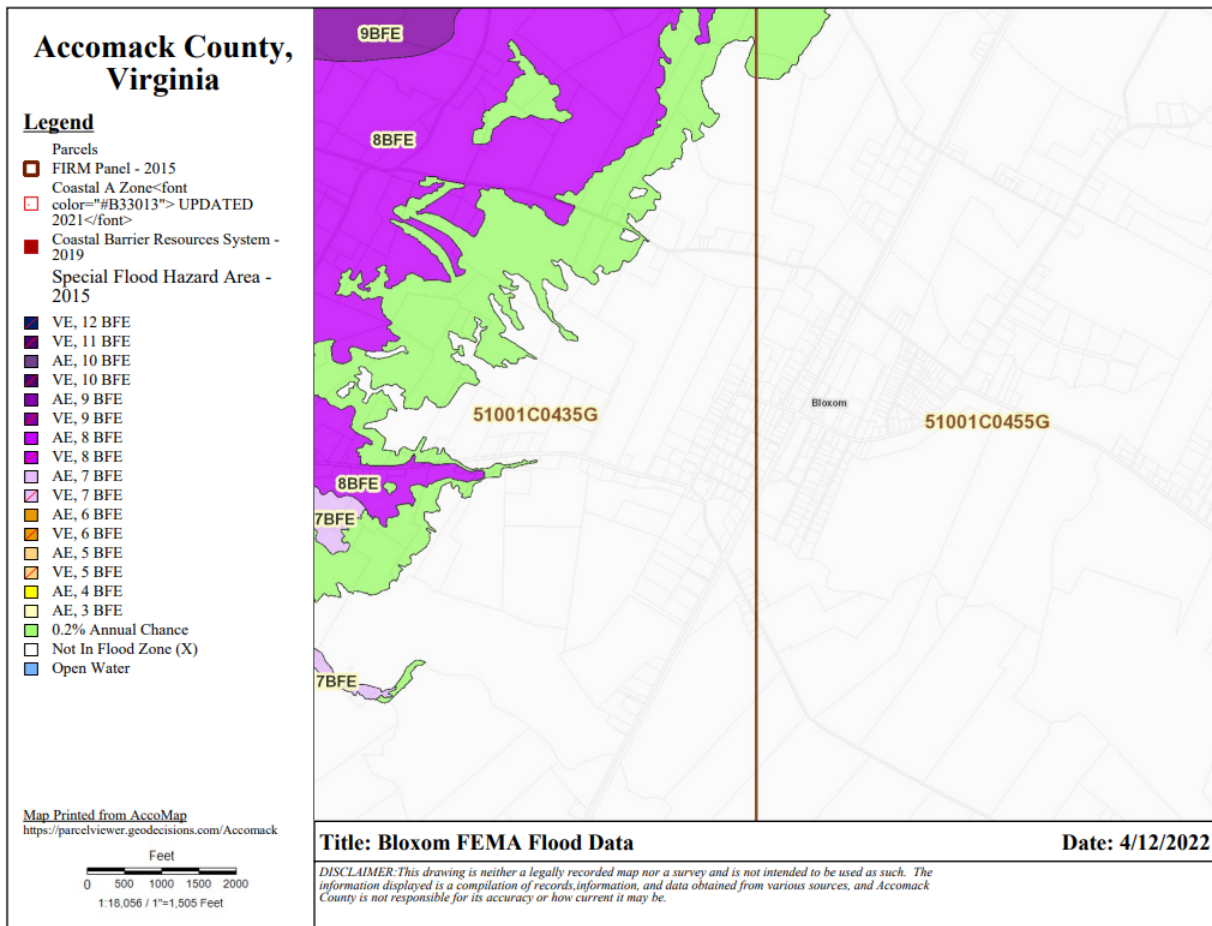
| | Ordinances, Plans, & Publications | | | | | | | | | | | | | | Resources, Committees | | | |
|-----------|-----------------------------------|--------------------|------|------------------------|--------------------|------------------------------|-------------------------|---|--------------------------|----------------------------|---------------------------------|-----------------------------|-------------------------------|---|------------------------|-------------------------------|----------------------------------|------------------------------------|
| Authority | Building Code | Chesapeake Bay Act | SWMP | Hazard Mitigation Plan | Comprehensive Plan | Zoning/Subdivision Ordinance | Storm Water Regulations | Transportation Infrastructure Inundation Vulnerability Report | All Hazards Preparedness | Emergency Operations Plans | Mutual Aid Agreements/Documents | Neighborhood Emergency Help | Virginia Hurricane Evacuation | Oil & HazMat Response Plan; HazMat Commodity Flow | Ground Water Committee | Navigable Waterways Committee | Climate Adaptation Working Group | ES Disaster Preparedness Coalition |
| Local | | | | | * | * | | | | | | | | | | | | |
| County | * | | * | | | | | | | | | | | | | | | |
| Regional | | | | * | | | | * | * | * | | | | * | * | * | * | |
| State | | * | | | | | * | | | | | | * | | | | | |
| Federal | | * | | | | | | | | | | | | | | | | |

