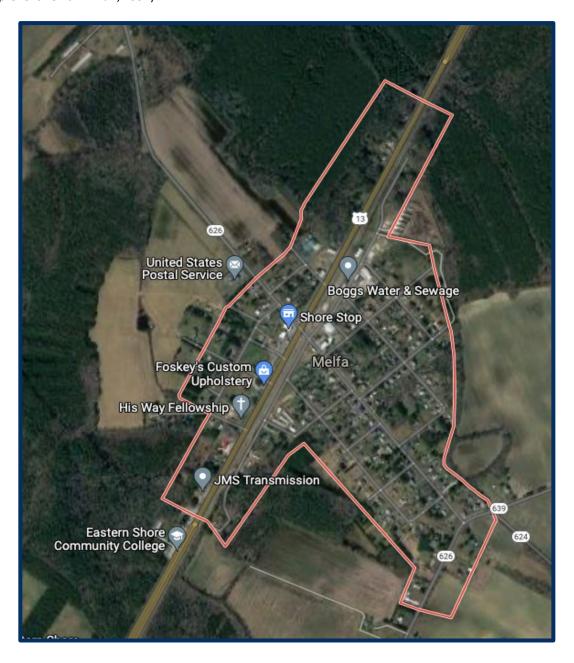
# TOWN OF MELFA

### **TOWN PROFILE**

The Town of Melfa encompasses 165 acres along the south-central spine of Accomack County (Figure 1). Melfa developed around a railroad station in 1884. In the early 1900s Melfa was a site of industries, including a canning factory, bottling company, three sawmills, two dairies, a barrel factory, and two hatcheries. Presently, Melfa is largely residential. The Town became incorporated in 1951 with the purchase of a fire engine (*Town of Melfa Comprehensive Town Plan*, 1997).



**Melfa Content 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**

American Community Survey (ACS) five-year estimates for 2019 show a population decline in the Town of Melfa; however, this is believed to be an underestimate and the population is likely closer to the 2010 Census figures displayed in Table 1 (Personal communications, Mayor Charles Wilbur, June 8, 2021). ACS data also shows a steady increase in the median age, which is currently about 17 years higher than the national median age. An older population may need additional assistance in the event of a hazard. The majority of residents speak English and would be able to access information about potential hazards or other safety information.

**Table 1: Melfa Demographic Information** 

	2019*	2014**	2013***	2010****	2000****
Population	320	411	383	408	450
Median Age	55.1	44.9	48.3	43.0	38.0
Disability	38	NA	12	NA	NA
Income					
Median Household	\$46,250	NA	\$38,684	\$34,097	\$37,361
Income					
Poverty Level	12.5%	NA	15.4%	29.2%	NA
Language					
Only English	96.8%	100%	100%	96.1%	94.2%
Other	3.2%	0.0%	0.0%	3.9%	5.8%
Spanish	1.3%	0.0%	0.0%	1.6%	4.4%
Indo-Euro	1.9%	0.0%	0.0%	2.3%	1.3%
Asian	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.0%

Source: \*ACS, 2014-2019, \*\*Annual Estimates of the Residential Population: 2010-2014, \*\*\*ACS, 2009-2013, \*\*\*\*US Census 2010, \*\*\*\*\*US Census 2000

### **WORK FORCE**

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

Melfa is primarily a residential community, where the majority of employed residents commute to work outside of Town. According to Table 2, the majority of the workforce (34.1%) in Melfa are in the education and health care services industry, which is likely due to the Eastern Shore Community College being located just outside of Town limits and Riverside Shore Memorial Hospital in the nearby Town of Onancock.

Another industry that dominates the area is manufacturing, which is most likely made up of poultry processing positions at Perdue Farms and Tyson Foods. These companies often have policies in place to mitigate the economic

### Eastern Shore of Virginia Hazard Mitigation Plan

impact for both the company and the employees; however, long-term closures would have strong negative impacts on the Town. There would be a 'domino effect' from such a closure, as employees in that industry wouldn't have spending dollars for rent, local shops, nor family necessities, and other dependent agricultural businesses would be at a loss as well.

The number of the total civilian employed population has greatly decreased in 2019 according to the American Community Survey five-year estimates. This number is likely not accurate, as Town officials state there is no large population retiring or not working (Personal communications, Mayor Charles Wilbur, June 8, 2021). This decrease in the civilian employed population is likely due to the decrease of the total population (Table 1) that was also deemed inaccurate by the Town Mayor.

