# Town of Montross
# 2018
# Comprehensive Plan

Land Use
Natural Resources Protection
Transportation

Town of Montross

2018 Comprehensive Plan

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# Town of Montross

# 2018

# Comprehensive Plan

**Land Use**
**Natural Resources Protection**
**Transportation**

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The Northern Neck Planning District Commission wishes to thank the Westmoreland County Museum & Library for the Town's historical photographs used in this document.

# Officials of the Town of Montross, Virginia, United States of America

*(current term)*


King


Cosgrove


Chandler


Watson, Jr.


Wheaton


Ault


Carlson

**Mayor**
Mr. Joseph P. King (2016-2020)

**Vice-Mayor**
Mr. Terry A. Cosgrove (2016-2020)

**Montross Town Council**
Mr. Ferdie F. Chandler (2014-2018)
Mr. Clinton A. Watson, Jr. (2014-2018)
Mr. Larry W. Wheaton (2016-2020)
Mr. Jesse R. Ault (2016-2020)
Mrs. Carolyn K. Carlson (2015-2018)

**Montross Planning Commission**
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Mr. Bobby D. Greene
Mr. Bobby Reamy
Ms. Jane C. Branson
Mr. Terry A. Cosgrove

**Town Manager**
Mrs. Patricia K. Lewis


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Town of Montross

2018 Comprehensive Plan

BLANK Page

# TABLE OF CONTENTS

Town of Montross

2018 Comprehensive Plan

BLANK Page

# Montross

1

## INTRODUCTION

Town of Montross

2018 Comprehensive Plan

BLANK Page

# 1. INTRODUCTION

The last Montross Comprehensive Plan was adopted in 2007. Much has changed in the Northern Neck in the decade since that last update, and those changes have affected the Town of Montross, not only because of its role as a county seat, but also because of its geographical location at the center of a major regional thoroughfare.

In simplified terms, a comprehensive plan is two things:

> 1) An **inventory** and analysis of existing conditions and growth trends;
>
> 2) A **guide** for achieving a coordinated, orderly growth and development of the locality.

When counties and towns develop their long-range plans, it's not just about the locality but also about the region, especially on a peninsula like the Northern Neck. The Town of Montross is well aware of its important role, and of how its development course will impact surrounding areas.

Decisions adopted by the Montross Town Council today will be extremely important for the future of the Town and the County, especially as development pressures increase under a growing influx of retirees concerned about public services, land use, environmental stewardship, and several other factors with which rural towns have not generally concerned themselves in the past.

Montross's first comprehensive plan was adopted on September 26th, 1980. An update of it was adopted in January of 1996. A completely new plan was adopted in 2007 and reviewed in 2013. The Code of Virginia requires a revision every five years, but many small localities like Montross don't have the time or the resources to accomplish this as often as needed.

## 1.1 Purpose and Scope

Land use, protection of natural resources, and transportation issues are the development categories that require the most informed decisions. This 2018 revision of the Town of Montross Comprehensive Plan aims to be a helpful analysis of these categories.

As such, this document represents the Town of Montross's recognition of its role in the protection of state waters, the Chesapeake Bay, and its tributaries. The Plan is intended to carry out the goals of the Chesapeake Bay Preservation Act and has been developed in accordance to the Chesapeake Bay Preservation Area Designation and Management Regulations.

This Plan does not address, in depth, other typical areas of concern in a community's comprehensive plan—such as education, employment and economic development, housing and health care, historic resources, recreation, utilities, and capital improvements—except when these issues directly affect land use, water-quality protection, and transportation. The Town's Planning Commission deals with these other community-development issues as a matter of course, so they are ongoing duties of the Commission.

This 2018 Plan—once adopted—should be reviewed regularly, and revised as needed.

## 1.2 Statutory Authority

Under Title 15.2-2223 of the Code of Virginia, the Town of Montross is required to prepare a Comprehensive Plan for the physical development of the territory within its jurisdiction. Specifically, the Code of Virginia states:

*The local planning commission shall prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction and every governing body shall adopt a comprehensive plan for the territory under its jurisdiction.*

*In the preparation of a comprehensive plan the commission shall make careful and comprehensive surveys and studies of the existing conditions and trends of growth, and of the probable future requirements of its territory and inhabitants. The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probably*

*future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants.*

*The comprehensive plan shall be general in nature, in that it shall designate the general or approximate location, character, and extent of each feature shown on the plan and shall indicate where existing lands or facilities are proposed to be extended, widened, removed, relocated, vacated, narrowed, abandoned, or changed in use as the case may be.*

*The plan, with the accompanying maps, plats, charts, and descriptive matter, shall show the locality's long-range recommendations for the general development of the territory covered by the plan. It may include, but need not be limited to:*

1. *The designation of areas for various types of public and private development and use, such as different kinds of residential, business, industrial, agricultural, mineral resources, conservation, recreation, public service, flood plain and drainage, and other areas;*
2. *The designation of a system of transportation facilities such as streets, roads, highways, parkways, railways, bridges, viaducts, waterways, airports, ports, terminals, and other like facilities;*
3. *The designation of a system of community service facilities such as parks, forests, schools, playgrounds, public buildings and institutions, hospitals, community centers, waterworks, sewage disposal or waste disposal areas, and the like;*
4. *The designation of historical areas and areas for urban renewal or other treatment;*
5. *The designation of areas for the implementation of reasonable ground water protection measures;*
6. *An official map, a capital improvements program, a subdivision ordinance, a zoning ordinance and zoning district maps, mineral resource district maps and agricultural and forestal district maps, where applicable;*
7. *The location of existing or proposed recycling centers, and;*
8. *The designation of areas for the implementation of measures to promote the construction and maintenance of affordable housing, sufficient to meet the current and future needs of residents of all levels of income in the locality while considering the current and future needs of the planning district within which the locality is situated.*

## 1.3 Chesapeake Bay Preservation Act

The Chesapeake Bay Preservation Act was enacted in 1988 (Code of Virginia, §10.1-2100 *et seq.*) by the Virginia General Assembly to protect water quality and natural resources that are fundamental to economic development in the Commonwealth. It was re-enacted with Overlay District regulations and ordinances adopted on November 23, 1993; December 16, 2003; December 13, 2004; and October 27, 2009.

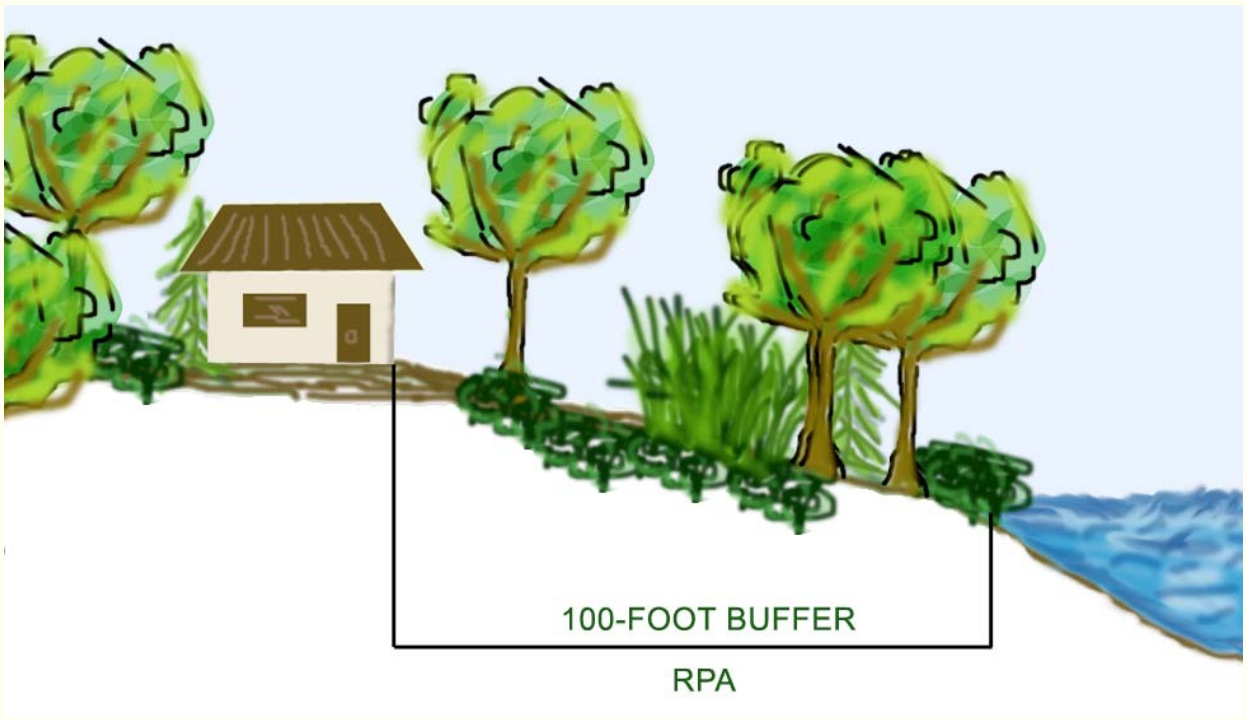
The Act is a cooperative state-local government effort designed to protect environmentally sensitive features that, when disturbed or developed inappropriately, lead to the degradation of water quality.

Under the Act, the Town of Montross is called to promote the following:

- Protection of existing high-quality state waters
- Restoration of all other state waters to a condition that will permit all reasonable public uses or support the propagation of all aquatic life which might reasonably be expected to inhabit them
- Prevention of any increase in pollution
- Reduction of existing pollution
- Promotion of water-resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of the Commonwealth

### Chesapeake Bay Preservation Area (CBPA)

Montross adopted Phase I of its Chesapeake Bay Preservation Act program on March 26, 1991, as an amendment to the Zoning Ordinance. With the amendment, the Town Council designated a jurisdiction-wide Chesapeake Bay Preservation Area (CBPA) district. It was re-enacted with Overlay District regulations and ordinances adopted on November 23, 1993; December 16, 2003; December 13, 2004; and October 27, 2009.




*RPAs Resource Protection Areas are lands at or near the shoreline that have an intrinsic value to water-quality protection because of the ecological and biological processes they perform.*

*RPA features include tidal shores, tidal wetlands, non-tidal wetland connected by surface flow and contiguous to tidal-wetlands or tributary streams, and a 100-foot vegetated buffer area adjacent to and landward of the other RPA features and tributary streams.*

The Chesapeake Bay Local Assistance Board reviewed the Town's CBPA map and program on December 5, 1991, and found it consistent with the Regulations.

Westmoreland County enforces the Chesapeake Bay Preservation Act in the Town of Montross.

### Resource Protection Areas (RPAs)

The Town's designated RPA consists of non-tidal wetlands contiguous to tributary streams within the Town. The 100-foot buffer is landward of these features and along both sides of tributary streams.

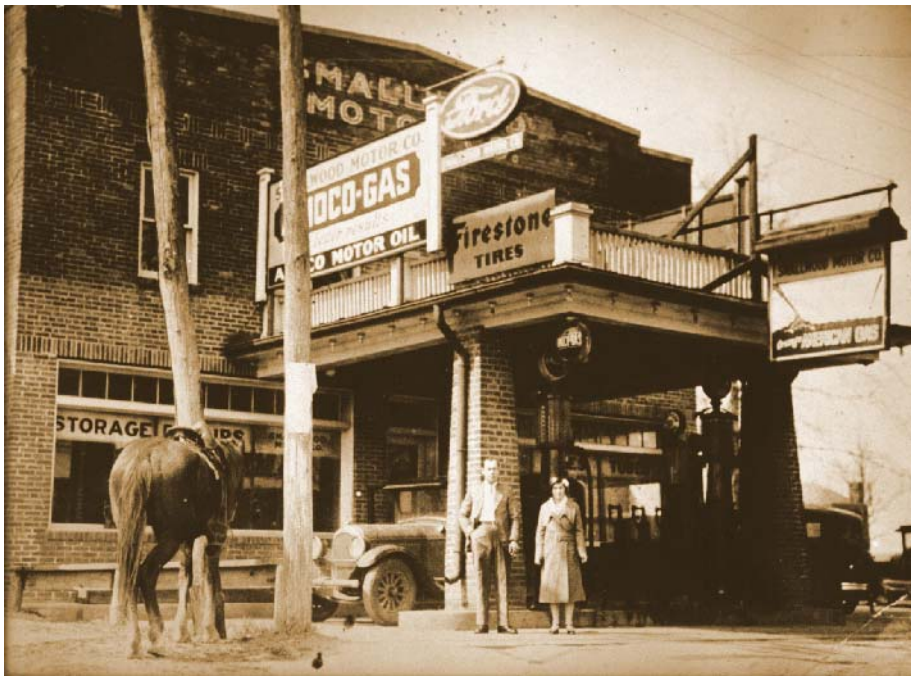
### Resource Management Areas (RMAs)

RMAs include land types that, if improperly used or developed, have the potential for causing significant water quality degradation, diminishing the functional value of the Resource Protection Area.

**Harris Variety Store, circa 1930s**

# Montross 2

## COMMUNITY




**Smallwood Motor Company, undated photograph**


**The same building today –**
**The Westmoreland County Museum**

# 2. COMMUNITY CHARACTERISTICS AND RESOURCE INVENTORY

## 2.1 Location and Size

The Town of Montross is located in the south-central portion of Westmoreland County, less than a mile north of the Richmond County line. The primary highway, Route 3, runs through the center of the Town and serves as its main street.

Montross is thirteen miles west of Warsaw and forty-five miles east of Fredericksburg, on Route 3. The City of Richmond is approximately ninety miles southwest, on Route 3, and some sixty miles southwest, on Route 360. Map 7.1 (Section 7) shows the regional location of the Town.

Downtown Montross, circa 1920s

Topographically, the Town is located on a broad, flat ridge that is typical of inland areas in the Northern Neck region. Such flat ridgetops are noted for deep, sandy soils that are well suited for agriculture or development.

Steep ravines that are associated with the streams in the area frequently dissect these flat ridgetops. Such ravines lie just to the north and south of the existing boundaries of the Town.

West of Montross, at the bottom of a steep hill, is the Big Swamp associated with Cat Point Creek. Much of the land in that area is generally too steep or too wet to be suitable for development. A large pond, Chandlers Mill Pond, is located just to the northwest of the Town boundary.

The additions of 1.52 acres (Rivah Investments, LLC) and 4.70 acres (Chandlers Mill Properties, LLC) to the original surface area of the Town have made the current total area 601.51 acres.

## 2.2 History of Montross

When Westmoreland County was formed in 1653 from part of Northumberland County, the first courthouse was erected on the property of the newly appointed sheriff, at an area now called Currioman, overlooking Currioman Bay.

A new high sheriff, John Lord, was appointed in 1658, and in 1667 he directed that a new courthouse be built on property he owned near the center of the County, at a site that is now Montross.

A town began to grow around this new courthouse. As was customary, the town was named after the County, and so Montross was called Westmoreland Courthouse until 1752.

In 1751, an Irish merchant, William Black, purchased 110 acres of land surrounding the Courthouse and began to operate a store on the property. Black owned a ship that he used to bring goods from England. The ship was called the *Montross*, after Black's native town of Montross, Ireland.

Shortly after Black began his business, references to the Town of Montross, Virginia, began to appear, and at some later time the Town was officially given that name.
Since then, the Town has continued to play an official role as the Westmoreland County seat. Montross also serves as a commercial center for the County.


Downtown Montross today

## 2.3 Government Structure

Montross has a Council-Manager form of government. Members from within the Council elect the Mayor. The Town Manager is recruited and hired by the Town and serves at the pleasure of the Council.

The Town maintains an office at 15869 Kings Highway in the village center. It employs a Town Manager and a Waterworks Operator. Westmoreland County maintains several offices adjacent to the Court Square, a modern office building, a Courthouse, and a library north of these on Polk Street.

## 2.4 Population and Demographics

According to U.S. Census figures, the Town of Montross has recovered some of the residents it had lost in the last few decades, and it is now enjoying a growth in population.

### Population - 1970 to 2016

| | Town of Montross | Westmoreland County |
|---|---|---|
| 2016* | 389 | 17,592 |
| 2010 | 384 | 17,454 |
| 2000 | 315 | 16,718 |
| 1990 | 359 | 15,480 |
| 1980 | 456 | 14,041 |
| 1970 | 419 | 12,142 |

Source: Census Bureau, Census of Population; 1970, 1980, 1990, 2000, 2010, 2016* estimate

### Average Decennial Change

| | Town of Montross | Westmoreland County |
|---|---|---|
| 2000 – 2010 | +21.9% | +4.4% |
| 1990 – 2000 | -12.3% | +8% |
| 1980 – 1990 | -21.5% | +10.2% |
| 1970 – 1980 | +8.8% | +15.6% |

Source: Census Bureau, Census of Population; 1970, 1980, 1990, 2000, 2010

### Age Cohorts (groups) for Montross

| | 2000 | % | 2010 | % |
|---|---|---|---|---|
| Total population | 315 | 100 | 384 | 100 |
| Under 5 years | 12 | 3.8 | 16 | 4.2 |
| 5 to 9 years | 20 | 6.3 | 18 | 4.6 |
| 10 to 14 years | 18 | 5.7 | 17 | 4.4 |
| 15 to 19 years | 14 | 4.4 | 29 | 7.6 |
| 20 to 24 years | 9 | 2.9 | 14 | 3.5 |
| 25 to 34 years | 25 | 7.9 | 33 | 8.6 |
| 35 to 44 years | 48 | 15.2 | 43 | 11.2 |
| 45 to 54 years | 44 | 14 | 46 | 12 |
| 55 to 59 years | 26 | 8.3 | 23 | 6 |
| 60 to 64 years | 21 | 6.7 | 29 | 7.6 |
| 65 to 74 years | 40 | 12.7 | 55 | 14.4 |
| 75 to 84 years | 28 | 8.9 | 43 | 11.2 |
| 85 years and over | 10 | 3.2 | 18 | 4.7 |
| Median age (years) | 48.5 | (X) | 49.8 | (X) |

Source: Census Bureau, Census of Population: 2000, 2010

For additional Census data, see Section 8.

## 2.5 Housing

| | 2000 | 2010 |
|---|---|---|
| Housing Units | 164 | 207 |
| Occupancy Rate | 92.1% | 88.9% |

Source: Census Bureau 2000, 2010

For additional Census data, see Section 8.