NATIONAL FLOOD INSURANCE PROGRAM & HAZARD MITIGATION GRANT PROGRAM

NFIP

§201.6(c)(2)(ii), §201.6(c)(3)(ii), §201.6(d)(3) Although there are no policies in the Town, Bloxom joined the NFIP on October 16, 2012. There is no identified Special Flood Hazard Area in the Town. More information on repetitive loss properties, NFIP policies and claims, and the CRS program can be found in Chapter 6: Coastal Flooding and Chapter 9: The Region.

Figure 4: Town of Bloxom FIRM Base Flood Elevation (BFE)



HMGP

The Town of Bloxom has not participated in the HMGP.

HAZARD PROFILE

§201.6(c)(2)(i), §201.6(c)(2)(ii), §201.6(d)(3) Storm water flooding has the greatest and most frequent impact on the Town.

PANDEMIC RESPONSE AND READINESS

The Town of Bloxom responded to the COVID-19 pandemic in several ways. The Town was able to provide new equipment for their police station in order to increase response and preparedness and used CARES Act and other federal funds to purchase personal protective equipment (PPE), such as masks, hand sanitizers, disinfectants, cleaning products, and more. The Town also purchased plexiglass and rearranged the Town Hall meeting room in order to abide by social distancing guidelines. Virtual technology was utilized to continue Town meetings and other business when unable to meet in-person (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

HIGH WIND

No parts of Town lie in the wind-borne debris hazard area near the shoreline, but lies in the area that can have 84-mph sustained winds during a 1%-annual-chance storm event and in the 110-120-mph design wind zone (Accomack County Building Code). Because its elevation is slightly higher than the surrounding areas, it is slightly more susceptible to higher winds. Although there is no record of tornadoes affecting the Town, there is always a possibility of these unpredictable storms and residents should be knowledgeable about the best course of action to take should conditions demand so. Most of the residential areas, particularly east of the railroad tracks, are older and have mature trees in and around the homes. During a high-wind event, falling branches or trees may damage some structures. A new firehouse was constructed in 2011 and was designed to withstand gusts of at least 110-mph.