Table 2: Melfa Local Workforce Industry

Civilian Employed Population												
Industry	20	19*	20	14**	20	12**	20	10**	2000***			
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent		
Agriculture, forestry, fishing/hunting, or mining	13	7.1%	25	10.2%	31	12.8%	4	1.8%	3	1.3%		
Construction	11	6.0%	7	2.8%	20	8.2%	15	6.9%	14	6.0%		
Manufacturing	12	6.6%	19	7.7%	12	4.9%	19	8.7%	32	13.7%		
Wholesale trade	13	7.1%	13	5.3%	16	6.6%	0	0.0%	16	6.9%		
Retail trade	17	9.3%	28	11.4%	25	10.3%	43	19.7%	43	18.5%		
Transportation and warehousing, and utilities	10	5.5%	8	3.3%	13	5.3%	18	8.3%	10	4.3%		
Information	2	1.1%	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
Finance, insurance, real estate, and rentals	2	1.1%	9	3.7%	5	2.1%	17	7.8%	8	3.4%		
Professional, scientific, waste management	12	6.6%	21	8.5%	5	2.1%	13	6.0%	5	2.1%		
Educational and health care services	62	34.1%	54	22.0%	69	28.4%	69	31.7%	47	20.2%		
Arts, entertainment, recreation, food	10	5.5%	22	8.9%	10	4.1%	8	3.7%	17	7.3%		
Public Admin	13	7.1%	22	8.9%	14	5.8%	10	4.6%	27	11.6%		
Other	5	2.7%	18	7.3%	23	9.5%	2	0.9%	11	4.7%		
TOTAL CIVILIAN EMPLOYED POPULATION	182	-	246	-	243	-	218	-	233	-		

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. They can also serve as an indicator of community recovery resources. Finally, data can help to prioritize restoration of utility and infrastructure functions following a high-intensity hazard.

Table 3 presents business information for the entire zip code (23410) area, not just the incorporated Town. The Town itself only has approximately 15 establishments (Personal communications, Mayor Charles Wilbur, June 8, 2021) which include a hair salon, Boggs Water & Sewage, an antique store, tax services, a furniture store, a construction company, storage units, contractors, Shore Stop, and CGR Firearms.

Table 3: Melfa Business Establishment Types

Industry Code Description	Total Establishments							
	2021*	2014	2012	2010				
Agriculture, Forestry, Fishing, and Hunting	-	-	-	-				
Construction	~2	4	6	6				
Manufacturing	-	3	3	4				
Wholesale Trade	-	5	5	3				
Retail Trade	~4+	8	8	7				
Real Estate and Rental and Leasing	-	0	0	1				
Information	-	-	-	-				
Finance and Insurance	~1	-	-	-				
Transportation and Warehousing	~1	3	4	4				
Professional, Scientific, and Technical Services	-	5	4	5				
Administrative and Support and Waste Management Remediation Services	~2+	4	3	3				
Health Care and Social Assistance	-	1	1	0				
Arts, Entertainment, and Recreation	-	1	1	2				
Accommodation and Food Services	~1+	2	2	4				
Other Services (Except Public Admin)	~1	5	5	5				
Total, All Establishments	~15	41	42	44				
Total Employees	-	-	-	-				

Source: \*Personal Communications, Mayor Charles Wilbur, 2021; Census Zip Code Business Pattern, 2013, 2011, 2009

### **BUILT INFRASTRUCTURE**

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 evacuate.

### HOUSING UNITS

Knowledge of a community's housing base contributes to hazard and vulnerability analysis by identifying how many homes are at risk. ACS 2019 five-year estimates show approximately 190 total housing units in the Town with approximately 7% being vacant. There is a trailer park containing several double-wide and single-wide trailers that sits just outside of Town limits and smaller structures in need of repair located on Main Street off Route 13 (Personal communications, Mayor Charles Wilbur, June 8, 2021). There are a few derelict homes within the Town that remain vacant, with one in the process of being repaired. Often times, vacant homes pose a threat during a hazard due to lack of maintenance and loose debris.