## 2.6 Employment and Economic Development

### Top Employment by Industry – Westmoreland County

| | |
|---|---|
| Government | 945 |
| Manufacturing | 549 |
| Retail Trade | 467 |
| Accommodation & Food Services | 380 |
| Agriculture, Forestry, Fishing and Hunting | 233 |
| Health Care & Social Assistance | 192 |
| Construction | 178 |
| Other Services (except Public Admin.) | 104 |
| Educational Services | 91 |
| Finance and Insurance | 83 |

Source: Virginia Employment Commission: 2017 Community Profile

### Top Forty Employers – Westmoreland Co.

1. Westmoreland County School Board
2. Carry-On Trailer Corporation
3. County of Westmoreland
4. Town of Colonial Beach School
5. Ingleside Plantation
6. Bevans Oyster Company
7. Food Lion
8. O'Gara Homeland Defense
9. Potomac Supply, LLC
10. Mary Washington Health Center
11. Town of Colonial Beach
12. Robert E. Lee Memorial Association

13. Virginia Department of Conservation
14. Bonums Oyster Company
15. High Tides on the Potomac
16. McDonald's
17. Hall's Market
18. Postal Service
19. E & C Mid-Atlantic Ventures, LLC
20. Westmoreland Land Company
21. Herbert Wilkerson and Sons, Inc.
22. Angelos Pizza Restaurant
23. Northern Neck Chevrolet, Pontiac
24. Ledo Pizza & Pasta
25. People's Community Bank
26. Donovan Grimley Investment LLC
27. Hopewell Nursery
28. Central Va Health Service Inc
29. DiPardo and Cole LLC
30. Parker Farms
31. Tim's at Coles Point
32. Capt Faunce Seafood, Inc.
33. Northern Neck Building Supply
34. Rite Aid
35. Robert H. Gawen and Sons, Inc.
36. Central Rappahannock Regional Library
37. Red Oak Nurseries
38. Chesapeake Bay Agency on Aging
39. Colonial Dp, Inc.
40. Dolgencorp LLC

Source: Virginia Employment Commission, Economic Information & Analytics, Quarterly Census of Employment and Wages (QCEW), 2nd Quarter (April, May, June) 2017.

### Annual Unemployment

| | County | VA | US |
|---|---|---|---|
| **2016** | 4.60% | 4.00% | 4.90% |
| **2015** | 5.40% | 4.50% | 5.30% |
| **2014** | 6.50% | 5.20% | 6.20% |
| **2013** | 6.90% | 5.70% | 7.40% |
| **2012** | 7.30% | 6.10% | 8.10% |
| **2011** | 7.50% | 6.60% | 8.90% |
| **2010** | 8.10% | 7.10% | 9.60% |
| **2009** | 7.60% | 6.70% | 9.30% |
| **2008** | 5.00% | 3.90% | 5.80% |
| **2007** | 4.20% | 3.00% | 4.60% |
| **2006** | 3.90% | 3.10% | 4.60% |

Source: Virginia Employment Commission, Economic Information & Analytics, Local Area Unemployment Statistics

The total civilian labor force in Westmoreland County in September 2017 was 9,092, of which 8,710 were employed and 382 were unemployed.

### Wages

According to the Bureau of Labor Statistics, the average weekly wage for Westmoreland County (First Quarter 2017) was $577, equivalent to $14.43 per hour or $30,004 per year (assuming a forty-hour work week, full year). For the State of Virginia, the weekly average wage was $1,129.

## 2.7 Infrastructure and Community Services

The Town, Westmoreland County, State agencies, and private industry provide infrastructure and services within the Town of Montross.

### 2.7.1 Water Supply and Quality

Montross (like all of the Northern Neck region) depends on groundwater as the source of potable water. Groundwater quantity and quality is presently acceptable. Since 2014, the Northern Neck is a Groundwater Management Area, with a permit required by any entity withdrawing more than 300,000 gallons per month.

#### *Wells*

The Town owns two active wells: #2 and #3. (The old County Courthouse well is now abandoned and inactive.)

Total Pumping Capacity (permitted by the Health Department): 200,000 gallons per day (gpd)

Current Total Usage: 67,891 gpd

Well #2
Type: 8” Drilled
Depth (feet): 702
Yield (gallons/minute): 160
Year of Construction: 8/1/1965
Public or Private: Public

Well #3
Type: 8” Drilled
Depth (feet): 560
Yield (gallons/minute): 160
Year of Construction: 7/1/1983
Public or Private: Public

Observation Well (maintained by the State Water Control Board)
Total Depth: 641 feet

*Storage*
Type of Storage: Elevated Tank
Capacity (gallons): 100,000
Height (feet): 131
Year of Construction: 1952
Fire Protection: Yes

*Distribution System*
Age of System: 1952, 1966, 1988
Pipe Sizes (diameter, inches): 2", 4", 6", and 8"
Number of hook-ups permitted by Health Department: 500
Number of current hook-ups (residences and businesses): 278

In-Hook-up charge: $500 + costs
Monthly Usage Fees: $15.00 per 6,000 gallons

Out-Hook-up: $1,000 + costs
Monthly Usage Fees: $22.50 per 6,000 gallons

*Water Quality*
Hardness (grains/gallon): 1.7
Fluoride (milligrams/liter): 2.37 mg/l
Sodium Bicarbonate and Silica: 1.69 mg/l
Chlorination: Yes

### 2.7.2 Sewerage

The private sewage system once owned by the Montross Sewage Cooperative has been replaced with the Montross-Westmoreland Sewer, which is owned by Westmoreland County.

Permitted Capacity: 130,000 gpd
Current Use: 51,000 gpd
Age of System: on-line March 2000
Type: Sequential-batch reactor plant

Mains (diameter): Gravity are 6" and 8"; force-feed are 2"

Number of Pumping Stations: 15 (10 in Town and 5 outside Town limits)
Coverage: (% of Town served): 100%
Number of Treatment Plants: 1

Connection Fees: $4,995 residential, $5,679 commercial + per-seat or per-room fee, according to category (hotel or restaurant, etc.)

Minimum Monthly Charge:
Residential - $37.00 for 6,000 gallons
Commercial - $68.00 for 6,000 gallons + additional gallons charged per gallon at approximately $0.011 per gallon.

### 2.7.3 Transportation and Streets

Major thoroughfares: Route 3
Main Street: Route 3
Number of Lanes: 2, 3, or 4, depending

See the transportation element of this Plan (Section 5) for additional details.

### 2.7.4 Storm Drainage

The only storm drainage facilities in Montross are those associated with Route 3, which collect stormwater to discharge into the surrounding area.

### 2.7.5 Street Lighting

Street lights are owned and maintained by Virginia Dominion Power.

### 2.7.6 Electric Power

Service by Virginia Dominion Power throughout the Town

### 2.7.7 Telecommunications

Cable: Private cable network providers
Telephone: Verizon
Broadband Internet: Various private providers

### 2.7.8 Refuse Collection

Curbside pick-up: Yes, commercial and residential within the Town

Yard debris, light construction debris, appliances, furniture, and other large items must be taken to Westmoreland County's solid waste collection sites on Panorama Road or Route 205. Heavy construction debris (bricks, cinder blocks, etc.) must go to the King & Queen County collection facility with a voucher to allow their disposal there.

Recycling: Westmoreland County

### 2.7.9 Schools

Only Washington & Lee High School is inside the Town.

Cople Elementary School, Washington District Elementary, and Montross Middle School are outside Town limits.

### 2.7.10 Health Services

- Regional Cancer Center at Montross
- Dr. Charles Palmer, Dentist
- Westmoreland Medical Center (right outside Town)

### 2.7.11 Social Services

Provided by Westmoreland County

### 2.7.12 Fire Department

Westmoreland Volunteer Fire Department, funded by the County and Town

### 2.7.13 Rescue Squad

Services provided by the County and volunteers.

### 2.7.14 Correctional Facility

Regional jail (in Warsaw)

### 2.7.15 Law Enforcement

Provided by Westmoreland County

### 2.7.16 Recreation

Parks: None
Sports Facilities: None

Westmoreland State Park is located six miles west of Town, on the Potomac River. It has camping, swimming, and hiking facilities, as well as a public boat ramp.

### 2.7.17 Historic Attractions and Tourism

- Westmoreland County Museum and Library
- George Washington's Birthplace National Monument, ten miles west of Town
- Stratford Hall, the birthplace of General Robert E. Lee, six miles west of Town

A total of twelve properties in the County are on the National Register of Historic Buildings and Landmarks.

### 2.7.18 Assisted Living Facilities

None

### 2.7.19 Retirement Communities

Millpond Village (operated by Bay Aging)

### 2.7.20 Regional Cooperation Agreement

The Town does not have a formal agreement to coordinate with Westmoreland County's Comprehensive Plan.

Town of Montross

2018 Comprehensive Plan

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# Montross 3

## LAND USE

Main Street, Montross, 1934

# 3. LAND USE PLAN

## 3.1 Historical Growth

The Town of Montross is a small, attractive village that has not experienced extensive growth and development—even with the availability of municipal sewer service since March, 2000.

## 3.2 Environmental Constraints

The principal environmental constraint in Montross is the steep-slope areas to the northwest, southwest and west of the Town. They define the plateau on which development is feasible.

These topographical characteristics render most construction in these areas costly, and with potential effects on water quality. As a result, many of these slopes remain densely wooded. Additional vegetation prevents erosion and enables these lands to function as an effective, natural stormwater-management system.

The wooded areas also serve as a pristine buffer for Cat Point Creek and the other water bodies in the Town's vicinity. In addition, the undisturbed land may present opportunities to link the Town's residential areas in a system of pedestrian or bike paths.

A second environmental constraint is the shallow water table in certain areas in the eastern section of Montross, which may present problems with roads, foundations and basements, underground storage tanks, and buried utilities—unless care is used in the development process.

## 3.3 Existing Land Use

Current land-use patterns are a product of past economic and social forces, environmental factors, and transportation availability. Future land uses, although still tied to these forces, can always change for the better, with the application of development guidelines set forth by a community's Comprehensive Plan and supporting ordinances.

**3.3.1 Residential** land use is represented by land developed for dwellings and ancillary structures. In Montross, it reflects a typical village pattern:

- Older residences clustered around the village center
- Newer homes built in outlying areas
- Variety with respect to lot size (that is, residences built on large parcels on Route 3 and close to the village center, and neighborhoods of smaller lots within walking distance of the village center)
- Mostly single-family, detached dwellings connected to Town water with County Sewer
- Recent residential developments farther from the village center (using conventional subdivisions)

Today, all residential units in Town have access to the public water and sewer system, so the limiting factor of septic drain fields, which kept sprawl in check in the past, is no longer present.

West of the Town center, some residential uses are in transition to commercial and professional uses.

At the eastern end of Town, older residences scattered along the highway appear to be likely to come under pressure for commercial development as the value of the land surpasses that of the house.

**3.3.2 Commercial** uses include a village center, small shopping centers, and various office and services uses, some in converted residential structures.

The Town's most intensive commercial development has extended east, along Route 3, to a commercial area at Crookhorn Road (State Road 645), the Town's eastern boundary. Most of the development is in a typical strip-commercial configuration.

Montross's village center is comprised of one- and two-story structures in various ages and styles arranged around the square in front of the Courthouse. Characteristic uses include small businesses and offices. This section of Town participated in a Business District Revitalization project that greatly improved business façades within that Project Area. Parking, circulation, and pedestrian-safety issues were also addressed by

the revitalization project, which concluded in 2015.

**3.3.3 Industrial** land uses include manufacturing, mining, processing, packaging, storage, repair and/or treatment of products, food and natural resources.

Transportation, distribution, and warehousing operations were also evaluated in the land-use survey in order to identify specific use patterns with large impervious surfaces (to assess potentially large stormwater volume sources) and high-volume traffic or congestion-generating operations.

**3.3.4 Public and Semi-Public** land uses are those of land owned or operated by a public or quasi-public agency. These include schools, parks, libraries, and municipal facilities.

Semi-public uses are those of non-business institutions and community facilities that are open to the public. These include churches, cemeteries, nursing homes, and meeting halls.

The only school facility in the Town is the Washington and Lee High School, on Route 3, which will require administrative attention once the County builds a new High School on a different site.

Several churches are located in Town. Montross has three tourism/hospitality facilities – The Inn at Montross, Washington & Lee Motel, and East End Cottage.

**3.3.5 Governmental** use includes buildings just south of the center of Town, the Town Office at 15869 Kings Highway (Route 3), and several buildings owned by Westmoreland County grouped around the original Courthouse, plus the County Administration building, a Courthouse and Library on Polk Street.

**3.3.6 Institutional** uses are often mixed with commercial uses, since they require convenient access and large parking areas. There are no major institutional uses in Montross.

**3.3.7 Agricultural** uses typically include farming and the production of livestock, and can include forestry operations. Large areas surrounding the Town are still in active agricultural use, with portions of these larger parcels in the Town.

Substantial agricultural landholdings are potential development areas because of their size, flatness and favorable soil conditions.

Maintaining some agricultural activity in the community, through land-use controls and special-tax districts, will help preserve the small-town character of Montross.

**3.3.8 Forestland** in Montross includes wooded areas associated with ravines and steep slopes, and with areas not readily accessible by paved roads or development. Forestry operations are not a significant land use in the Town. Some flat, forested land surrounds the Town, but forest harvesting operations occur infrequently.

**3.3.9 Vacant and Undeveloped** lands comprise most of the land associated with the steep slopes of the plateau and the low lands associated with the surrounding drainage basins. They are not suitable for development.

**3.3.10 Land Uses Adjacent to the Town**'s limits are few. The flatlands to the north of Montross are agricultural.

To the west, Route 3 bends northward and crosses Chandlers Mill Pond, which is surrounded by steep, wooded land.

To the southwest, adjacent to Route 622, lies a broad area of flatland that drops, in a steep slope, to the Cat Point Creek basin.

### 3.3.11 Boundary Adjustments

The Town favors negotiation with Westmoreland County to adjust the Town's boundary over annexation. These adjustments should particularly address areas where Town services are provided.

## 3.4 Land Use and Development Issues

The sewer system opened opportunities for substantial development that has yet to take place. Montross still reveals its colonial origin, with its County Courthouse, square, and small streets in the business district.

Its small-town character and historical significance are valuable assets to be protected and cultivated. Village-center features, such as landscaping and pedestrian amenities, reinforce its village character.

Rapid residential growth and commercial development along Route 3 may not emphasize sensitivity to scale, design, access, landscaping, and signage that are consistent with reinforcing the uniqueness of the Town. The history and character of Montross are important factors in the Town's planning process.

Town leaders may use rezoning and utility availability as management tools to make decisions concerning proposals, plus such things as site design, setbacks, landscaping, signage, and aesthetics.

Protecting water quality and natural resources are at the top of the list of priorities for the Town's future growth.

The lack of affordable, single-family homes and apartments is perceived as a problem.

Community-survey results show that a variety of housing is desired, including single-family homes, townhouses, apartments, and senior-living facilities.

With a growing population of retirees (82% of survey respondents over age 46), interest in efficient public services is high, particularly in areas related to public safety (i.e., rescue squad, fire department, and law enforcement).

The Town should look for opportunities to provide more parks, open spaces, recreational areas, and greenways, as well as alternative transportation routes and modes throughout the community. Amenities such as these are strongly recommended as elements of a desirable quality of life in any community.

Maintaining some level of agricultural activity in the Town will be important to support a small-town appeal.

Montross has a vested interest in preserving its rural character, encouraging infill development in the village center, and in reinforcing and extending the pedestrian scale of the village.

## 3.5 Future Land Use

To aid in portraying the Future Land Use plan for the Town of Montross, the Town has been divided into three Planning Areas.

These areas were each looked at individually by the Planning Commission and considered for all types of possible future uses.

Each Planning Area was evaluated concerning its need for future infrastructural improvements, transportation improvements, enhancements of public services, and need for capital improvements. See Map 14 (Section 7).

### 3.5.1 "Downtown" – Planning Area 1

**Commercial Uses**

The Planning Commission believes that the downtown area contributes greatly to the small-town character of the Town of Montross, and that this area needs a plan to guide redevelopment.

✓ **supported**

- Maintenance of individual shops
- Re-use of the existing commercial structures and mixed-use zoning
- Property-tax discounts (or fines) to encourage rehabilitation of rundown structures
- If new: commercial structures that are compatible with the existing buildings
- Restaurants, bakery, cafes, delis
- Small retail shops and stores
- Enhanced pedestrian facilities
- Improved street parking
- Off-street parking
- Re-routed or buried overhead utility lines
- Uniform lighting and landscaping
- Historic preservation
- Landscape architecture and appropriate signage for a historical small town

✗ **discouraged**

- Shopping centers

### Industrial Uses

✗ discouraged
- Any industrial development

### Recreational Uses

✓ supported
- A Town Park in the central area
- Farmers market
- Improved sidewalks
- Playground
- Green areas, trees
- Uniform street lighting
- Greenways and bike paths
- Bicycle racks

### Residential Uses

✓ supported
- If new: mixed, near, or above commercial structures
- Single-family housing in existing residential area of downtown, following established pattern (size, types of homes, etc.)
- Mixed-use zoning

✗ discouraged
- High-density condominiums

### Infrastructure

✓ supported
- Maintenance of current level of water services
- Upgrade of water-supply lines to meet long-term needs

### Public Uses and Services

✓ supported
- Maintenance of current level of services
- Fire and rescue, law enforcement
- Farmers market
- Public parks
- Public library

### Capital Improvements

✓ supported
- Off-street parking on Main Street
- Sidewalks
- Street lights
- Street crossings
- Town park
- Farmers market
- Greenways or bike paths that blend in with long-term development plans

### Environmental Factors

✓ supported
- Redevelopment
- Low Impact Development (LID) designs and retrofits*
- Street crossings
- Town park
- Farmers market

## 3.5.2 "West" – Planning Area 2

The "West" area of the Town, while including commercial activity, should emphasize the long-term development of residential neighborhoods.