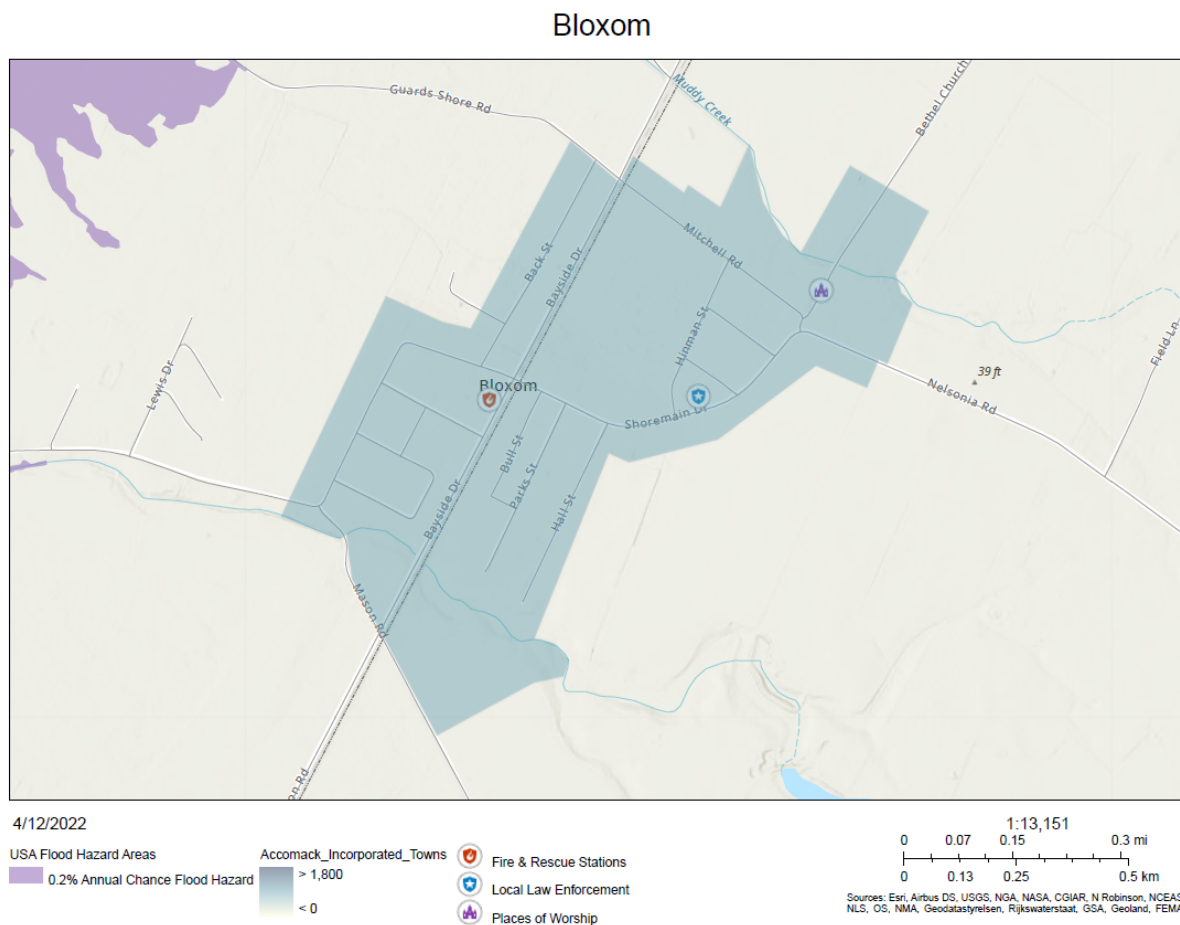
COASTAL EROSION

No areas of the Town are at immediate risk of coastal erosion.

COASTAL FLOODING

No portions of the Town lie within a Special Flood Hazard Area. The Town is within the X zone, which is the 500-year floodplain, and is not likely to be affected by a 100-year flood; however, it is possible for the Town to be affected by a flood of that magnitude due to flat topography, an elevated water table, and poor drainage. Several small commercial areas are located in the center of the Town (*Town of Bloxom Comprehensive Plan*, 2000).

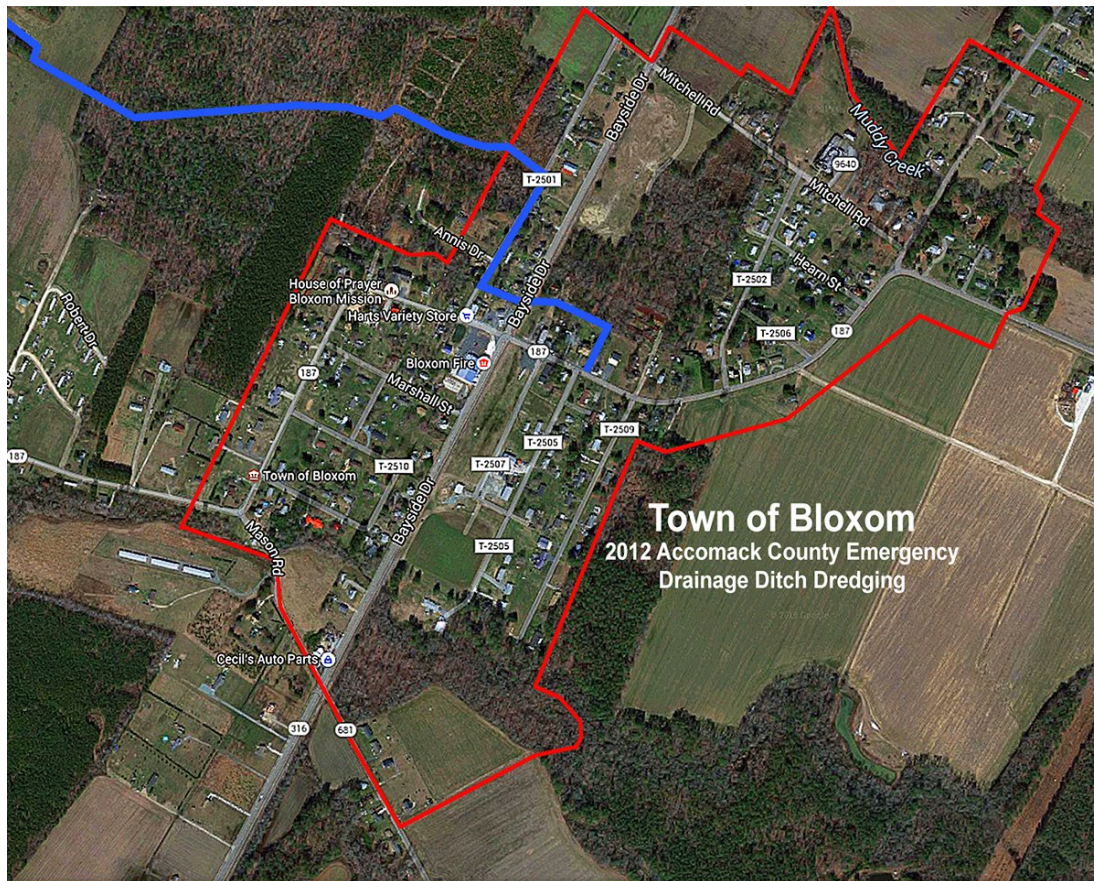
Figure 5: Town of Bloxom Flood Hazards to Infrastructure