**Table 4: Melfa Housing** 

	2019*	2013**	2010***	2000****
<b>Total Housing Units</b>	190	218	202	205
Occupied	177	170	179	183
Vacant	13	48	23	22
Owner-Occupied	133	143	179	144
Renter-Occupied	44	27	42	39
Median Housing Value	\$146,100	\$143,500	NA	NA

Source: \*ACS, 2014-2019, \*\*ACS, 2009-2013, \*\*\*U.S. Census 2010, \*\*\*\*U.S. Census 2000

### **TRANSPORTATION**

U.S. Route 13 and the abandoned railroad corridor run parallel northeast to southwest through the Town and are two of the Town's most dominant features. Ongoing efforts intend to convert the abandoned railroad corridor into a Rail-to-Trail to provide multi-use access from the southern Town of Cape Charles in Northampton County up to the Town of Hallwood in Accomack County. The segment of the Eastern Shore Rail Trail that will run from the Town of Onley and through Melfa aims to provide safe, multimodal access to the Eastern Shore Community College. Route 13 is designated as part of several essential highway networks, including the national defense Strategic Highway Network (STAHNET), the National Highway System, and the Eastern Shore's only hurricane evacuation route. Furthermore, the State of Virginia has named U.S. Route 13 a "Corridor of Statewide Significance," which emphasizes the long-distance movement of goods and people.

Average daily traffic in the Melfa section of Route 13 was about 15,000 in 2020, with approximately 92% consisting of 2-axle vehicles, 6% tractor-trailers, and the remaining a mix of heavy multi-axle trucks, buses, and other vehicle configurations (*VDOT Daily Traffic Volume Estimates*, 2020).

The measure of vehicles available to households is one indicator of a household's ability to evacuate when necessary or obtain essential supplies to make hazard mitigation preparations. The number of households with no vehicle is relatively low according to 2019 ACS data displayed in Table 5. There is confidence that all of these residents without a vehicle have family or friends that would be able to assist in the event an evacuation or hazard mitigation preparation is needed (Personal communications, Mayor Charles Wilbur, June 8, 2021).

Table 5: Melfa resident vehicles

Vehicles Available	2019*	2014**	2010***	2000****
None	5	2	7	7
One	88	49	78	78
Two	43	67	102	102
Three or more	41	52	28	28

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

Melfa is on Star Transit's purple and red routes. Although there are not regularly scheduled stops in Town, it is part of the deviated route system and drivers will stop at Vance's Furniture and Doughty's Market with advance notice. The service has regular stops at the Eastern Shore Community College, located just outside of Town limits. Shore Ride also provides services up and down the Eastern Shore.

### **COMMERCIAL AREAS**

The traditional "Town Center" is located on the east side of the abandoned railroad tracks. Businesses include Vance's Furniture, Bogg's Water and Sewer, CGR Firearms, Crutchley Enterprises, Affordable Septic Solutions, and more (Personal communications, Mayor Charles Wilbur, June 8, 2021).

As with many small towns on the Eastern Shore, and as business becomes more oriented to the highway, new businesses have chosen to locate directly along Route 13. Since the abandoned Bay Coast Railroad and future Eastern Shore Rail-to-Trail prevents development directly on the east side of Route 13, Melfa's highway-oriented development is all on the west side, which includes two gas stations, Daughty's and Shore Stop.

### **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 of Melfa

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.

### **PUBLIC SAFETY**

Police protection is provided by the Accomack County Sheriff's Department and Virginia State Police. The State Police post for the Eastern Shore of Virginia is located about one-mile northeast of Melfa.

The Melfa Volunteer Fire and Rescue Company was organized in May 1950 in the aftermath of the "Easter Sunday Fire." Presently, the Fire Company operates a fleet of six apparatus, including two advanced life support ambulances, two engines, a 2,500-gallon tanker, and a brush truck. Additionally, there are three trailers as well as a support/tow vehicle operated by the Hazmat Team and the Eastern Shore C.E.R.T. Disaster Response trailer that are kept on the station's property. The station has three bays and was built in 2002. In addition to serving Melfa, the Melfa Volunteer Fire and Rescue Company serves portions of Bobtown, Boston, Hacks Neck, Harborton, Keller, Texacotown, Savageville, and various outlying areas.



Figure 1: Melfa Volunteer Fire and Rescue Company building on Hatton Avenue includes 3 bays, a community room, bunk rooms, restrooms, station watch room, laundry room, offices, & storage areas.

### WATER SUPPLY AND WASTEWATER

Melfa residents rely on private wells for their water supply and private septic systems for disposal. These residential wells are potentially at risk of contamination from aboveground and underground petroleum storage tanks (AST and UST). Most homes in the Town are heated by oil (ACS, 2019), which is stored in these tanks. If not properly maintained, ASTs and USTs and gas station storage tanks can pose a significant water quality risk to the Town.

### SOLID WASTE DISPOSAL

The Town has a trash truck and offers pick up every Monday, which is then delivered to the Accomack County Landfill located in Town. Additionally, residents can take their refuse to a County Convenience Center, of which the closest is the Grangeville facility on Wachapreague Road. The Town also offers free spring and fall clean-up opportunities within the Town.