### Commercial Uses

✓ supported
- Professional offices and low-intensity commerce on Route 3, particularly between Lyells Street and Peach Grove Lane
- Landscape architecture and appropriate signage for a historical small town
- Mixed-use zoning
- Location of parking to the rear and sides of buildings
- Screening of loading areas, storage yards, and mechanical equipment
- Adequate setbacks

✗ discouraged
- Shopping centers

* Low Impact Development (LID) technology allows a developed site to handle as much stormwater runoff as the site had been able to handle before it was developed. The goal is to reduce the volume and velocity of stormwater as it reaches stream banks from the developed areas. For additional information, visit http://www.lid-stormwater.net/

### Industrial Uses

✗ discouraged
- Any industrial development

### Recreational Uses

✓ supported
- Connection of recreational facilities to those in Planning Area 1 ("Downtown")
- Improved sidewalks
- Playgrounds
- Green areas, trees
- Uniform street lighting
- Greenways and bike paths
- Bicycle racks

### Residential Uses

✓ supported
- Single-family housing
- Moderate-density and clustered development with substantial use of common green areas
- Landscaping that clearly defines and buffers residential areas
- Four dwelling units per acre in cluster configurations
- Each development proposal evaluated on a case-by-case basis
- Revision of the Town's development ordinances, as required
- The incorporation of water-quality protection from the early planning stages of any project
- Open spaces

✗ discouraged
- High-density condominiums

### Infrastructure

✓ supported
- Maintenance of current level of water services
- Upgrade of water-supply lines to meet long-term needs

### Public Uses and Services

✓ supported
- Maintenance of current level of services

### Capital Improvements

✓ supported
- Off-street parking on Main Street
- Sidewalks, crosswalks
- Street lights
- Greenways or bike paths that blend in with long-term development plans of the Town and the County
- The incorporation of water-quality protection from the early planning stages of any project
- Open spaces

✗ discouraged
- Any activity that diminishes the small-town quality of the community

### Environmental Factors

✓ supported
- Redevelopment
- Low Impact Development (LID) designs and retrofits
- Street crossings
- Protection of open spaces
- Protection of watershed by managing stormwater properly as development takes place
- Minimum land disturbance with control of erosion and sedimentation
- Limiting impervious cover and reducing stormwater runoff
- Open spaces

## 3.5.3 "East" – Planning Area 3

The Plan designates the "East" area of Montross as a commercial node.

### Commercial Uses

✓ supported
- Buildings that are set well back from State Route 3

- Access via shared entrances, feeder roads, and neighboring parts of Montross to reduce curb cuts and traffic on Route 3 as much as possible
- Easy pedestrian access
- Mixed use
- Landscape architecture and appropriate signage
- Best Management Practices that are attractive and useful in dealing with increased impervious surfaces
- Clean and light industries
- Location of parking to the rear and sides of buildings
- Screening of loading areas, storage yards, and mechanical equipment

✗ **discouraged**

- Noisy, polluting, and unattractive industries
- Shopping centers
- Forcing Town residents to drive in order to reach businesses located in this area

### Industrial Uses

✓ **supported**

- Clean and light industries
- Location of parking to the rear and sides of buildings
- Each new industrial proposal evaluated on a case-by-case basis
- Totally enclosed buildings limited to one story in height
- Screening of loading areas, storage yards, and mechanical equipment

✗ **discouraged**

- Noisy, polluting, and unattractive industries
- Any industry that would disrupt small-town atmosphere

### Recreational Uses

✓ **supported**

- Pedestrian links to recreational facilities in Planning Area 1 ("Downtown")
- Improved sidewalks
- Green areas, trees
- Uniform street lighting
- Greenways and bike paths
- Bicycle racks

### Residential Uses

✓ **supported**

- Limited residential development
- Landscaping that clearly defines and buffers residential areas
- Housing that requires minimal infrastructure investment
- Links to nearby commercial, recreational, and industrial areas via internal walkways, paths, and limited streets
- Each development proposal evaluated on a case-by-case basis

✗ **discouraged**

- High-density residential development

### Infrastructure

✓ **supported**

- Maintenance of current level of water services
- Upgrade of water-supply lines to meet long-term commercial and light-industrial standards

### Public Uses and Services

✓ **supported**

- Maintenance of current level of services

### Capital Improvements

✓ **supported**

- Off-street parking
- Sidewalks
- Street lights
- Street crossings
- Greenways or bike paths that blend in with long-term development plans of the Town and the County
- The incorporation of water-quality protection from the early planning stages of any project
- Open spaces, landscaped medians

✗ **discouraged**

- Any activity that diminishes the small-town quality of the community

### Environmental Factors

✓ **supported**

- Redevelopment
- Low Impact Development (LID) designs and retrofits
- Street crossings
- Protection of open spaces
- The incorporation of water-quality protection from the early planning stages of any project
- Minimum land disturbance with control of erosion and sedimentation
- Limiting impervious cover and reducing stormwater runoff pollutant loadings
- Open spaces

Town of Montross

2018 Comprehensive Plan

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# Montross 4

## RESOURCES

Town of Montross

2018 Comprehensive Plan

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# 4. NATURAL RESOURCES PROTECTION

Montross's location on a high ridge in the Northern Neck peninsula can be summarized as "high and dry," well above sensitive environmental features such as wetlands and shorelines.

Thus, the Town's most important natural-resources impact relates to its residential and commercial activities, and how they affect groundwater and stormwater runoff.

## 4.1 Resources Inventory

Montross is located in Westmoreland County, which is entirely within the Coastal Plain physiographic province of Virginia. In particular, Montross is located within the St. Mary's formation, which is characterized by upland gravel, sand, and unconsolidated, fossil-bearing clay deposits (SCS Soil Survey, 1982). The relatively flat, sandy coastal plain is well suited for agriculture, where well drained.

Agricultural uses are still active in some places throughout the Town and outskirts. Some parts of the Town remain forested, mostly within the ravines. In a sense, the region's most valuable natural resources are within the Chesapeake Bay and along its shorelines. The viability of those resources is fundamentally dependent upon the water quality of the Bay and its tributaries.

### 4.1.1 Topography

Most of Montross is built on a flat highland plateau approximately 150 feet above sea level. The Town reflects an east-west orientation, following Route 3.

Toward the edges of Town, streams have cut through the unconsolidated soils, forming ravines. Such ravines lie to the north and south of the existing boundaries of the Town. The slopes associated with these ravines are generally too steep for development. Within Montross, these slopes can range from 15 to 25 percent, and even greater than 25 percent in some locations.

Development on steep slopes may present special problems. While a modest slope aids drainage, steeper slopes may be easily eroded. This is not only because of the steeper topography, but because the soils found there (exposed beds of unconsolidated soils) are characteristically more easily eroded.

Steep slope areas are best left undisturbed for water-quality protection. Minimizing land disturbance and maintaining existing vegetation on slopes reduces the potential for erosion.

Slopes ranging from 15 to 25 percent begin to restrict development potential, and slopes greater than 25 percent pose significant development constraints, incurring additional grading, construction, and infrastructure costs.

Erosion resulting from development on steep slopes causes significant water-quality problems in the long term, requiring the use of expensive retaining walls that must be periodically repaired or replaced. If such sites are approved for development, land disturbance should be restricted to include the minimum needed for construction of the building footprint.

Open space and access should be designed to minimize the potential for disturbance of vegetation, and limits should be placed on the amount of impervious surface area and resulting stormwater runoff.

Within Montross, the steepest areas are found around Chandlers Mill Pond and Porters Meadow, the drainage ravine east of Peach Grove Lane, and areas near the high school's sewage treatment plant.

#### Drainage Patterns

Montross is located on a plateau within the Cat Point Creek drainage basin, which empties into the Rappahannock River.

At an elevation of approximately 150 feet above sea level, the northern side of the Town drains into Davis Branch, Porters Meadow, and Chandlers Mill Pond—located just to the northwest of the Town boundary. To the south, the Town drains into Ruin Branch.

Northwest of Montross, at the bottom of a steep hill, is the Big Swamp, which is associated with Cat Point Creek.

Inadequate management of stormwater runoff results in flooding and erosion, with sediments and pollutants entering streams and rivers. If allowed to continue over time, such conditions can seriously impact water quality.

With this in mind, the Montross Town Council has established a policy to submit all of the Town's proposed site plans to Westmoreland County's staff for review. The Town assists the County with administration and enforcement, but the chief responsibility falls with Westmoreland County.

### 4.1.2 Soils

Because soil characteristics affect the capacity of land to support structures, roads, and foundations, they must be considered in determining land use and development patterns.

Knowledge of a locality's soil characteristics can help identify areas where development should be encouraged or restricted. Other features—such as topography, hydrology, and vegetation—interact with soil characteristics to determine an area's suitability for development.

Certain types of land use and development should be limited or prohibited where soil conditions pose clear physical constraints. By restricting development, a locality can reduce environmental impacts and public and private costs.

For example, high shrink-swell soils can cause building foundations to fail, chimneys to separate, roads and driveways to crack. By allowing inappropriate development of such areas, these projects are likely to have higher maintenance and repair costs, and accelerated depreciation.

The ability for soil and other physical characteristics to effectively support development is termed "the carrying capacity of the land." Proposing land uses based on the land's carrying capacity is more cost-effective, on both the public and private sides of development, because it reduces utility requirements and minimizes environmental impacts.

Geographic Information Systems (GIS) allow analysis of soil types, including their erodibility relative to steepness and length of a slope. Such analysis provides important information to identify environmentally sensitive areas and protect water quality in the development process.

Soil is a complex mixture of organic and inorganic particles combined with variable amounts of air and water. Arranged in layers of different compositions called "horizons," the aggregate formation is termed "the soil profile classification."

#### Soil Classifications

Soil classifications for most areas of Virginia have been mapped by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). Westmoreland County's soil survey, performed in the 1970s, includes Montross, but it should be emphasized that the maps delineate general boundaries only. Site-specific soil analyses should be performed to ensure the appropriateness of certain land uses.

Shrink-swell soils are those that can greatly change in volume when their moisture levels fluctuate throughout the year. The shrink-swell potential of the soil is a measurement of how much volume change can be expected in a soil with an increase or decrease in moisture levels.

The extent of shrink-swell soils in Montross can be seen on Map 8 (Section 7). Soil types in the Town were studied as to their shrink-swell potential up to depths of 60 inches, a depth chosen to account for any change in grade along the length of any planned or future structures. If any soil type was classified as having high shrink-swell potential anywhere in this 60-inch range, it was grouped in the "high" category.

Highly erodible soils are those that, once disturbed, can be difficult to stabilize. Runoff produced from disturbance of these soils can lead to increased sedimentation of drainage courses and surface water bodies. Most of the soils in the coastal plain are sediments laid in horizontal layers by successive rises and falls in sea level.

Vegetative cover retards erosion, functioning as a retaining net or anchor. A significant disturbance of the ground cover may initiate the erosion process. Once started, erosion often accelerates and worsens, making solutions more difficult.

Determining erodibility is a complex process involving numerous variables. The soil's Erodibility Index (EI) is a function of:

- Its susceptibility to erosion at its surface
- The amount of rainfall and runoff
- Slope length and steepness
- Soil loss tolerance

Soils in Montross and vicinity were evaluated according to their erosion indices: "Low" (with an EI of less than 9) or "Moderate to Highly Erodible" (with an EI of 9 or more).

Development should be virtually prohibited in the highly erodible areas because any disturbance to existing vegetation will increase erosion and sedimentation. Areas with steep slopes are susceptible to extensive erosion when developed, but the moderate slope areas (15-25%) may be developed with careful site development and strict erosion controls.

Highly permeable soils are those suitable for septic drainage fields. But if a soil is too permeable, septic effluent percolates through it too quickly for natural biological processes to break down harmful bacteria, potentially contaminating the water table and threatening public health. This is often the case with sandy and large-grained soils.

The Chesapeake Bay Preservation Act defines soils with permeability equal to or greater than six inches per hour (up to a depth of 72 inches) as highly permeable.

If a soil has insufficient permeability, the effluent will not percolate through the soil, with contaminated water pooling close to or on the land surface. This often occurs when soils have high clay content or lie over impermeable strata. In this case, it is said that the land will not *perc*.

Since the Town requires mandatory hookup to the public sewage system, soil permeability is not a

**Specific Soil Groups**

Kempsville Loam is the most prevalent soil group in Montross. Map 7 (Section 7) shows the areas where this group is located. The permeability of Kempsville soil is moderate. Surface runoff is slow. The soil has an acidity of pH 4.5 to 5.5. It is low in natural fertility and organic material content. Surface layer and subsoil are commonly very acidic unless lime has been applied. Most areas of this soil type are farmed or used for crop or pasture. The depth to water table is at least six feet deep. It is a fair sub-grade material for local roads and streets. As slope increases, erosion and soil loss are a problem. In Montross and its vicinity, most of the level areas with Kempsville soils have been cleared and are either developed or in cultivation.

Suffolk Sandy Loam is the other important soil group to consider in Montross, since these are the soils found in the flat area in the village core and south and west along Route 3. Typically, the surface layer is brown and about ten inches thick. Subsoil is mostly strong brown sandy loam and loamy sand 40 inches thick. Beneath the subsoil is a compact layer of pale brown, loamy sand about 7 inches thick. The bottom layer is mostly red, sandy clay loam that extends to a depth of 60 inches or more. Permeability of Suffolk soil is moderate: 0.6 inches to 2 inches per hour. Runoff is slow. The soil has an acidity of pH 4.5 to 5.5. Suffolk soil is low in natural fertility and organic material content. Its surface layer and subsoil are commonly very acidic unless lime has been applied. Most areas of this soil type are farmed. In Montross and its vicinity, most of the level areas Suffolk soils have been cleared and are either developed or in cultivation.

Rumford and Tetotum Soils within the Town are located in the eastern area of Montross, on both sides of Route 3. These are associated with the heads of the Ruin Branch drainage basin and the Davis Branch basin, and are generally composed of 45% Rumford soils, 30% Tetotum and 25% other soils. The Rumford soils are well drained, runoff is rapid and permeability is moderately rapid. The Tetotum soils are moderately well drained and permeability is moderate. In Montross, the Rumford and Tetotum soil areas, found primarily in the ravines, remain wooded. Any disturbance of the associated steep slopes should be considered a significant water-quality protection concern.

Hydric Soils are regularly saturated soils that show a characteristic discoloration due to leaching of certain minerals by water. Because of frequent periodic saturation, these soils are classified as hydric. These are currently accepted as reliable indicators of wetlands. Hydric soils support plants adapted to saturated soils and occasional inundation. Because the Town is located on a plateau, it does not have significant areas containing hydric soils.

significant planning factor for properties within the Town's present boundaries.

Water-table depth varies greatly throughout the Town of Montross, as well as Westmoreland County as a whole. In some areas of the Town, the seasonal high-water level is less than 36 inches from the ground surface.

Some locations indicate a high saturation level of the soil, coming from the unconsolidated aquifer underlying the surface of the coastal plain. With seasonal fluctuations, the saturation level of the soil may increase significantly. These areas may also be prone to flooding.

Additionally, a high water table can cause problems with roads, foundations and basements, underground storage tanks, and buried utilities.

The water-table level may rise close to the soil surface in some cases, due to seasonal fluctuations. Proposals for development in high water-table areas should investigate water-table fluctuation histories and perform site-specific sub-surface hydrology evaluations. Actual site conditions may necessitate certain building constraints and prohibitions.

By examining both hydric soils and depth to water table, the characteristics of the unconsolidated aquifer in Montross and vicinity can be visualized. The presence of hydric soils with a high water table indicates that an area is regularly saturated and not suitable for development.

Non-hydric soils with a high water table are saturated less frequently and may be suitable for limited development.

Because of the Town's location on a flat, high ridge, the water table is at least three feet below the surface in most areas. However, there are several areas where it is higher—18 to 36 inches deep. These are mostly in the northeastern section of the Town.

Overall, the deep water table indicates a low vulnerability to contamination from low intensity land use, but where the soils are highly permeable and the water table is seasonably high, contamination from man-made pollutants can occur.

### 4.1.3 Hydrology

#### Surface Hydrology

Currently, there are no major surface water bodies in Montross.

Small impoundments are located to the north and south of the Town, with a substantial wetlands area on Cat Point Creek, west of Montross. Numerous unnamed, intermittent freshwater streams are found in the slopes of the plateau, collecting groundwater and stormwater runoff.

Floodplains are those areas of land predictably subject to overflows from nearby water bodies, including bays and oceans. Tidewater Virginia was analyzed by the Federal Emergency Management Agency (FEMA) to delineate flood hazard areas in its Flood Insurance Study of 1987.

The 100-year and 500-year floodplains are areas where floods are expected, at least once, during those spans of time.

Designation of floodplains can be a valuable mechanism for protecting life and property. Many localities restrict most types of development within the 100-year floodplains, and federal National Flood Insurance is being restricted to further discourage development in these areas.

FEMA's National Flood Hazard Layer considers Montross an "Area of Minimal Flood Hazard (Zone X). The Town's only flooding occurs when heavy rains pool on flat, slow-draining areas.

Wetlands are transitional areas between land and water. They include marshes, swamps, bogs, pocosins (swamps in an upland, coastal region), and wet meadows. In the past, they were thought of as breeding grounds for disease-bearing insects. They were considered virtually worthless land.

As a consequence, more than half of the total wetlands in the United States were filled in before the end of the 1970s. However, in recent decades, scientists have recognized that wetlands play vital roles in filtering and cleaning runoff, acting as sponges to slow and retain stormwater.

Wetlands also provide highly fertile habitat for land, avian, and aquatic life. The nutrient-rich, near-shore environment of wetlands also functions as a cradle for fin and shellfish.

Wetlands are classified into two broad categories:

> ***Tidal*** wetlands are found along the Chesapeake Bay and Atlantic coasts
>
> ***Nontidal*** wetlands are associated with perennial and intermittent streams, water impoundments, and frequently saturated areas

Because wetlands are dynamic living ecosystems, they are highly sensitive to pollution and other stresses. And because of the vital role wetlands play in protecting water quality, it is imperative that they be protected.

The Chesapeake Bay Preservation Act is designed to protect wetlands by establishing buffer zones and addressing the threat of non-point pollution to water quality. The Town's wetlands areas are shown on Map 12 (Section 7).

### Groundwater

The future growth and economic vitality of a community must be based on procuring and protecting long-term water resources.