STORM WATER FLOODING

Storm water flooding has traditionally had the greatest and most frequent impact on the Town. The Town lies on unsuitable soil for drainage and retains rainwater. During heavy rains, the Town's roads historically flooded and floodwaters have rushed down the main street in Town causing damage to property (*Town of Bloxom Comprehensive Plan*, 2000); however, this has not happened since the 2012 ditch maintenance described in the Storm Water Drainage section. The location of the emergency ditch construction efforts is indicated by the blue line in Figure 5, which leads first to Guilford and Muddy Creeks and ultimately to the Beasley Bay and then Chesapeake Bays. The Town does not finance the annual maintenance of ditches along roadways and relies on Accomack County and the Virginia Department of Transportation for ditch maintenance (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

Figure 6: Town of Bloxom Emergency Ditch Dredging (Town boundary is red, Ditch is blue). Photo Provided by Former Mayor Callander



In specific instances, storm water has accumulated and caused flooding. Bloxom received a flood of this nature on September 3, 2003, just prior to Hurricane Isabel. A heavy rain occurred and water flowed to the railroad tracks, which acted as a dam, back flooding several homes. Figure 6 reveals some of the damage incurred. Although the storm is called the Great Bloxom Flood of 2003, several areas were flooded including Bloxom, Clam, Guilford, Hallwood, and Nelsonia. Although there were no estimates of the probability of the storm event, the entire 12-hour period, including the initial storms in the afternoon, would put this above the 100-year storm event level, which on the Eastern Shore is 7 to 8 inches in 12 hours. Persons who remember the Bloxom storm recall that the larger storm's rainfall occurred over approximately 2 hours, making this storm above the 100-year storm event. The 2-hour, 100-year storm on the Eastern Shore is between 4.5 and 5 inches of rain.



Figure 7: Greenhouse Flooded in the Town of Bloxom on September 3, 2003. Photo by Franklin Kreisl

In 2006, the railroad was actually washed out at Bayside Road close to the Mason Road intersection. Luckily, since 2012, there has been very little flooding, although the ditches require maintenance on a regular basis in order to maintain this state. The area between Bull and Bayside at Marshall Street still floods where the old railroad station and grainery were located (Former Mayor Callander, personal communications, January 25, 2016). Due to lingering standing water from Hurricane Matthew, the Bloxom Family Fun Festival scheduled for the first weekend of October had to be canceled (see Figure 7). None of the ditches in the Town have year-round standing water.

Having reduced the chances of stormwater flooding reduces the risk to residents for well contamination, mosquito-borne illnesses, and property damages.