### Eastern Shore of Virginia Hazard Mitigation Plan

#### PARKS AND RECREATION

The Melfa Town Park located at the end of Woodland Avenue offers a lit baseball field, picnic area, playground equipment, a hiking trail, soccer field, benches and grills, and pet friendly areas (Personal communications, Mayor Charles Wilbur, June 8, 2021).

#### DRAINAGE DITCHES

The Town enlists the services of a private contractor to complete ditch cleaning for litter and brush removal in the spring and fall seasons. VDOT and Accomack County also maintain several ditches in the Town. In the summer of 2015, the Town paid the County to replace the culvert pipe by the Town Hall. This effort has considerably prevented street flooding in the Town; however, there is also significant flooding on Woodland Avenue and near Vance's Furniture on Railroad Avenue. The Town is currently looking into the replacement of the culvert near Vance's Furniture (Personal communications, Mayor Charles Wilbur, June 8, 2021).

### **SCHOOLS**

Although there are no schools within Melfa Town limits, the Eastern Shore Community College is less than a mile south of the Town and Pungoteague Elementary School is located approximately 4 miles southwest of the Town on Bobtown Road. Both schools are located within Melfa's 23410 zip code.

#### HISTORIC OR CULTURAL RESOURCES

There is a plaque located in the Town of Melfa indicating the tallest point on the Eastern Shore within the Town boundaries. The Town Hall is located in a historic store building.

### NATURAL ENVIRONMENT

Melfa lies within the Chesapeake Bay watershed. The Town itself is relatively flat, with most of the Town ranging in elevation from 45 to 54-feet above sea level, although the highest point on the Shore is located west of Route 13 and is 54-feet in elevation. Melfa is not located within the 100-year or 500-year floodplain.

### LAND USE LAND COVER

Melfa has a land area of 160 acres. Approximately 60% of the land area is developed with residential land use being the predominant land use category. The majority of the developed land use areas surround Route 13 and there is very little in the way of forest or shrub habitats. Like many towns along the Eastern Shore, the Town of Melfa is surrounded by an abundance of agricultural lands.

## HAZARD PREPAREDNESS & COMMUNITY CAPABILITIES

### PREVIOUS HAZARD MITIGATION PLANS

§201.6(b)(3), §201.6(c)(3), §201.6(d)(3) The Town of Melfa began participating in the hazard mitigation planning process in 2016 and the last update to the Town's comprehensive plan was in 1997. The Town's primary risk is associated with storm water flooding.

Table 6: Town of Melfa Hazard Mitigation Resources

Ordinances, Plans, & Publications											Resources, Committees												
Authority	Building Code	Chesapeake Bay Act	SWMP	Hazard Mitigation Plan	Comprehensive Plan	Ordinance	Storm Water Regulations	Transportation Infrastructure	Inundation Vulnerability Report	All Hazards Preparedness	Emergency Operations Plans	Mutual Aid	Agreements/Documents	Neighborhood Emergency Help	Viginia 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 FLOODING INSURANCE PROGRAM & HAZARD MITIGATION GRANT PROGRAM

### NFIP

 $\S 201.6(c)(2)(ii)$ ,  $\S 201.6(c)(3)(ii)$ ,  $\S 201.6(d)(3)$  Melfa does not participate in the NFIP program.

### **HMGP**

Melfa has not participated in the HMGP.

### **DISASTER ASSISTANCE**

Following severe flooding of the Melfa Town Park and the area around the storage units, a FEMA grant allowed for the installation of culvert piping that has vastly improved the stormwater flooding situation in that area.

### HAZARDS PROFILE

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

### PANDEMIC RESPONSE AND READINESS

The Town of Melfa responded to the COVID-19 Pandemic by following mask mandates, social distancing guidelines, and any other regulations set forth by the State of Virginia. CARES Act and other federal funding remained with Accomack County.

### WIND

No parts of Melfa lie in the wind-borne debris hazard area. This area extends one mile inland from the coast. The Town lies in the 110-120 mph design wind zone (Accomack County Building Code). Most of the Town's residential areas are older and have mature trees around the homes. Falling trees or branches may cause damage to personal property and infrastructure during a high-wind or ice event.

Although there are no records of any tornado damage in the Town, there have been tornadoes touch down just outside of the Town and in other areas in the Region. In July of 2012, the National Weather Service confirmed a tornado touched down approximately 6.5 miles northeast of Melfa in the unincorporated area of Daugherty. Although there were no injuries reported, the storm brought down numerous trees with one tree falling on an unoccupied vehicle. Preparation is vital in order to stay safe and minimize the impacts of such a hazard.