The Northern Neck peninsula is framed by the Potomac River to the north and the Rappahannock River to the south. These portions of these rivers are classified as estuarine environments, having high salinity and being subject to tidal flushing. Such an environment supports marine habitats but it cannot provide potable water.

Currently, there are no surface water-supply facilities in the Northern Neck. All of the localities on the peninsula rely on groundwater as the main potable water source. For this reason, management and protection of groundwater resources is a critical issue to Northern Neck communities, and, since 2014, the Northern Neck has been a Groundwater Management Area, with a permit required by any entity withdrawing more than 300,000 gallons per month.

## Northern Neck Aquifers

**Yorktown-Eastover (Unconfined and Water Table)**
The Yorktown-Eastover Aquifer is unconfined in its western limits, but becomes confined as the aquifer slopes eastward (Pg. F7, USGS Professional Paper 1404-F). The western limit of the Yorktown-Eastover is in the eastern part of Richmond. In this part of the County, the Yorktown-Eastover acts as the water table aquifer, as well as acting as the recharge area for the confined part of the aquifer (Pg. F7, USGS Professional Paper 1404-F). The unconfined, water table recharge areas of the Yorktown-Eastover are important because these areas are where contaminants can quickly reach the aquifer through the ground surface. This is of further concern because the Yorktown-Eastover Aquifer is a primary source of drinking water for the Eastern Shore of Virginia.

**Chickahominy-Piney Point Aquifer (Confined)**
This confined aquifer is located approximately 325 – 400 feet below the ground surface in Irvington and averages 50 to 100 feet in thickness throughout its reach, with a maximum thickness of 140 feet in Lancaster County (Pg. C46, USGS Professional Paper 1404-C). The Chickahominy-Piney Point starts at outcrop areas near the major stream valleys in Stafford and King George Counties, on down through Caroline, Hanover, and Henrico Counties, just east of the fall line (Pg. C46, USGS Professional Paper 1404-C). The major recharge area for this aquifer is also found at the outcrop location. Water entering from the recharge area flows down and eastward to reach Irvington. Lesser recharge of the aquifer also occurs in smaller amounts from vertical seepage between the confining beds of the other aquifers and along existing well conduits. This aquifer is not as prone to contamination as the water table aquifer due to its limited recharge potential in Montross and Westmoreland County. Furthermore, supply in this aquifer is not as susceptible to decreases due to local drought conditions.

**Brightseat-Upper Potomac Aquifer (Confined)**
This aquifer is located approximately 575 – 650 feet below the ground surface in Montross. The aquifer is actually two aquifers located very close together, and separated by a thin confining bed. The Brightseat is the smaller aquifer and is located above the Upper Potomac Aquifer. The Upper Potomac Aquifer is located further below the surface at depths of 750 feet to 820 feet. These aquifers start from “subsurface pinchouts” east of the fall line and build to almost 400 feet in thickness to the east (Pg. C42, USGS Professional Paper 1404-C). Recharge areas for these aquifers are located at the start of the “pinchouts” east of the fall line. Recharge areas for these aquifers are located at the start of the “pinchouts” east of the fall line. Recharge also occurs in much smaller amounts from vertical seepage between aquifers and along existing well conduits. These aquifers are not as prone to contamination as the water table aquifer due to its limited recharge potential in Montross and Westmoreland County. Furthermore, supply of these aquifers is not susceptible to decreases due to local drought conditions.

Most deep wells in Montross and Westmoreland County tap the Brightseat Aquifer, not the Upper-Potomac. Water in the Brightseat Aquifer is of the sodium bicarbonate type in the central part of the aquifer, and becomes of the sodium chloride type when moving east. Additionally, ground water in this aquifer becomes more mineralized the further one moves east.

Refer to the Virginia Coastal Plane diagram, in Section 8, for a visual rendering of the region’s groundwater

The Town of Montross and Westmoreland County's groundwater resources come from an underground system of aquifers that reflect the geology of the Coastal Plain Region of Virginia.

To understand how and where this groundwater is stored, it is helpful to remember that the Tidewater Region consists of layers of sand and sediments laid down by rises and falls in ocean level throughout history.

Some layers, such as those comprised of clays, are impervious, so they act as barriers to the migration of liquids.

Other layers are comprised of sands or porous soils that are receptive to absorbing, transporting, accumulating, and storing groundwater.

In the hydrologic cycle, groundwater percolates through permeable soils until it reaches impermeable areas. Layers in which water tends to accumulate are termed "aquifers."

Aquifers can be "confined" or "unconfined."

A confined, or artesian, aquifer is often a deep aquifer filled with water that is confined by rock or soil on all sides.

Of the two deep aquifers lying below the Montross area, the top of the upper one lies approximately 225 feet beneath the surface, and it is about 60 feet thick.

Typically, large-scale users such as municipalities and industries will tap the principal artesian aquifer. Smaller users are more likely to tap the upper artesian aquifer, or the (unconfined) water-table aquifer, since shallower wells are less costly.

Montross draws its water from a depth of approximately 700 feet. According to the *Groundwater of the Northern Neck Peninsula* report, water quality remains excellent.

The water extracted is of a soft, sodium-bicarbonate type. Areas in the southeast portion of the peninsula have highly mineralized water, and some brackishness due to saltwater intrusion. But the Town's water supply is considered viable for the long-range future.

There is evidence, however, that withdrawals from this aquifer have exceeded re-supply. Between 1967 and 1975, water levels in the Town's well dropped approximately 15 feet.

Montross's withdrawals average a modest 68,000 gallons per day (Town, November 2006). The substantial drop in aquifer levels is attributed to large industrial users in the Virginia Coastal Plain. They withdraw huge volumes of water from the same aquifer.

A dip in the water table due to excessive groundwater withdrawal can cause a cone of depression, disrupting normal groundwater flow and drawing down water from higher confined layers. This process may result in pollutants reaching the water supply. Additionally, depletion of fresh water from the aquifers often causes salt water to be drawn from tidal areas into the aquifers, resulting in contamination that is difficult to reverse.

Confined aquifers are refilled by precipitation and surface-water runoff. Areas where these external waters enter their path to the artesian aquifers are called "groundwater-recharge areas." These areas are primarily located farther inland (the water travels slowly eastward, following the west-to-east tilt of the deep Coastal Plain sedimentary layers).

However, some local groundwater recharge may occur where streams have cut through a confining clay layer, or where high soil permeability allows water to migrate to deeper aquifers without much filtering.

The *Groundwater of the Northern Neck Peninsula* study, prepared by the State Water Control Board in 1979, did not identify local recharge areas, but the Town and Westmoreland County should monitor whether such groundwater-recharge areas become present by using the DRASTIC mapping system.

The DRASTIC system was developed in order to evaluate the potential for groundwater pollution.

The acronym pertains to the physical characteristics of a site that affect that potential:

**D** – Depth to Water
**R** – Recharge (net recharge)
**A** – Aquifer Media
**S** – Soil Media
**T** – Topography (slope)
**I** – Impact of the Vadose Zone Media
**C** – Hydraulic Conductivity of the Aquifer

DRASTIC provides a quantified measure of the relative vulnerability of an area to contamination that may impact groundwater resources. It can also help prioritize areas where groundwater protection is critical, or identify sensitive areas where special attention is warranted.

An unconfined aquifer (a.k.a. upper, or water-table aquifer) is located near the surface. This is the aquifer most often used by smaller industries and some residential and agricultural users.

As the water table rises and falls with seasonal fluctuations, the unconfined aquifer is recharged by precipitation. However, water levels in this aquifer are also dropping. Records show a drop of 15 to 20 feet from 1900 to 1977.

Montross's unconfined water table has shown signs of decline, caused by withdrawals exceeding recharge (*Groundwater of the Northern Neck Peninsula*, 1979). This unconfined water table lies approximately six to twelve feet below ground in most areas of the Town.

Periodic septic pump-outs (as required by the Chesapeake Bay Preservation Act Designation and Management Regulations) will greatly reduce the incidence of groundwater contamination from septic systems.

Even with a municipal sewer system in place, the water-table aquifer is sensitive to: 1) leaking sewer lines, 2) grandfathered septic tanks, and 3) potential point-source pollution from underground storage tanks, dump sites, and abandoned and improperly capped wells.

Agricultural operations can introduce pollutants such as fertilizers and pesticides, and feed lots and waste areas can contribute excessive nutrients as well. In developed areas, runoff carries pollutants in stormwater. Residential runoff may carry such pollutants as lawn fertilizers and pesticides, and the careless dumping of household chemicals can cause water-table pollution that may ultimately jeopardize the potable water supply.

In 1987, the Virginia Groundwater Protection Steering Committee published the *Groundwater Protection Strategy for Virginia*. This document assigned top priority to five potential sources of groundwater contamination:

- Leaking underground storage tanks
- Landfills
- Waste lagoons
- Septic tanks
- Pesticides and fertilizers

Leaking underground storage tanks are an important potential threat to water quality due to the fact that the water-table aquifer is relatively close to the surface in some areas of Montross.

Threats to the deeper aquifers include old or abandoned wells (which can quickly introduce concentrated contaminants) and old dump sites and certain agricultural activities (where contaminants might migrate into groundwater-recharge areas or fissures).

### 4.2 Environmental Factors and Development

Environmental sensitivity throughout the Town varies, depending on soil permeability, depth to water table, and slopes.

Sensitive environmental areas include 1) the ravines associated with the stream headlands, and 2) the floodplains and steep areas associated with these ravines.

Soils in these areas are highly erodible and frequently saturated. Leaving these lands undisturbed and protecting the vegetation is essential to stormwater management and erosion and sedimentation control.

Fortunately, the steep slopes in these areas have prevented large-scale development until now. However, with the expected development pressures and the availability of sewer service, areas originally thought poorly suited for development may have their feasibility reevaluated.

The Town will need to minimize or prevent development in steep-slope and drainage areas by guiding development into the predominantly flat parts of the plateau. The environmentally sensitive areas, however, may present opportunities for the development of greenways within the Town and surroundings.

## 4.3 Existing and Potential Pollution Sources

Pollutants generally affect water quality through two different methods:

> **Runoff** refers to water that is not absorbed by the soil, but is instead carried off by natural or man-made drainage courses to a surface water body.
>
> **Leaching** refers to water that is absorbed by the soil and percolates into the soil layers underneath. The effect of this type of pollution is usually felt on the groundwater supply.

The amount of runoff or leaching in a community is usually dependent on the existing land cover. Generally, the more heavily an area is developed, the more susceptible the area is to runoff due to increased amounts of impervious land cover (i.e. parking lots, buildings, and roads).

Large tracts of farmland and forest offer extensive areas of pervious surfaces, with more possibilities of groundwater-recharge areas that could be susceptible to leaching.

Impacts from runoff and leaching are further complicated by the types of soils present in different areas of the Town.

Highly erodible soils have the potential to become a source of pollution in times of heavy rainstorms and melting periods (after ice or snowstorms). This combination of a high amount of runoff and the presence of highly erodible soils can result in a higher concentration of sediments entering the Town's surface waters.

Individual occurrences of pollution through leaching or ponding can be worsened through the presence of either highly permeable soils or soils with high water tables.

Highly permeable soils and soils with high water tables both act to provide connections between groundwater and surface water. Awareness of these soil properties as they relate to existing and future land uses can help in pinpointing areas currently in need of mitigation efforts, as well as planning for the avoidance of further contamination of water resources.

Permeability of soils in the Town of Montross can be seen on Map 11 (Section 7).

Surface water bodies can be polluted by improperly placed septic systems, or from failing or poorly maintained systems.

Often, septic systems have been placed in soils that can act to heighten the negative impact of the system. In soils with seasonally high water tables, the water table can rise into the septic systems' drain fields and intermix with the relatively untreated effluent.

Furthermore, high water tables can cause pooling of septic effluent on the ground surface. During a rainstorm, pooled effluent can quickly drain into nearby surface water bodies.

Highly permeable soils can also act to increase negative impacts of septic systems. These soils allow septic effluent to percolate too quickly through soils underneath a drain field, not allowing for proper filtration. If the effluent percolates before it is properly treated, then it can become a threat to groundwater.

### 4.3.1 Point Source Pollutants

Pollutants that can be traced to their source.

#### Superfund Site

About one-half mile east of Town, on Route 3, is the former Arrowhead Industries manufacturing plant. The plant manufactured cosmetic packaging, some of which was metal-plated. The waste lagoon contained various heavy metals: cadmium, arsenic, lead—plus various hazardous chemicals. The plant closed in the mid 1980s.

Because of the hazardous materials left in the waste-storage lagoon, the property was designated a "Superfund" site by the Environmental Protection Agency—meaning that the Agency ordered a comprehensive cleanup, under EPA supervision, that included extensive soil removal and extensive testing of the lagoon's water integrity.

Fortunately, the soils in this region are predominantly clay, and the lagoon bottom was compacted according to EPA standards when constructed. State Health Department officials stated that test wells were in place, that no pollution had been found, and that the lagoon did not constitute a threat to the Town's water supply.

However, the waste lagoon may pose a long-term water-quality threat, and the Town should ensure that the lagoon is monitored regularly in the future.

Finally, the Arrowhead Industries plant also had a well reaching into the principal aquifer. The Virginia Department of Environmental Quality's (DEQ) Water Division has stated that it did not present a threat to the aquifer's water quality.

### Underground Storage Tanks

Underground petroleum or chemical storage tanks (USTs) constitute potential threats to groundwater due to leaks or accidental spills. Leaks are often not detected until substantial contamination of the surrounding soils has already occurred. In addition, tanks that were abandoned before more stringent regulations were put in place may pose an unwanted and potentially expensive liability on the property owner or the Town.

The definition of USTs also includes piping that has at least ten percent of its volume underground, and that contains a regulated substance.

The State Water Control Board (SWCB) is charged with administering the Virginia Underground Storage Tank Program. It requires registration of tanks over 5,000 gallons and provides for periodic inspection of tanks. It also requires the phased upgrade of old tanks, strict controls on new tanks, and provides funding for the cleanup of leaking tanks.

## Pollution Sources

**Point source pollutants** are those that can be traced to a single source (industrial and manufacturing uses, leaking underground storage tanks, landfills, and waste disposal sites). Currently, the State of Virginia oversees the federal requirements of the National Pollution Discharge Elimination System (NPDES) by administering the Virginia Pollution Discharge Elimination System (VPDES). Under this program, the State Water Control Board (SWCB) issues discharge permits, sets effluent standards, and regulates the amount of point source effluent allowed to enter Virginia waters.

**Nonpoint source pollutants** are diffused sources of pollution such as stormwater runoff. Nonpoint source pollutants include but are not limited to pollutants carried in stormwater runoff from impervious surfaces (phosphorus, metals, toxins, particulate matter), leachate from inadequately sited, designed, or maintained septic fields, erosion and sedimentation from construction sites, agricultural runoff (sediment and nutrients), and boat and marina pollution.

Due to the moderate acidity of the soils in Montross (pH of 4.5 to 5.5; SCS Soil Survey, Westmoreland County, 1979), corrosion is a factor to be considered. Although newer tanks and pipes are corrosion resistant, older tanks may be subject to accelerated corrosion and failure.

Mandatory replacement of older tanks by non-corrosive tanks with "spill preventers" and other safety features is required.

The SWCB investigates UST leaks on a statewide basis—when reported or suspected—through the Spill Response and Remediation Pollution Program.

The Town's role with respect to this program should be one of cooperation with state agencies in monitoring events associated with the underground storage of products that, if leaked or spilled, would pollute groundwater.

### Aboveground Storage Tanks

These tanks are prevalent in many areas not served by natural gas and where heating is generated by propane or fuel oil. Most propane and oil users rely on aboveground storage tanks, ranging in size from 200 gallons to commercial and industrial storage facilities.

Since Montross residents rely heavily on fuel oil or propane for heating, it is possible that aboveground tanks may present existing or future pollution problems.

While leaks from individual tanks may pose relatively minor threats to groundwater, long-term leaking, or a concentration of such tanks as might be found in an older residential area, may pose significant water-quality threats.

The Clean Water Act of 1972 regulates individual aboveground storage tanks. Owners of single tanks containing **more** than 660 gallons—or multiple tanks with a combined capacity of 1,320 gallons—must register with the State and have a "Spill Prevention and Control and Countermeasure Plan" in place.

The Virginia Department of Environmental Quality regulates aboveground storage tanks for the Commonwealth. It requires that tank owners develop an "Oil Discharge Contingency Plan," or ODCP, prior to registering a tank. This is an emergency-response plan in the event of a release from the tank. The Plan must also identify the anticipated environmental impacts for such an accidental discharge, and identify mitigation measures to be implemented following a spill.

Aboveground storage tanks with a capacity of **less** than 600 gallons—or multiple tanks with a combined capacity of less than 1,320 gallons—are not currently regulated by State and federal agencies.

Most home storage tanks range in size from 200 to 660 gallons. Therefore, it is the tank owner's responsibility to ensure that leaks do not occur. It would be beneficial for the Town to publicize this fact, and also provide information on remediation measures for leaks and spills.

### Illegal Dumping of Hazardous Wastes

Construction materials, household chemicals, automotive products, and many other types of pollutants may be carried in runoff into streams, killing buffer vegetation and possibly entering the water-table aquifer, where pollution damage can spread very rapidly.

Although it is generally thought of as occurring on underutilized and vacant public or private property, illegal dumping includes the dumping of hazardous materials into a water-treatment system (e.g. pouring chemicals down a sink or toilet).

Not only does illegal dumping preclude the opportunity for quick, relatively inexpensive clean-up, but with extensive contamination, remediation may be either very costly or fiscally impossible.

Illegal dumping is an attempt to transfer waste-disposal costs to someone else. If the perpetrator is not identified, then the expense is incurred by a governmental agency. The Town should investigate illegal dumping sites and actively prosecute the polluters, publicizing the fact that illegal dumping will not be tolerated in the Town.

## 4.3.2 Nonpoint Source Pollutants

The main nonpoint source in Montross is likely to be pollutants in stormwater runoff from roads and highways, plus runoff from impervious surfaces associated with the parking areas of commercial buildings. Erosion and sedimentation from inadequately controlled construction sites contributes as well.

Other potential nonpoint source pollution includes excessive pesticide and nutrient use, failed septic systems, and abandoned wells.