Figure 8: Town Square Flooding October 1, 2016

HAZARDS OF LOCAL SIGNIFICANCE

GROUND WATER CONTAMINATION

Bloxom faces a threat of ground water contamination from several major facilities in the vicinity. Major ground water withdrawers in the area are Perdue, Tyson Foods, and the Towns of Onancock and Parksley. The large withdrawals of ground water increase the possibility of water quality problems, including well interference, salt water intrusion, and deterioration of water quality. A liquid propane gas (LPG) storage facility with a capacity of 90,000-gallons was located on the east side of the Town. Town residents were concerned about the safety of these tanks and expressed concerns about similar facilities being located within the Town. The Town requested removal of the facility and now does not allow similar facilities to exist within the Town (*Town of Bloxom Comprehensive Plan, 2000*; Verified; Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

The residential wells in the Town are also potentially at risk of contamination from aboveground and underground petroleum storage tanks (AST and UST). Over 25% of homes in the Town are heated by oil (ACS, 2019), which is stored in these tanks. If not properly maintained, ASTs and USTs can pose a significant water quality risk to the Town. In addition, residential water supplies can also be threatened by failing septic systems, which the majority of residences operate for waste disposal. Bloxom Town Officials indicated that several residences on Back Street use lift stations that drain to a common drain field located on the outskirts of the Town. If the integrity of the septic drain pipe is compromised in the future, it could pose a significant health risk to residential water supplies and surface water quality (Personal communications, Jeanette Eby, Town Clerk, March 16, 2021).

SNOW AND ICE STORMS

Winter snow and ice storms have historically had adverse impacts on the Town, including damage to trees and power lines and making roads impassable. A winter storm struck Bloxom in late December of 2010 creating blizzard-like whiteout conditions and extensive snow drift that blocked roadways and compromised accessibility to and from the Town. Power losses were experienced and Town businesses were closed for days, creating potentially hazardous situations for residents and adverse impacts on the local economy.

The Town Firehouse is equipped with a generator to supply back-up power in the event power is lost during a storm event and the Town has expressed interest in a generator for the Town Hall/Police Station (Personal communications, Jeanette Eby, Town Clerk, 3/16/2021).

DROUGHT

Droughts have historically impacted the agricultural areas in and around the Town of Bloxom and creates conditions susceptible to fires.

HEAT

Agricultural lands and employees in processing plants may be impacted by excessive heat. Employees may face hazardous conditions in processing plant facilities, construction businesses, farming agricultural lands, and other jobs requiring employees to work outside for an extended period of time.

CRITICAL FACILITIES

The following table lists the critical facilities and their relative importance to the Town.

Table 7: Town of Bloxom Critical Facilities

| Facility | HMP 2006 | HMP 2011 | HMP 2016 | HMP 2021 | Hazards | No of People Affected | Loss potential | Relocation Potential | Retrofit Potential |
|--|-------------|-------------|-------------|-------------|------------------------------|-----------------------------|---------------------|-------------------------|-----------------------|
| Town-Owned Facilities | | | | | | | | | |
| Bloxom Town Hall and Police Station | - | X | X | X | Stormwater Flooding, Wind | 392+ | Major Disruption | No | Yes |
| Other Facilities (Not Town-Owned) | | | | | | | | | |
| Bloxom Fire and Rescue Department | - | X | X | X | Stormwater Flooding, Wind | 32,742+ | Devastating | No | Yes |
| Bloxom Post Office | - | X | X | X | Stormwater Flooding, Wind | 600+ | Major Disruption | Yes | Yes |
| Bloxom Gas Station | - | - | X | X | Stormwater Flooding, Wind | 392+ | Inconvenience | No | Yes |
| Bloxom Town Square | - | - | X | X | Stormwater Flooding, Wind | 600+ | Inconvenience | No | Yes |

FINDINGS

1. The hazards expected to have the greatest impact on the Town are stormwater flooding and high-wind events, which have been experienced throughout the Town's history. Other hazards facing the Town are groundwater contamination, ice storms, drought, tornadoes, and mosquito-borne disease.
2. Although no part of the Town lies within any flood zone and there are no flood policies in the Town, representatives have expressed interest in joining the NFIP so that residents may obtain flood insurance in case of severe storm water flooding.
3. Emergency maintenance and ditching in 2012 along with ongoing maintenance has alleviated the majority of stormwater flooding in the Town; however, if regular maintenance does not continue, severe stormwater flooding will occur. Some ditches in Town are currently in need of maintenance.
4. Older construction and mature trees in residential areas increase risk from damages from wind and snow events, as branches are likely to come down causing secondary wind/snow damages and power outages.