### **COASTAL EROSION**

No structures in Melfa are at immediate risk to coastal erosion.

### COASTAL FLOODING

No portions of the Town lie within the Special Flood Hazard Area. The threat of coastal flooding within the Town is considered to be minimal.

### STORMWATER FLOODING

Melfa is underlain by some soils that are unsuitable for drainage and rainwater. Arapahoe mucky loam (very poorly drained) and Nimmo sandy loam (poorly drained) are the dominant soil types, along with Munden sandy loam (moderately well drained) and Bojac sandy loam (well drained). Installation of culvert pipes has lessened the stormwater flooding in the Town; however, Woodland Avenue and around the area of Vance's Furniture on Railroad Avenue are still in need of a culvert, as ditches are currently just draining into the street (Personal communications, Mayor Charles Wilbur, June 8, 2021). The lower portion of Main Street is mostly impacted by stormwater flooding and lower portions of the Town still have drainage issues even several days after heavy rains (Personal communications, Mayor Charles Wilbur, June 8, 2021).

### HAZARDS OF LOCAL SIGNIFICANCE

### **GROUND WATER CONTAMINATION**

The Town faces a threat of ground water contamination from failed septic systems within the Town as well as leaks and spills of petroleum-based products from underground storage tanks.

### **ICE & SNOW STORMS**

Ice and snow storms, particularly coupled with strong winds, have historically caused damages to properties in Town in the past. It is not uncommon for these storms to cause power outages and secondary streets to become impassable.

### HAZARDOUS MATERIALS

The U.S. Route 13 highway corridor runs through Town putting residents at greater risk from HAZMAT incidences resulting from traffic accidents involving tractor trailers carrying hazardous materials.

### **TORNADOES**

Although there are no records of a tornado touching down in Melfa, there have been instances of tornadoes nearby the Town and elsewhere in the Region, therefore, it is important to be prepared in the event one of these hazardous storms were to occur.

### **CRITICAL FACILITIES**

The following table lists the critical facilities and their relative importance to the Town. Nandua High School, not in the Town or any incorporated area, is critical, as it serves as the shelter of last resort for residents. Additionally, the State Police Office and the Eastern Shore Community College, although outside of the Town limits, are also critical facilities to the Town.

Table 7: Melfa Critical Facilities

Facility	HMP 2006	HMP 2011	HMP 2016	HMP 2021	Hazards	No of People Affected	Loss potential	Relocation Potential	Retrofit Potential
Town-owned Fac	cilities								
Melfa Town Office	-	-	Х	Х	Stormwater, Wind, Fire	400+	Major Disruption	Yes	Yes
Town Park	-	-	Х	Х	Stormwater, Wind, Fire	400+	Inconvenience	No	Yes
Empty Lot	-	-	-	Χ	Stormwater	400+	Inconvenience	No	Yes
Other Facilities									
Melfa Post Office	-	-	Х	Х	Stormwater, Wind, Fire	400+	Major Disruption	Yes	Yes
Internet Towers	-	-	Х	Х	Stormwater, Wind, Fire	400+	Inconvenience	Yes	Yes
Gas Stations	-	-	Х	Х	Stormwater, Wind, Fire	500+	Major Disruption	Yes	Yes
State Police Headquarters	-	-	-	Х	Stormwater, Wind, Fire	45,000+	Devastating	Yes	Yes
Community College	-	-	-	Х	Stormwater, Wind, Fire	3,000+	Major Disruption	No	Yes
Nandua High School	-	-	-	Х	Stormwater, Wind, Fire	5,000+	Major Disruption	Yes	Yes
Melfa VFC	-	-	Х	Х	Stormwater, Wind	5,000+	Devastating	Yes	Yes

### **FINDINGS**

- Although no part of the Town lies within any flood zone and the highest point on the Eastern Shore is located within boundaries, due to soil types and flat topography, stormwater flooding is the most common hazard experienced by the Town. Additional culverts have been successful in mitigating stormwater flooding in the past, and the Town would like to see additional culverts be installed.
- 2. The Melfa Volunteer Fire and Rescue Company is vital to the Town and surrounding area not only for fire and rescue, but also as the location of important assets to the region for Hazard Materials and C.E.R.T. response.
- 3. Due to an aging building stock and mature trees, wind and ice storms pose a significant threat to the community through direct damages and damages to power distribution infrastructure.