Water quality can be protected by employing Best Management Practices (BMPs) to reduce pollutant loadings in stormwater runoff. Preserving existing vegetation and minimizing impervious surfaces are among the most effective practices.

Land disturbance, especially that occurring on steeper slope areas, should be carefully regulated and monitored to minimize erosion.

Long-term erosion and sedimentation lead to eutrophication—the gradual filling of a water body with sediment, excessive nutrients, and algal growth, resulting in oxygen depletion, suffocation, decay, and stagnation of that water body.

The Chesapeake Bay Preservation Area Designation specifically addresses nonpoint source (NPS) pollution during the land-

development process, with performance criteria that include such requirements as 1) maintaining protective buffer strips around water bodies, 2) minimizing site disturbance, 3) retaining site vegetation, 4) reducing impervious surfaces, and 5) utilizing BMPs to maintain a site's pre-development loadings.

Other measures, such as the five-year septic tank pump-out requirement—and the recommendation to use agricultural-conservation plans and forestal BMPs—also improve water quality.

### Nonpoint Source Pollution & Land Uses

Residential developments should provide either on-site BMPs or a regional facility that may be shared by other nearby developments.

Encouraging higher densities in areas with little environmental sensitivity—and clustering development to provide open space and recreation areas—will reduce impervious surfaces and utility costs, and will thereby result in cost savings as well as better water-quality protection.

Development guidelines should restrict the use of steep-slope areas. Existing erosion and sediment controls should be effective in controlling runoff and protecting water quality if consistently enforced.

Town development ordinances should include protection of sensitive environmental areas, open space, the establishment of greenways and conservation areas, and minimizing land disturbance.

Commercial and industrial development brings greater water-quality impacts due to larger impervious-surface requirements, utility demands, redundant facilities, and increased automobile traffic.

New commercial and industrial development must be encouraged to minimize land disturbance, protecting riparian buffer areas and existing on-site vegetation.

Redevelopment of the village center can provide public benefits, including the utilization of existing infrastructure with no net gain in impervious surfaces.

#### Low Impact Development (LID)

Low Impact Development is an extremely effective planning and engineering approach in the management of stormwater runoff and water flow.

It incorporates site-specific techniques that result in enhanced water-quality protection, less costly infrastructural improvements, and a decrease in the need for large stormwater retention basins.

Modifying existing land-use and stormwater ordinances to include provisions and incentives for LID can provide alternative methods of stormwater control and water-quality protection in the Town's undeveloped areas.


*Above: LID implementation at the Northern Neck Planning District Commission's office in Warsaw, Virginia.*

In Montross, the existing industrial area poses no known water-quality threats. The Town's preference for light industrial development may result in fewer negative impacts on water quality than other traditional industrial uses.

In addition to water-quality protection measures, Town development ordinances should incorporate low-impact development designs (LID), appropriate landscaping, and open-space measures that add value to the community and minimize impacts to surrounding land uses.

Agricultural and Forestry operations still comprise a component of the land uses in the Town. Agriculture may be a significant contributor to water-quality pollution if safeguards are not in place. Tilling may result in erosion and sediment transport. Excessive pesticide and nutrient application may contaminate groundwater.

Unquestionably, poorly managed farming operations seriously threaten water quality. The Bay Act's emphasis on using plans approved by the Soil and Water Conservation District for each agricultural operation—plus the use of buffers around RPAs—will help minimize these impacts.

Agricultural feedlots may also be a potential source of water pollution. Livestock production generates wastes that have the potential of seriously contaminating farm ponds, streams, and the water-table aquifer. Particular care should be taken in their location and management.

Since agricultural uses in Montross and vicinity are relatively small-scaled and limited, an equally important consideration is the future development of these lands and the potential impacts resulting from that development.

The forestry operations in Town seem to occur only irregularly. However, it is possible that tree-harvesting and land-clearing activities will occur in the future.

The Chesapeake Bay Preservation Act requires the retention of trees and vegetation on a site to be developed to the maximum extent possible, consistent with the use and development allowed. The Town should discourage land speculators from clearing a site prior to submitting plans for development, or from allowing site development under the guise of forestry activities.

Public and semi-public water-quality concerns focus on schools, churches, institutions, and buildings with large parking lots and other impervious surfaces. These facilities should be encouraged to adopt LID retrofits and to share parking facilities with other institutions. Water-quality improvement may also be realized by reexamining the institution's approach to grounds maintenance and vegetative practices.

Also, the Town's development ordinances should require the provision of public amenities, such as open spaces, parks, and conservation areas that can tie into greenways and alternative-access routes.

## Shoreline and Streambank Erosion

Streambank erosion and the transport of sediment is a natural component of the hydrologic cycle. In most cases, they are accelerated following the development of a site, due to increased impervious surfaces and the resulting increase in stormwater loading.

The goal of the 100-foot vegetative buffer next to state waters—as required by the Chesapeake Bay Preservation Act—is to reduce the velocity of the stormwater, thus trapping most of the sediment before it reaches the watercourses.

No existing erosion problems were identified in the field survey of Montross. There is, however, a potential for erosion of creek banks near land development—where parking lots create impervious surfaces that drain into those creeks.

Combined with stormwater from Route 3 and other roads, volumes and velocities may increase and be channeled into the streams. Future development should be carefully monitored to ensure adequate stormwater management.


McGinness General Store, circa 1929
In 2018, the site is occupied by the
Get & Zip convenience store, right outside
the Town Boundary

# Montross 5

## TRANSPORTATION

People's Drug store in Montross. From left to right: A salesman from Baltimore, George Chandler, Sr., Norris Lowery, and Wesley Lowery. Undated photograph.

# 5. TRANSPORTATION

Given Montross's unique location on the path of major traffic on State Route 3, this section focuses entirely on transportation-related issues, in good part to provide the Virginia Department of Transportation (VDOT) with an opportunity to review the Town's future land-use plans and thus be able to prepare for the Town's future transportation needs.

## 5.1 Existing Transportation Conditions

Traffic-safety concerns were clear in residents' responses to the Town's survey. In particular: the need to enforce the speed limit through Town. Many residents also mentioned the need for improved parking facilities and bike lanes.

State Route 3, a VDOT "Primary Arterial Thoroughfare," bisects the Town from east to west. It is a four-lane roadway from the eastern boundary of the Town to the village center, where it narrows to two lanes.

To the east of Montross, Route 3 connects with Route 360 at Warsaw, where 360 goes on across the Rappahannock River to Tappahannock and the City of Richmond.

To the west, Route 3 connects with U.S. Route 301, twenty-five miles from Montross, and it also connects with U.S. Route 1 and Interstate 95 at Fredericksburg, at a distance of fifty miles from the Town.

The Town of Montross is located along a major corridor that realizes large increases in the flow of traffic beginning in the time of late Spring and continuing through late Fall.

The seasonal increase in traffic is linked to certain days of the week, usually from Thursday evenings through noontime on Mondays, during the season. The peaks of this traffic occur on Friday afternoons or evenings, and again on Sunday afternoons or evenings.

The impact of seasonal traffic on local road conditions cannot be underestimated, and it has to be further studied in order to properly assess future transportation needs in the Town.

A number of secondary (or collector) roads are based on older paths to nearby communities. The local road network serving the Town is based on the pre-automotive layout of the village.

Most streets and roads within Montross are maintained by VDOT. State law requires VDOT to assume operation and maintenance responsibility for up to one-quarter mile of new road in each locality per year, provided the roads are constructed to VDOT specifications.

This provides an effective mechanism to encourage developers to construct high-standard roads for subdivisions and other projects, to turn them over to the Town when completed, and to then have VDOT assume responsibility for maintenance and safety.

However, this approach creates problems sometimes for localities that find that VDOT standards apply more to large urban areas, like Richmond, than to rural communities.

The Town should work with VDOT to bring non-conforming elements as close to compliance as possible.

## 5.2 Future Transportation Conditions

While long-term development is difficult to predict, some assessment of potential growth is necessary to assess future transportation needs. The Town should work with VDOT to conduct additional traffic counts, especially at key intersections.

A review of historical traffic trends—as well as population forecasts for the Montross and Westmoreland County area—is one tool to predict future needs.

### Historical Traffic Trends

The Virginia Department of Transportation conducts traffic counts with the use of sensors in or along a street or highway.

From the data collected, VDOT estimates the average number of vehicles that travel a given segment of road.

Data collected by VDOT produced the following average daily traffic estimates on State Route 3:

| Segment (in Town) | 2001 | 2005 | 2016 |
|---|---|---|---|
| East of Peach Grove Ln. | 8,800 | 8,600 | 7,700 |
| West of Peach Grove Ln. | 5,000 | 5,400 | 5,300 |

Earlier estimates predicted a 5% increase in traffic volume between 2005 and 2015. That clearly did not happen, and the trend is either a maintenance or even reduction of the daily average.

The implications on roadway Level of Service (LOS) cannot be determined without additional data. Generally, the capacity of a four-lane, undivided highway can be in the 40,000-to-60,000 average daily range. However, this number decreases at signals or at locations with significant turning movements.

## 5.3 Access Management

Managing access along Route 3 might help avoid undesirable modifications such as widening of roadways through the center of Town.

Access-management techniques include a broad range of roadway treatments, but given the variety of roadway conditions in Montross, not all of these will apply throughout the Town.

These access-management techniques tend to be highway-oriented and will have broader application on Route 3 outside the Town. In addition, some standards will only be applicable above certain speeds limits.

Nevertheless, a few of these provisions may have application within the Town core. Local officials should coordinate with VDOT to determine the most appropriate use of the general standards.

The Northern Neck Planning District Commission is currently developing a Model Overlay District to address such things as setbacks, signage, landscaping, and lighting. The Town should use this model—perhaps by adopting an access-management ordinance—for its major thoroughfare.

The following include both Standard VDOT access-management techniques and additional ideas tailored to the Town's needs.

### Turn Lanes

#### VDOT Standards

By separating turning vehicles and through traffic, turn lanes can improve highway safety and efficiency. In general, left-turn lanes should be required at median crossovers, and right-turn lanes should be required at all commercial entrances and side streets. In some cases, the use of a paved shoulder can substitute for a right-turn lane.

#### Recommendations

The Town should adhere to VDOT standards.

### Driveway Spacing and Consolidation

#### VDOT Standards

Because driveways introduce conflict between turning and through vehicles, their spacing is a critical part of highway planning. Generally, a minimum separation of 400 feet should be required. This can be accomplished by means of shared access, indirect access from side streets, and driveway closure and consolidation. New residential subdivisions should include a system of internal roads, with no direct driveway access on the major thoroughfare.

#### Recommendations

The Town should adhere to VDOT standards.

### Corner Clearance

#### VDOT Standards

This technique is related to driveway spacing. It addresses the distance from roadway intersections to the nearest driveway. On the primary road (such as Route 3), clearances should be 400 feet upstream of the intersection and 250 feet downstream. On the interesting street, the clearances should be 250 feet upstream and 100 feet downstream.

#### Recommendations

The Town should adhere to VDOT standards.

## Sight Distance (Visibility)

### Recommendations

The Town should work with VDOT to ensure adequate sight distances for new development and redevelopment. Signage, landscaping, and setback requirements can help maintain sight distances, and the Town should adopt an ordinance addressing each of these issues.

## Crossover Spacing and Consolidation

### VDOT Standards

Like driveways, median crossovers require adequate spacing for efficient highway function. In general, full-access crossovers should have a minimum spacing of 0.5 miles, while directional crossovers should be a minimum of 0.25 miles apart. In some cases, attaining this standard may require closure of existing crossovers.

### Recommendations

The Town should manage new development to avoid the need for crossovers that violate these standards. Where development occurs at existing crossovers, access to adjacent parcels should be considered.

## Median and Crossover Width

### VDOT Standards

The width of a median affects the ability of vehicles to pause in the median while turning or crossing the roadway. Crossover width is the actual size of the opening in the median, and it affects the ability of large vehicles to navigate the opening safely and efficiently. Standards vary depending on use.

### Recommendations

At major traffic generators and cross streets, the Town should seek a minimum of 50 feet median width, which may require roadway widening or flaring. At locations where buses or tractor-trailers make frequent turns, crossovers should be widened to accommodate these users.

Where median and crossover widening is not possible, consideration should be given to converting full access crossovers to directional crossovers, thereby prohibiting certain turning movements.

## Signal Spacing and Timing

### Recommendations

In order to accommodate pedestrian crossing, and as development continues, certain locations along Route 3 might require new traffic signals. Because the spacing of signals dramatically affects roadway function, a spacing of 0.5 miles should be maintained in developing areas, and a spacing of 0.25 miles in developed areas near the Town center. The need for timing coordination of any new signal with the existing signal at the east end of Town should be investigated.

## Inter-Parcel Connection

### VDOT Standards

Connecting adjacent parcels by means of an access drive can eliminate short local trips on the main road.

### Recommendations

Where new commercial development occurs, the Town should require connection to adjacent commercial uses or “stubbing” of connector roads to adjacent, vacant, commercial parcels.

## Local Road Connections

### VDOT Standards

Like inter-parcel connections, a connected system of local roads can reduce demand on the major thoroughfare.

### Recommendations

The Town should require that new residential subdivisions connect to the existing road system and make provisions for future connections to land that is currently undeveloped.

## Crosswalks and Pedestrian Safety

### Recommendations

Locations where safe crosswalks are most needed include Porter Lane, Opal Lane, Lyells Street, Peach Grove Lane, Zacata Road, etc.)

To assist in planning these enhancements, and as a first step toward obtaining implementation funding, the Town should develop a master pedestrian and bicycle plan.

Such a plan would identify specific improvements at these locations, and would develop a Town-wide program for improving access. Implementation priorities, timeframes, and cost opinions would poise the Town to obtain grant funding.

**Short Term (2020-2022)**: Seek funding to design and construct enhancements.

## Future Paths and Bike Routes

### Recommendations

The Town should work with developers to provide bicycle and pedestrian facilities as new development occurs. In all cases, possible pedestrian connections to the existing sidewalk network should be encouraged. To assist in identifying and prioritizing such facilities and connections, the Town should develop a master pedestrian and bicycle plan.

**Immediate Action (2018-2019)**: Seek funding to develop a master plan.

**Short Term (2020-2022)**: Seek funding to design and construct priority plan elements.

**Long Term (2019-2031)**: Work with developers to implement plan in incremental fashion.

## Sidewalk Connections

### Recommendations

A continuous sidewalk from the west end to the east end of the Town should be the goal, as well as a sidewalk that meets standard features and is consistent throughout its length.

To assist in planning these connections, the Town should develop a master pedestrian and bicycle plan.

**Immediate Action (2018-2019)**: Seek funding to develop a master plan.

**Short Term (2020-2022)**: Seek funding to design and construct enhancements.

**Long Term (2019-2031)**: Based on the master plan, seek funding to develop additional segments as the town is developed.

## Local Road Connections

### Recommendations

To provide alternative means for local trips, the Town should work with VDOT through its transportation planning and programming process to evaluate potential future improvements.

## Intersection Improvements

### Recommendations

Safe pedestrian crosswalks at intersections have a high priority to Town residents.

## One Way Street

### Recommendations

No recommendations at this time.

## Gateways

### Recommendations

Montross has two gateways through which rural traffic enters the Town: Route 3 east and west. As entrances into the Town, these areas provide visitors with their first impression of Montross. As

such, their appearance, traffic flow, and character are extremely important.

The Town's access-management policies should preserve and enhance the function and character of the Town's gateways. In addition, the Town should pursue signage and streetscape enhancements to denote these entrances and welcome travelers to Montross.

**Immediate Action (2018-2019)**: Seek funding to develop a streetscape master plan and construct gateway enhancements. Adopt overlay zoning to protect corridors.

## Transition Areas

### Recommendations

Transition areas are those where road uses are predominantly highway-oriented, but also where speed limits begin to come down and the highway's rural character shifts to suburban and commercial.

Having entered through one of the Town's gateways, motorists now begin to experience the fabric of Montross. Elements such as access management, commercial signage, streetscaping, traffic calming, and pedestrian access define this area.

Currently, this area corresponds to Route 3 from the gateway at Zacata Road to Porter Lane.

**Immediate Action (2018-2019)**: Seek funding to develop a streetscape master plan.

**Short Term (2020-2022)**: Seek funding to construct streetscape enhancements.

**Long Term (2019-2031)**: Implement signage and access guidelines, work with developers and VDOT to retrofit non-conforming sites, and develop traffic-calming and pedestrian measures.

## Town Core

### Recommendations

The town core, with its shallow setbacks and mixed uses, forms a compact, small-town environment. To preserve and enhance this character, the Town should ensure adequate vehicular and pedestrian access, along with parking to accommodate residential, commercial, and public uses.

Adequate parking should be provided, and should be placed behind buildings and not next to the sidewalk and street.

**Long Term (2019-2031)**: Work with developers and VDOT to retrofit non-conforming access and parking. Identify infill sites and develop public parking on them. Implement signage and access guidelines.

Gathering at Courthouse Square, 1917

# Montross 6

## GOALS & ACTIONS

Town of Montross

2018 Comprehensive Plan

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# 6. GOALS & ACTIONS

## 6.1 Water Quality Protection

| 1 | **Goal** - Maintain the quality of waters to allow all reasonable public uses by pursuing reductions in water pollution |
|---|---|

| Action | Responsible Party |
|---|---|
| Conduct an engineering study to determine the most feasible and cost-effective way to replace the existing water line. | Town Council |
| Conduct and engineering study to help the Town comply with VDEQ rules regarding Town wells | Town Council |
| In cooperation with the State and County, identify and correct existing sources of point and non-point pollution in the Town | Town Manager |
| Use Best Management Practices and stormwater improvements in redevelopment | Westmoreland County |
| Educate Town citizenry on ways to minimize impacts on water quality from everyday activities like yard and garden care, driving, vehicular maintenance, etc. | Town Manager |
| Develop a water-resources management plan to provide for the long-range water needs of the Town | Town Manager |
| Conduct background studies to identify groundwater recharge areas and use DRASTIC mapping techniques to assess the vulnerability of the area to groundwater contamination | Northern Neck Planning District Commission |

| 2 | **Goal** - Protect water resources of the Town and the Commonwealth from pollution due to development |
|---|---|

| Action | Responsible Party |
|---|---|
| Enforce the Chesapeake Bay Preservation Act | Westmoreland County |
| Educate and inform the development community and the public about water-quality protection and the Town's Bay Act program requirements | Town Manager |
| Revise the Town's development ordinances and customize Montross's Chesapeake Bay Preservation Area Overlay District Ordinance | Town Manager and Town Council |

| 3 | **Goal** - Protect water resources of the Town and the Commonwealth from erosion and sedimentation problems |
|---|---|

| Action | Responsible Party |
|---|---|
| Identify critically eroding areas within the Town | Westmoreland County |
| Inspect and enforce erosion control requirements in coordination with the County | Westmoreland County |
| Prohibit development in areas with 25 percent slopes or greater, and discourage development in areas with slopes greater than 15 percent | Town Planning Commission and Town Council |
| Implement water-quality conservation plans among agricultural land owners by January 1, 2009, as developed by the Northern Neck Soil and Water Conservation District | Property owners and the Northern Neck Soil and Water Conservation District |
| Rectify all existing stormwater management and erosion problems with Virginia Department of Transportation's resident engineer | VDOT and Town Manager |
| Revise the existing development-review process to ensure the control of erosion and sedimentation during site development | Town Planning Commission and Town Manager |

| 4 | **Goal** - Protect water resources of the Town and the Commonwealth by exploring the feasibility of utilizing Low Impact Development (LID) Site Design and On-Site Stormwater Management Methods |
|---|---|
| Action | Responsible Party |
| Incorporate LID approaches into appropriate Town ordinances | Town Manager and Town Council |

| 5 | **Goal** - Improve the Town's ability to manage stormwater runoff |
|---|---|
| Action | Responsible Party |
| Have the planning district and the Chesapeake Bay Local Assistance Department review stormwater management plans for development projects | NNPDC and Town Manager |
| Develop a stormwater management plan to address flooding, erosion, and inadequate stormwater management facilities | Westmoreland County |
| Where LID approaches to on-site stormwater management are not practical or feasible, encourage shared and regional stormwater retention basins for existing and future development | Town Planning Commission and Town Council |
| Review the Town's development standards addressing parking areas, drives, loading areas, and lot coverage—and revise development ordinances as necessary to minimize impervious surfaces | Town Manager and Town Council |
| Develop a tree-preservation ordinance to protect indigenous vegetation in Town | Town Manager in conjunction with forestry department |
| Develop landscaping requirements to apply to all development projects, and implement an "adopt a tree" program or other measures to increase areas of vegetative cover within the Town | |

| 6 | **Goal** - Protect the quality and quantity of the Town's supply of potable water |
|---|---|
| Action | Responsible Party |
| Conduct background studies supported by federal and state efforts to identify groundwater recharge areas to assess the vulnerability of the area to groundwater contamination, and devise appropriate land-use controls for those areas | Northern Neck Planning District Commission |
| Ensure compliance with state regulations concerning the operation of municipal water systems | Town Manager |

## 6.2 Land Use and Development

| 1 | **Goal** – Eliminate rundown structures from the Town |
|---|---|
| Action | Responsible Party |
| Enforce ordinances requiring property owners to match minimum standards | Town Council |

| 2 | **Goal** – Achieve a pattern of land use that balances water quality and environmental protection with social and economic development goals |
|---|---|
| Action | Responsible Party |
| Prohibit development in environmentally sensitive areas to protect important environmental resources within the Town | Town Planning Commission and Town Council |
| Require the preparation and careful review of an environmental site assessment to ensure the accurate delineation of environmental resources prior to the design of a site | Westmoreland County |

| | |
|---|---|
| Ensure that required buffer areas be protected during the construction process by carefully flagging and inspecting these areas before any land disturbance occurs | Town Manager and Westmoreland County |
| Encourage private citizens to protect environmentally sensitive lands they own through conservation, open-space easements, or deed restrictions | Town Manager, Town Planning Commission, and Town Council |
| Revise the Town's development ordinances to encourage clustering, Planned Unit Developments (PUDs), and neo-traditional approaches (i.e., contemporary design that borrows from the past) to new development | Town Council and Town Planning Commission |

| 3 | **Goal** – Provide for the long-term use and enjoyment of scenic and environmentally sensitive areas |
|---|---|
| Action | Responsible Party |
| Revise development ordinances to ensure that higher-density residential projects include adequate provisions for open space and alternative access ways | Town Council and Town Planning Commission |

| 4 | **Goal** – Encourage the revitalization of Montross in a manner that is sensitive to its small town character. |
|---|---|
| Action | Responsible Party |
| Explore availability of grant moneys and develop a funding plan for the revitalization of the East End and West End areas of the Town | Town Manager, Town Planning Commission, Town Council, and NNPDC with a committee of business owners and residents |

## 6.3 Transportation

The overall goal for the Town's transportation future—shaped by the features discussed in detail in the Transportation Element of this Plan (Section 5)—is supported by the following specific actions.

| 1 | **Goal** – Develop a multi-modal transportation system that meets current and future needs, promotes sustainable development and redevelopment, and protects environmental resources, village character, and visual quality |
|---|---|
| Action | Responsible Party |
| Study short-term and mid-term improvements to avoid widening Route 3, including traffic-calming measures, signalization, and speed controls, among other possibilities | Town Council and Town Manager working with VDOT |
| Create a long-term solution with VDOT to the increasing traffic on Route 3, based on likely future traffic volumes | Town Council and Town Manager working with VDOT |
| Assess future levels of service (LOS) for Route 3 to help identify potential deficiencies, and establish target LOS to help identify potential improvements | Town Council and Town Manager working with VDOT |
| Study measures to manage future development and access on Route 3. Work with Westmoreland County to ensure the maximum degree of consistency in access management | Town Council and Town Manager working with VDOT<br><br>Town Council and Town Manager working with VDOT |
| Study policies to improve existing access deficiencies during redevelopment proposals | Town Council and Town Manager working with VDOT |
| Work with VDOT to consider access retrofit projects as part of improvements to Route 3 | Town Council and Town Manager working with VDOT |
| Identify and seek VDOT funding for enhanced local road connections to provide safe and efficient alternatives for local vehicle, pedestrian, and bicycle trips | Town Council and Town Manager working with VDOT |
| Identify priority areas (based on usage demand and safety) for short-term enhancements to pedestrian access, | Town Council and Town Manager working with VDOT |

| | |
|---|---|
| crosswalks, and signalization. Propose specific improvements for these areas and pursue implementation funding | |
| Develop a Town-wide bicycle and pedestrian plan with a prioritized, phased implementation that identifies target dates and potential funding sources | Town Council and Town Manager working with VDOT |
| Reevaluate the requirements for the number and size of parking spaces per business in Town. Encourage the use of pervious pavement | Town Manager and Town Council |
| Encourage new businesses to provide off-street parking and conduct a study to determine where shared parking areas are possible and appropriate | Town Manager and Town Council |

## 6.4 Other Goals and Actions

| 1 | **Goal** – Encourage affordable housing opportunities within the Town |
|---|---|

| Action | Responsible Party |
|---|---|
| Enforce the Subdivision Ordinance and Zoning Ordinance to control the location and development of housing, ensuring that development is consistent with the future land use | Town Manager |
| Revise the Zoning Ordinance to allow for a variety of housing types and densities in locations suitable for such development | Town Manager, Town Council, and Town Planning Commission |

| 2 | **Goal** – Promote future economic development while maintaining the existing character of the area |
|---|---|

| Action | Responsible Party |
|---|---|
| Continue cooperative efforts with the County to develop the Commerce Park | Town Manager and Town Council |

| 3 | **Goal** – Assist and support efforts to increase the quality of life for citizens of the Town and County |
|---|---|

| Action | Responsible Party |
|---|---|
| Increase the number of restaurants and entertainment establishments available to residents | Town Council with a committee of business owners |
| Encourage new retail businesses that provide for the day-to-day needs of residents to locate in the Town | Town Council with a committee of business owners |

| 4 | **Goal** – Increase the diversity, quantity, and quality of employment opportunities |
|---|---|

| Action | Responsible Party |
|---|---|
| Promote the Town and its commercially zoned areas as a central location of the Northern Neck region | Town Manager, Town Council, and Westmoreland County |
| Utilize the Virginia Enterprise Zone Program to help stimulate the growth of new and existing businesses, focusing on job creation and property investment | Town Manager, Town Council, and Westmoreland County |
| Encourage new light industries related to markets specific to the Northern Neck region | Town Council and Westmoreland County |

| 5 | **Goal** – Prepare for the future development of infrastructure |
|---|---|

| Action | Responsible Party |
|---|---|
| Develop a Capital Improvement Plan (CIP) to include plans for expenditures that involve large initial investments for such things as water systems, parks, streets, etc. | Town Council |

## 6.5 Implementation Strategies

The implementation of this Montross Comprehensive Plan should be viewed as an ongoing planning process. Other plans, policies, regulations, and programs—at the federal, state,

county, and town levels—must be coordinated to fully implement the goals of this Plan.

The Plan should be revised every five years.

The Montross Planning Commission should review it every two years to ensure it remains responsive to community concerns and development trends.

### 6.5.1 Planning Strategies

Current and short-term planning efforts should concentrate on dealing with the abandoned or rundown properties in the Town.

These initial efforts should specifically address issues related to building rehabilitation and infill development, parking, enhanced pedestrian circulation, and aesthetics.

The Town should consider adopting a Capital Improvements Program (CIP)—a method through which expenditures on the part of a local government are planned and coordinated with the development pattern set forth in the comprehensive plan.

A CIP is generally developed for a five-year period. It is usually updated annually, and it plans for expenditures that involve large initial investments—including those in sewers, water systems, parks, and streets.

Montross does not have a CIP at this time but may find it advantageous to develop one to implement this Comprehensive Plan's recommendations within desired timeframes.

### 6.5.2 Zoning and Subdivision Strategies

The primary tools for implementing a locality's comprehensive plan are the zoning and subdivision ordinances. The zoning ordinance establishes district requirements relating to building types, the height and bulk of structures, lot size, and setbacks.
This 2018 Montross Comprehensive Plan strongly recommends that zoning and subdivision ordinances in the Town match all the attributes put forth by the Plan.

The Plan further encourages the Town to utilize any or all of the following development standards as implementation strategies:

#### Planned Unit Development (PUD)

PUDs allow developers to propose a mix of land uses in exchange for the protection of environmentally sensitive areas.

They can be effective in encouraging traditional town development patterns, which favor neighborhoods with parks and squares, a mix of housing types, and an emphasis on alternative access and expanded public use of community spaces.

Such developments encourage walking and pedestrian accessibility to commercial areas, as well as building placement to spatially define streets and open spaces.

#### Overlay Districts

An overlay district supplements the requirements of already established zoning districts.

With an overlay district, development can be further regulated by specific requirements of interest to the community.

For example, *corridor overlay districts* can designate an architectural review board to evaluate changes proposed to historical buildings within the corridor.

In this way, compatibility with other buildings in the district can be maintained. Protection of historic landmarks is best accomplished by the creation of an overlay district.

Local governments have also used overlay-districts to protect the scenic character of corridors, minimize curb cuts and the proliferation of signage (i.e. billboards), and ensure safe access between arterial roads and adjacent property.

This Plan recommends investigating the appropriateness of a historic district in downtown Montross. After assessing the Town's historic resources, the Town may want to consider creating a Historic Overlay District as an amendment to its Zoning Ordinance.

## Development Review

The careful review of proposed developments provides the opportunity to examine the relationship of the proposed land disturbance with the physical features of a specific site and the surrounding properties.

Plan review is the vehicle for ensuring compliance with local regulations as they apply to a particular property.

A strong local development-review process is critical to ensure the protection of water quality as lands develop. Accurately assessing the physical characteristics of a site—and delineating environmentally sensitive features—is essential to protect these resources and minimize development costs.

This Plan recommends evaluating the Town's existing development-review process and revising it as necessary to ensure the adequate control of erosion and sedimentation during the construction process.

This may necessitate amendments to the Town's existing plan of development requirements in the Zoning Ordinance.

Plan recommendations are also directed at improving Town coordination with the County in the inspection and enforcement of land-use and water-quality regulations.

## Subdivision Ordinance

Subdivision rules provide for the orderly development of an area by regulating the establishment of lots, the laying out of streets, the provision of utilities, and other aspects of the process by which land is subdivided.

Through the use of subdivision and land-development regulations, public expenditures for streets, utilities, and other services are shared by the private sector.

In accordance with §15.1-466 of the Code of Virginia, all municipalities in Virginia must have such ordinances.

This Plan recommends that the Town's Subdivision Ordinance be revised in order to minimize impervious surfaces and protect indigenous vegetation.

Revisions should also address the protection of sensitive environmental features and the preservation of useable open space, particularly during the process of designing and platting subdivision lots.

## Open Space Subdivision (Cluster Development)

Open-space subdivision presents a cost-effective alternative to conventional residential development. Clustering may offset the negative impact of conventional zoning and subdivision ordinances, which sometimes encourage sprawl.

By clustering improvements on less sensitive portions of a property, environmentally vulnerable lands and open spaces can be preserved while maintaining allowable density.

Typically, reduced lot sizes and closer arrangement of structures is exchanged for the preservation of useable open space.

From the developer's point of view, this approach is worth considering because it nearly always reduces construction costs by lessening utility and infrastructure requirements of the site.

A further advantage of clustering comes from the relative freedom in design options that this approach offers as opposed to conventional, cookie-cutter lot patterns.

### 6.5.3 Open Space, Greenways, and Conservation Easements Strategies

The preservation of open space is often a critical element in protecting a community's character and sense of place. The character of the visible landscape is an important contributor to the attraction a community holds to visitors, residents, and businesses.

Local governments are increasingly concerned about the need to preserve open space as the supply of undeveloped land diminishes. The most successful efforts to protect open space and community character are those that integrate a range of open-space approaches.

A comprehensive open-space system would integrate greenways, woodlands and farmland, wildlife habitat, and riparian buffers with:

- Recreation areas like parks and playgrounds
- Planned communities with internal systems of pathways
- Public-access facilities like boat landings and marinas

Greenways are corridors of linked public and private lands that provide access to parks and other open spaces, woods, and conservation areas. They may be in the form of trails, bikeways, or linear parks.

Permanent open-space areas are a complimentary component of all types of development that can add significant value to a project, provide recreational amenities, and enhance and protect environmental resources. Often, the real-estate value added to a project by open-space areas more than compensates for any loss in development potential.

Implementing an open-space system is usually the result of multiple strategies. Conservation easements are a reliable technique for preserving land in Virginia. Property owners may sell or donate certain rights and interests in their lands to a government or non-profit organization, in exchange for certain tax benefits. The General Assembly has authorized the Virginia Outdoors Foundation to hold donated easements in the public interest.

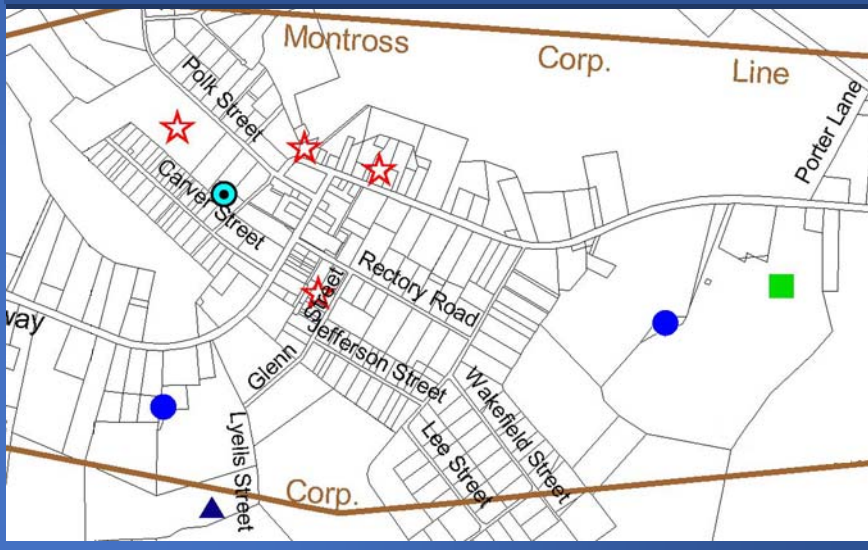
Easements may be used to protect sensitive environmental areas, open spaces, corridors, farmlands, wilderness, habitat and wildlife areas, and even building façades. Easements run in perpetuity or for a specific period of time, and may or may not be binding on the future owners of the property.

This Plan recommends that the Town take the first step toward creating a linked system of pedestrian ways and open space. It recommends that the Town develop a park and greenway plan for linking sites within downtown to the surrounding community. Such an approach would encourage permanent open-space donations or easements by interested citizens.

The Courthouse at Montross.
Undated Photograph.

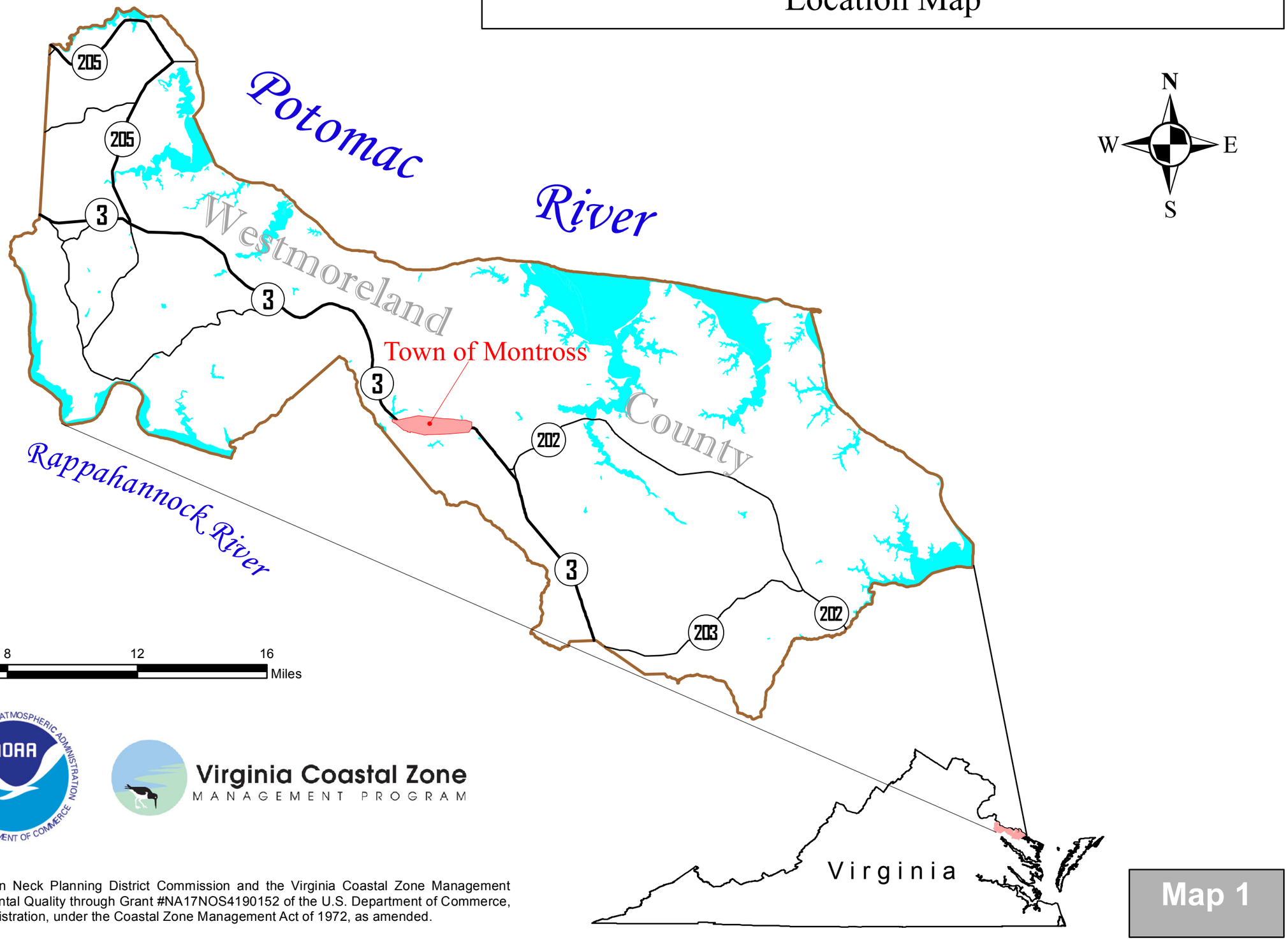
# Montross 7

## MAPS



# 7. MAPS

# Town of Montross 2018 Comprehensive Plan
# Location Map




0 2 4 8 12 16 Miles

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Map 1

Town of Montross

2018 Comprehensive Plan

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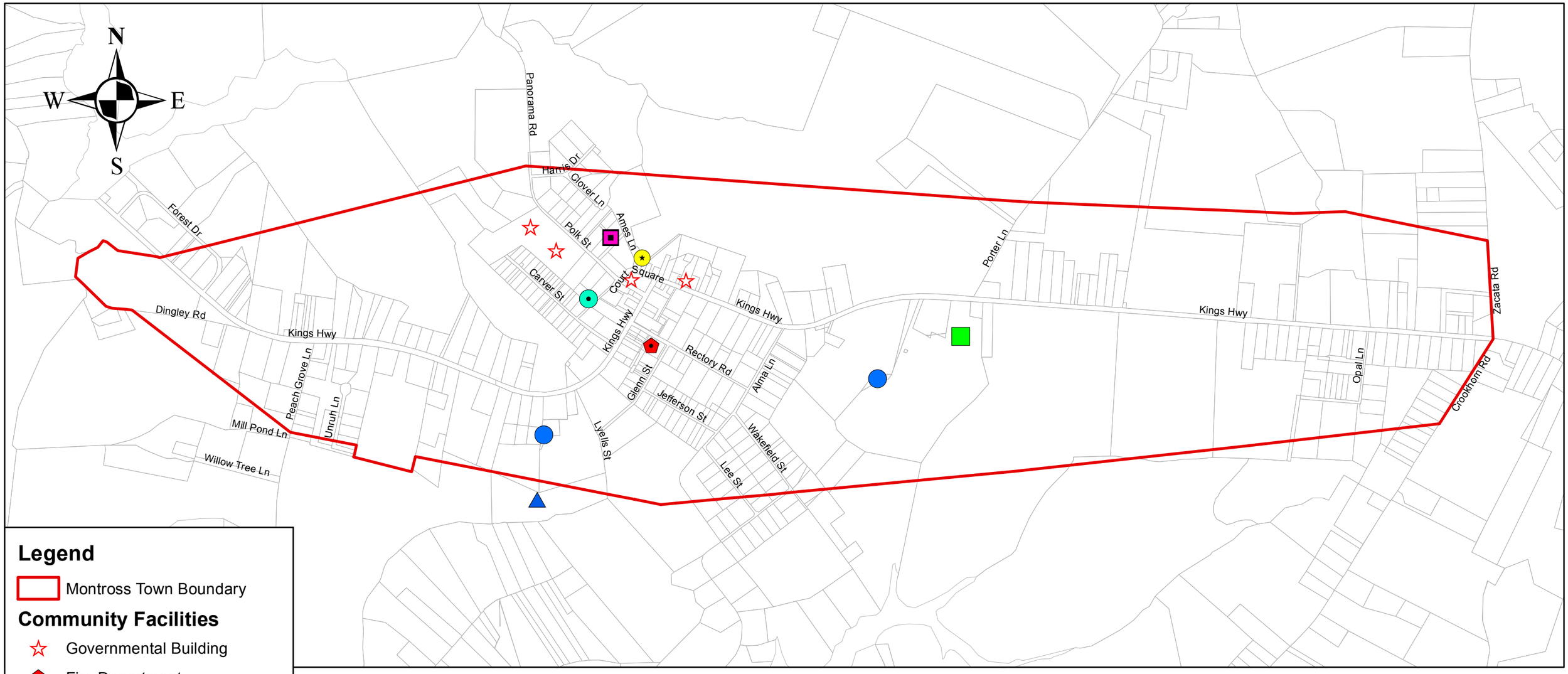
# Town of Montross 2018 Comprehensive Plan
# Community Facilities




## Legend

- Montross Town Boundary

### Community Facilities

- Governmental Building
- Fire Department
- Sheriff's Office
- School
- Library
- Waster Water Treatment Plant
- Water Storage
- Wells

0 1,000 2,000 4,000 Feet

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**Map 2**

Town of Montross

2018 Comprehensive Plan

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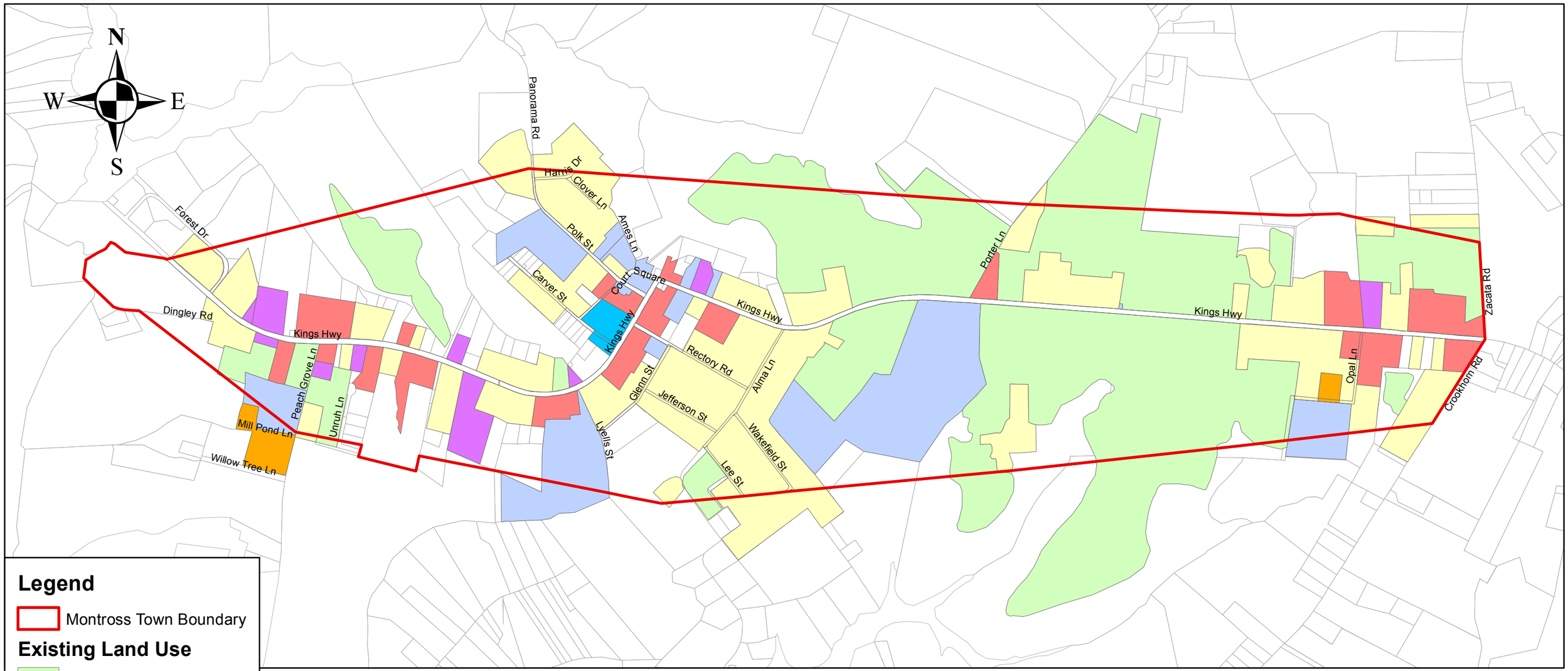
# Town of Montross 2018 Comprehensive Plan
# Existing Land Use




## Legend

- Montross Town Boundary

### Existing Land Use

- Agricultural
- Commmercial
- Industrial
- Multi-Family
- Office
- Public/Semi-Public
- Single Family

0 1,000 2,000 4,000 Feet

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**Map 3**

Town of Montross

2018 Comprehensive Plan

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# Town of Montross 2018 Comprehensive Plan
# 100 Foot Chesapeake Bay Resource Protection Areas


NOTE: All areas NOT in the 100 Foot Resource Protection Area (RPA) are, by default, located in the Chesapeake Bay Resource Management Area (RMA), which encompasses the entire County.

## Legend

- Montross Town Boundary
- 100 Foot Chesapeake Bay Resource Protection Area (RPA)
- Chesapeake Bay Resource Management Area (RMA)

0 1,000 2,000 4,000 Feet

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**Map 4**

Town of Montross

2018 Comprehensive Plan

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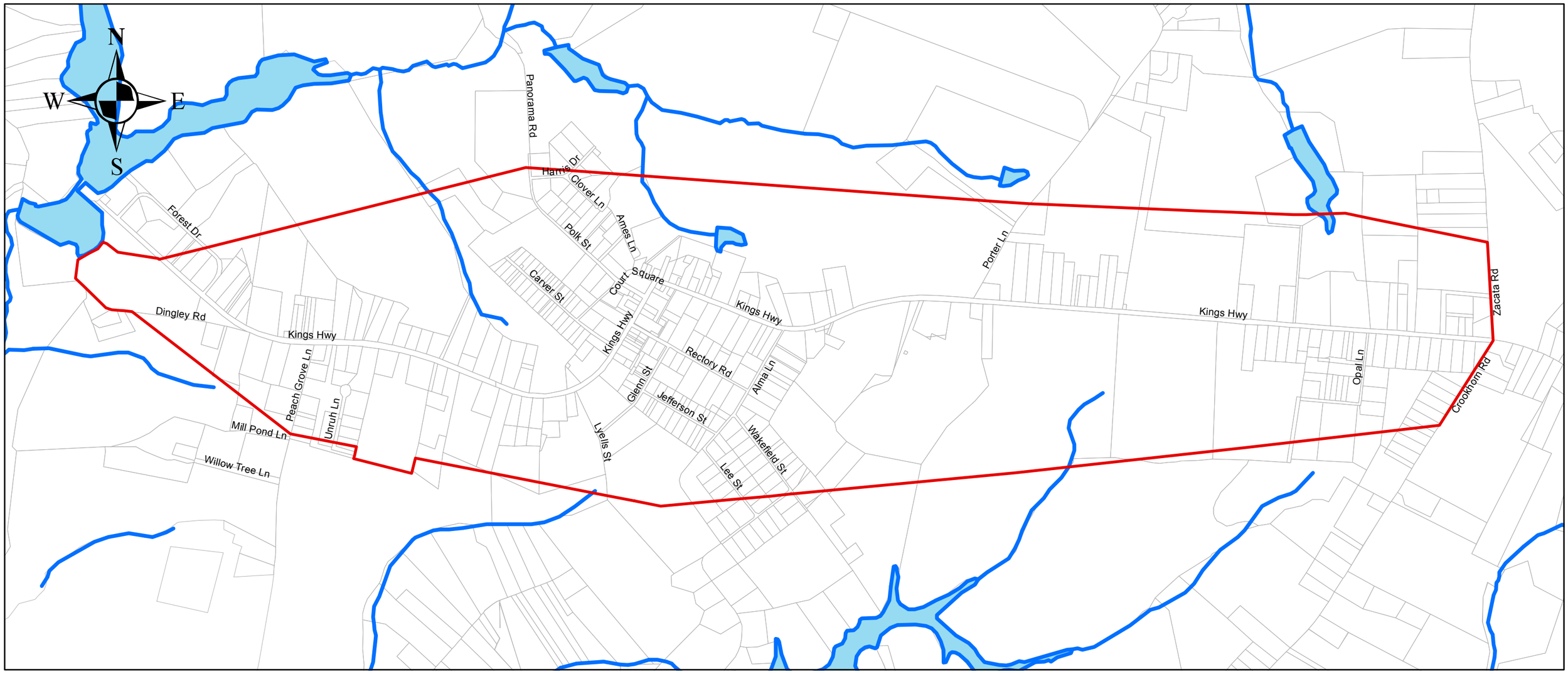
# Town of Montross 2018 Comprehensive Plan
# Streams and Water Bodies




**Legend**

- Montross Town Boundary
- Streams
- Water Bodies

0 1,000 2,000 4,000 Feet

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**Map 5**

Town of Montross

2018 Comprehensive Plan

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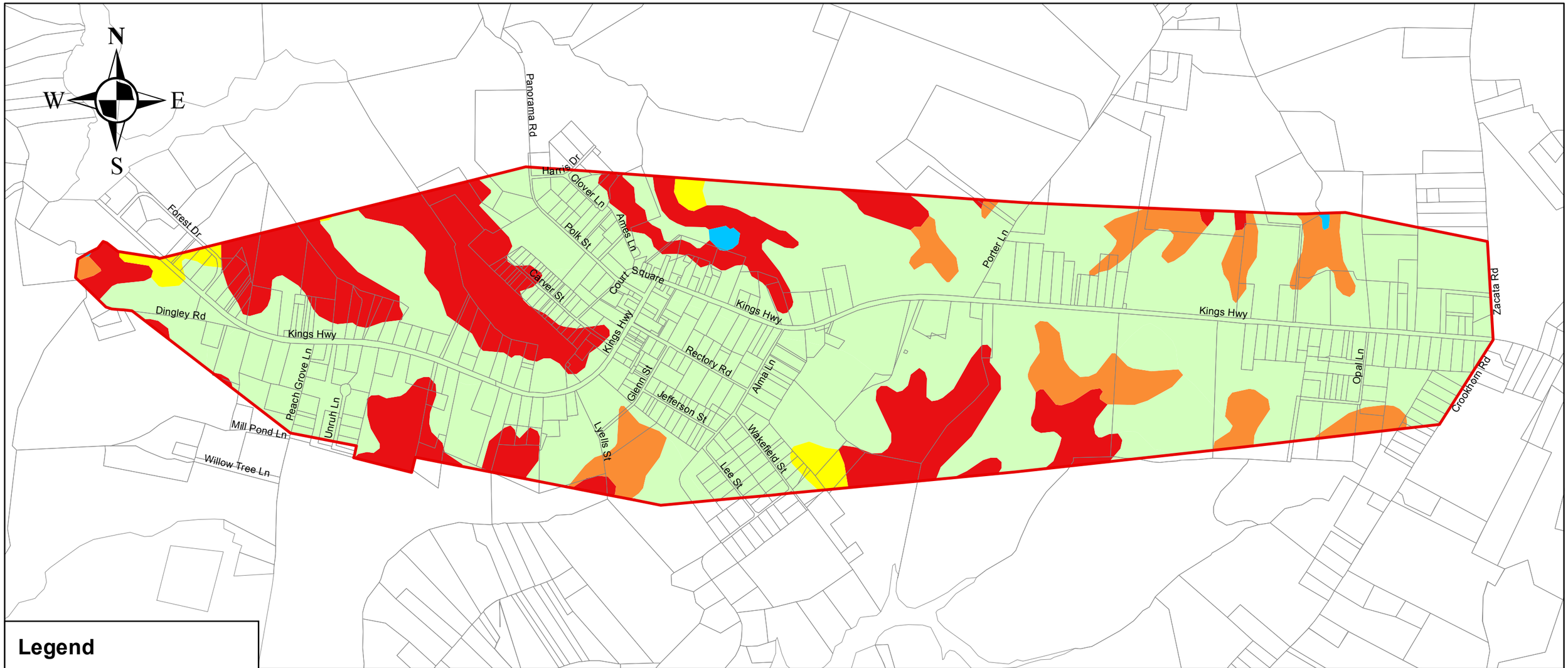
# Town of Montross 2018 Comprehensive Plan
# Slope (Derived form Soil Survey)




## Legend

- Montross Town Boundary

**Slope**

- Water: No Slope
- 0-2% Slope
- 2-6% Slope
- 6-15% Slope
- 15-50% Slope

0 1,000 2,000 4,000 Feet

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**Map 6**

Town of Montross

2018 Comprehensive Plan

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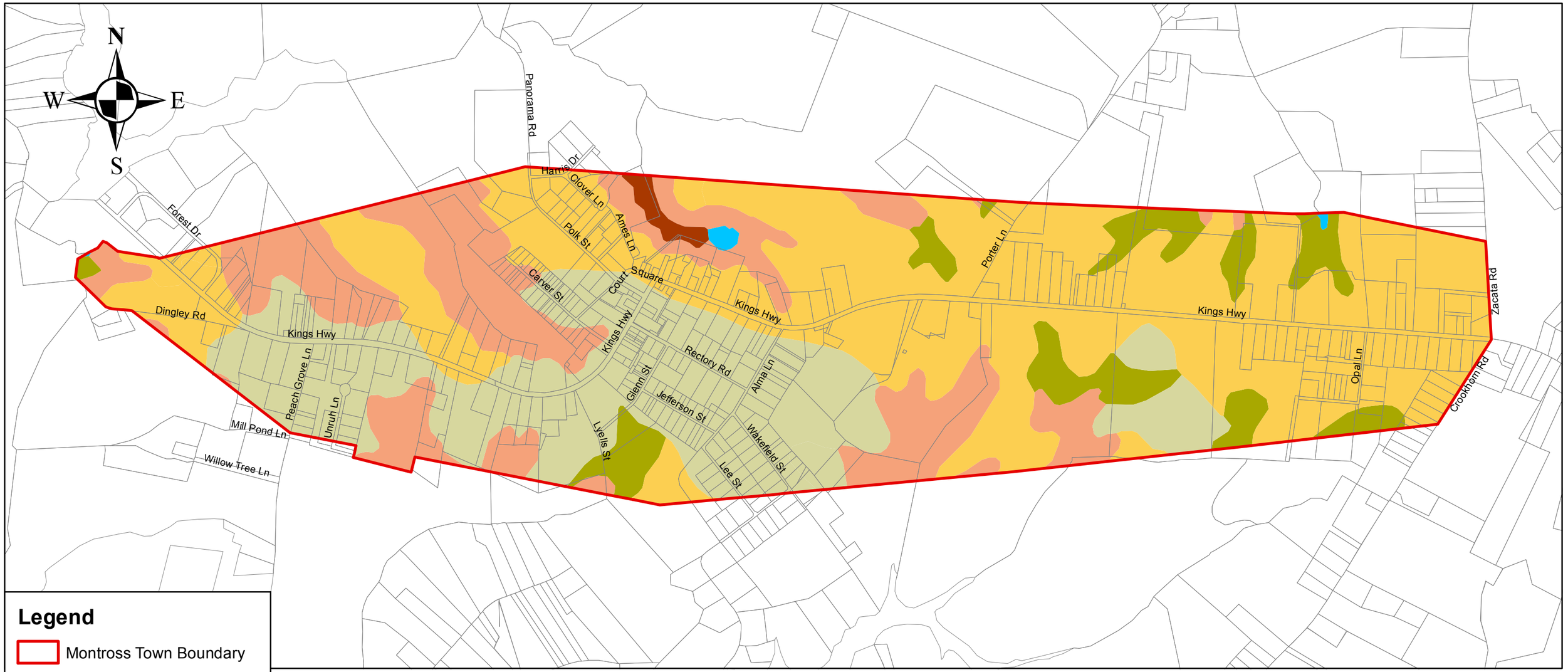
# Town of Montross 2018 Comprehensive Plan
# Soil Types




## Legend

- Montross Town Boundary

**Soil Types**

- Bibb and Levy Soils
- Kempsville Loam
- Rumford and Tetotum Soils
- Rumford Soils
- Suffolk Sandy Loam
- Water

0 1,000 2,000 4,000 Feet

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**Map 7**

Town of Montross

2018 Comprehensive Plan

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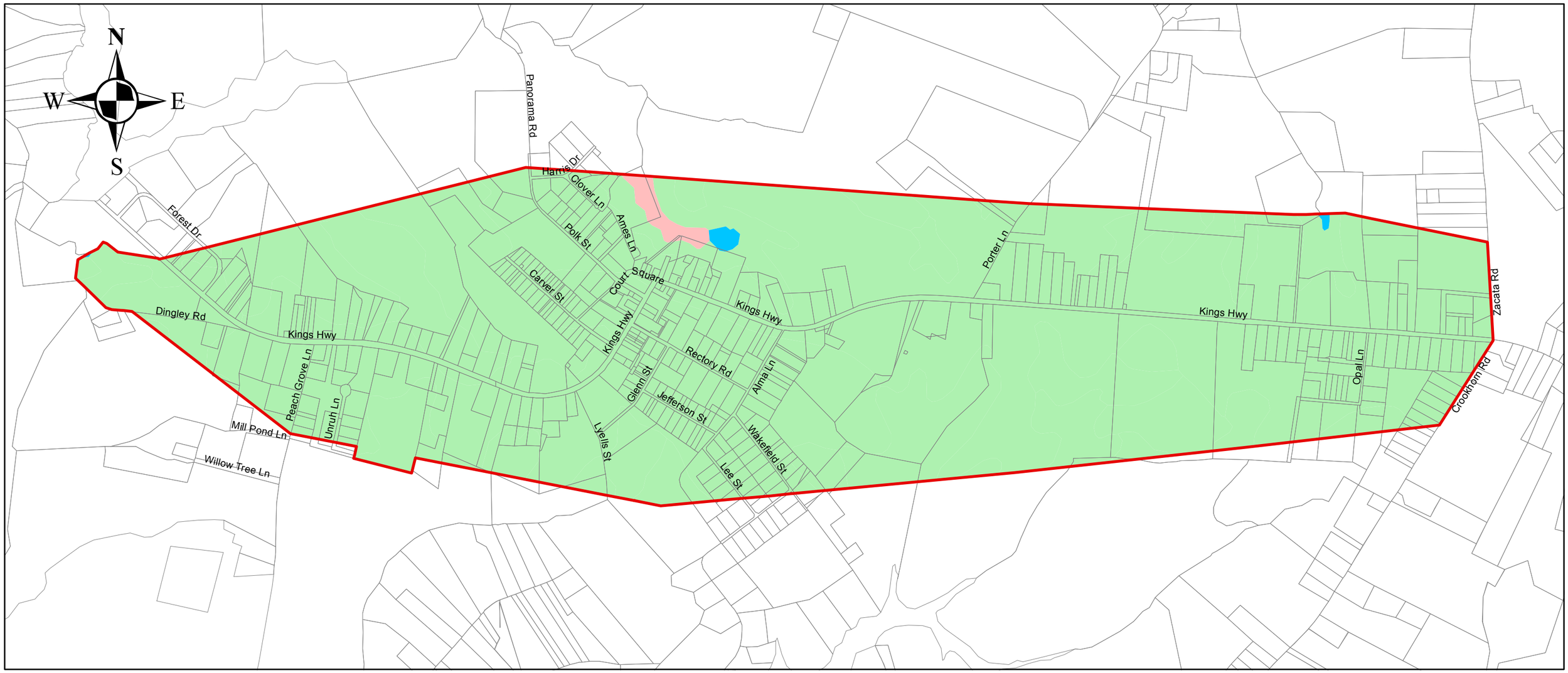
# Town of Montross 2018 Comprehensive Plan
# Shrink-Swell Soil Potential




## Legend

- Montross Town Boundary

**Shrink-Swell Soil Potential**

- Water
- Low Potential
- Low to High Potential

0 1,000 2,000 4,000 Feet

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

**Map 8**

Town of Montross

2018 Comprehensive Plan

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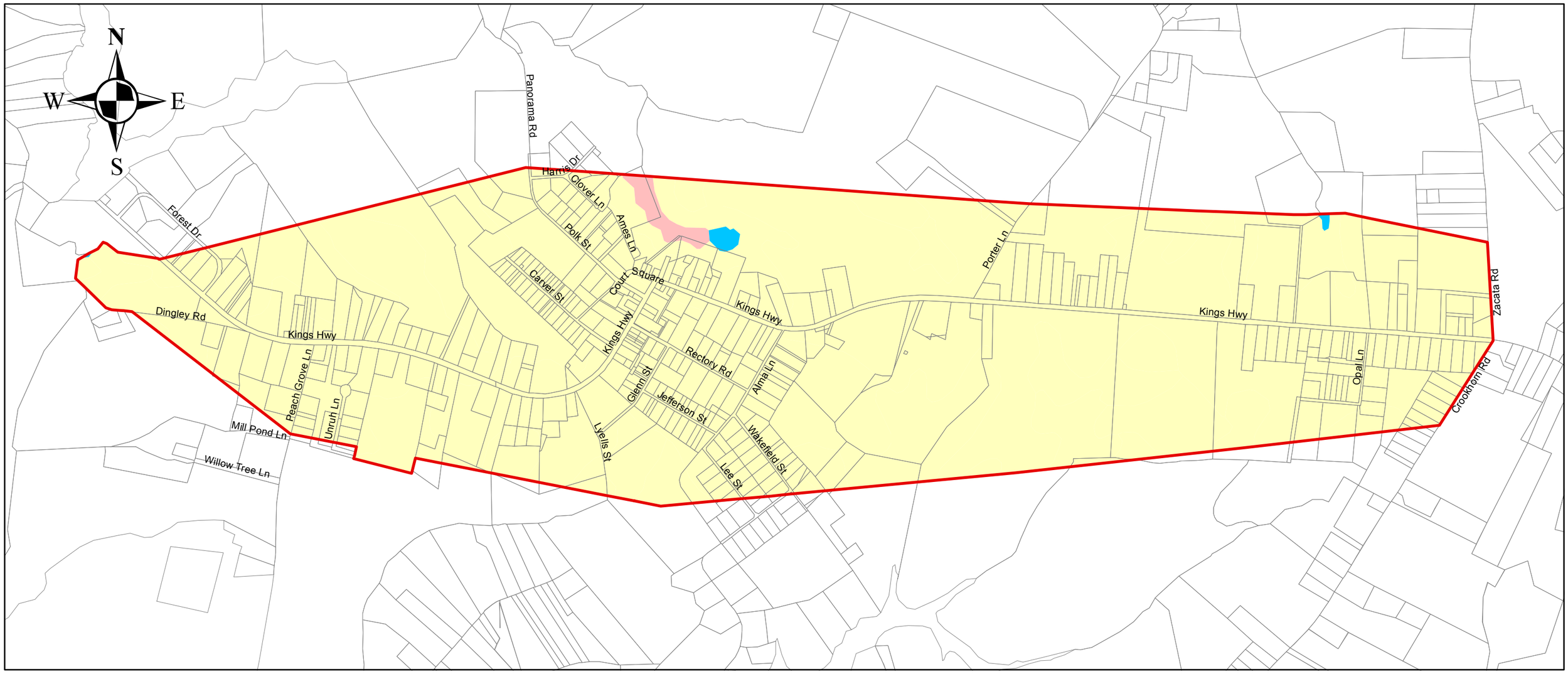
# Town of Montross 2018 Comprehensive Plan
# Depth to Water Table




## Legend

- Montross Town Boundary

**Depth to Water Table**

- 0
- 0.5-1.5 feet
- >6 feet

0 1,000 2,000 4,000 Feet

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

**Map 9**

Town of Montross

2018 Comprehensive Plan

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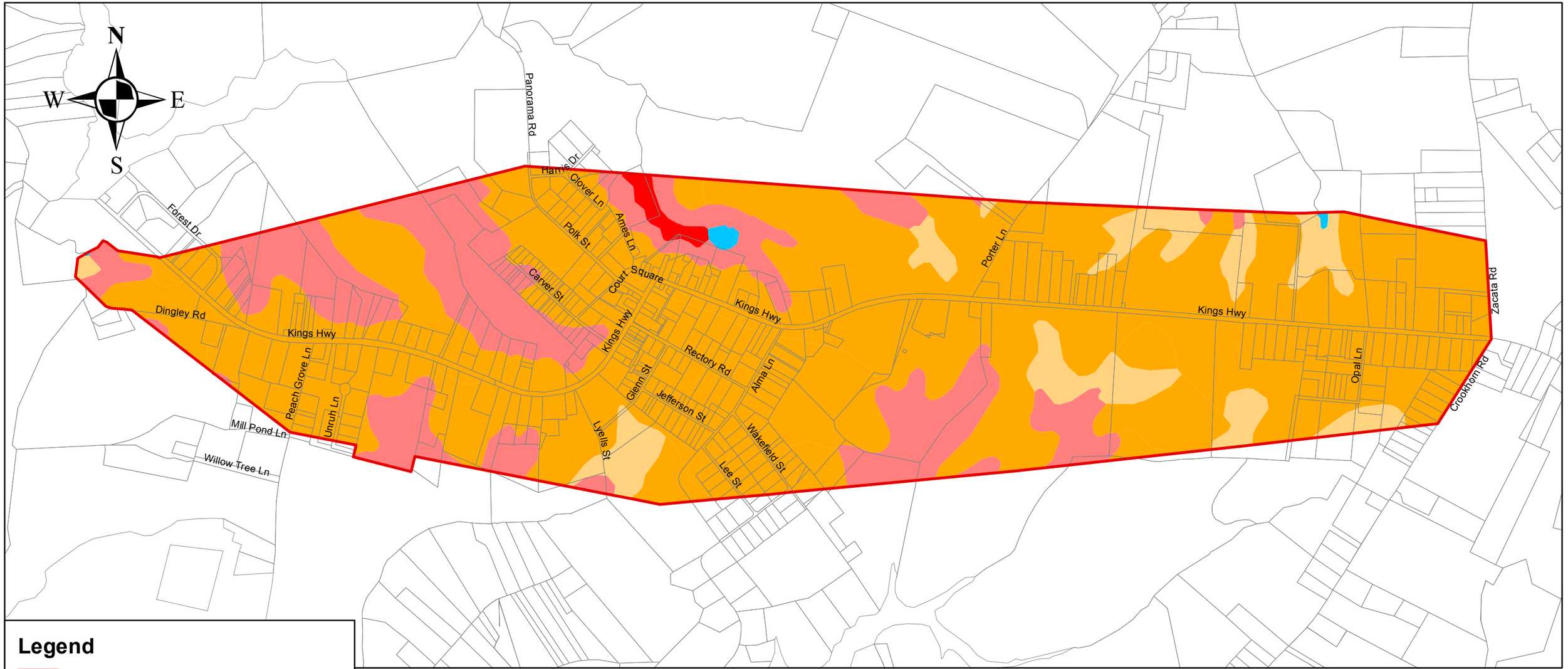
# Town of Montross 2018 Comprehensive Plan
# Conventional Septic System Soil Suitability




## Legend

- Montross Town Boundary

**Conventional Septic SystemSoil Suitability**

- Water
- Moderate Limitation: Slope
- Moderate Limitation: Slow Percolation
- Severe Limitation: Slope
- Severe Limitation: Flooding, Wetness

0 1,000 2,000 4,000 Feet

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**Map 10**

Town of Montross

2018 Comprehensive Plan

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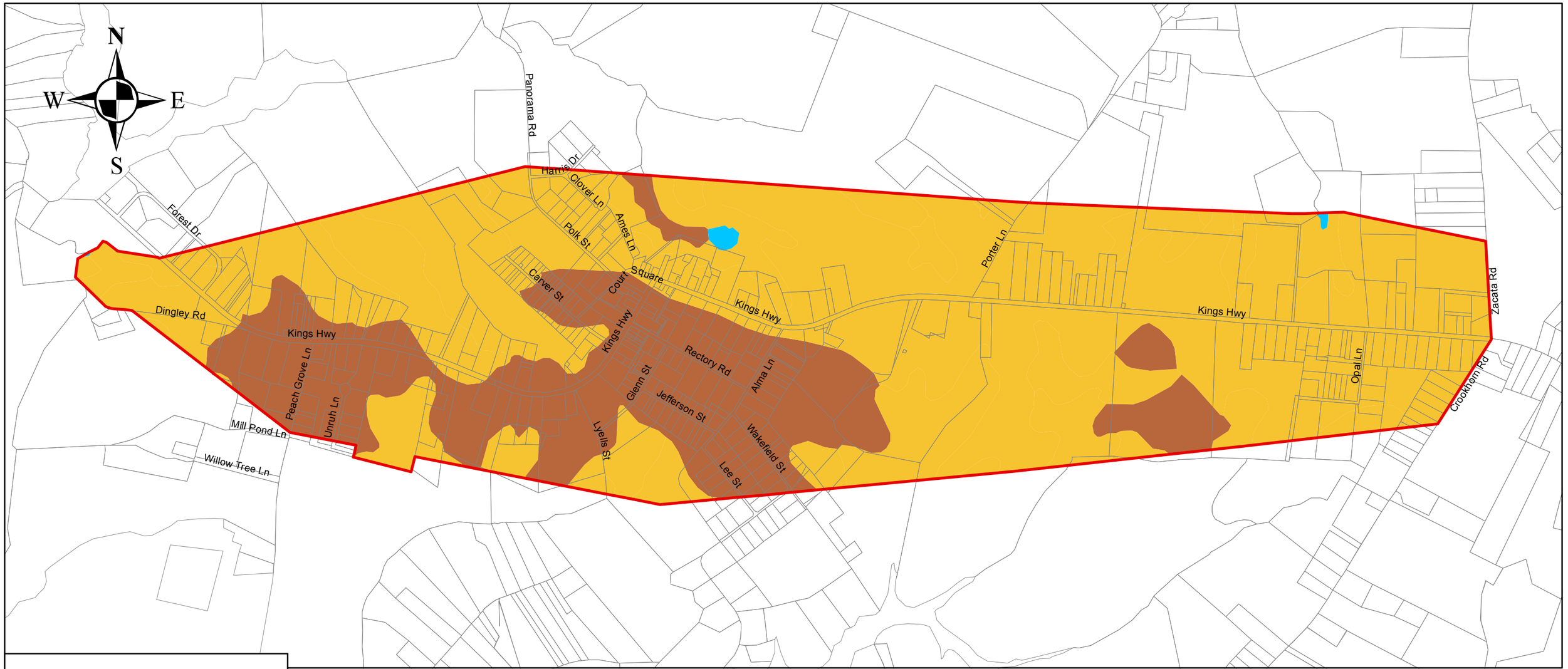
# Town of Montross 2018 Comprehensive Plan
# Soil Permeability




## Legend

- Montross Town Boundary

**Soil Permeability**

- Water
- High Permeability (2-6 inches per hour)
- Low Permeability (Less than 2 inches per hour)

0 1,000 2,000 4,000 Feet

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

**Map 11**

Town of Montross

2018 Comprehensive Plan

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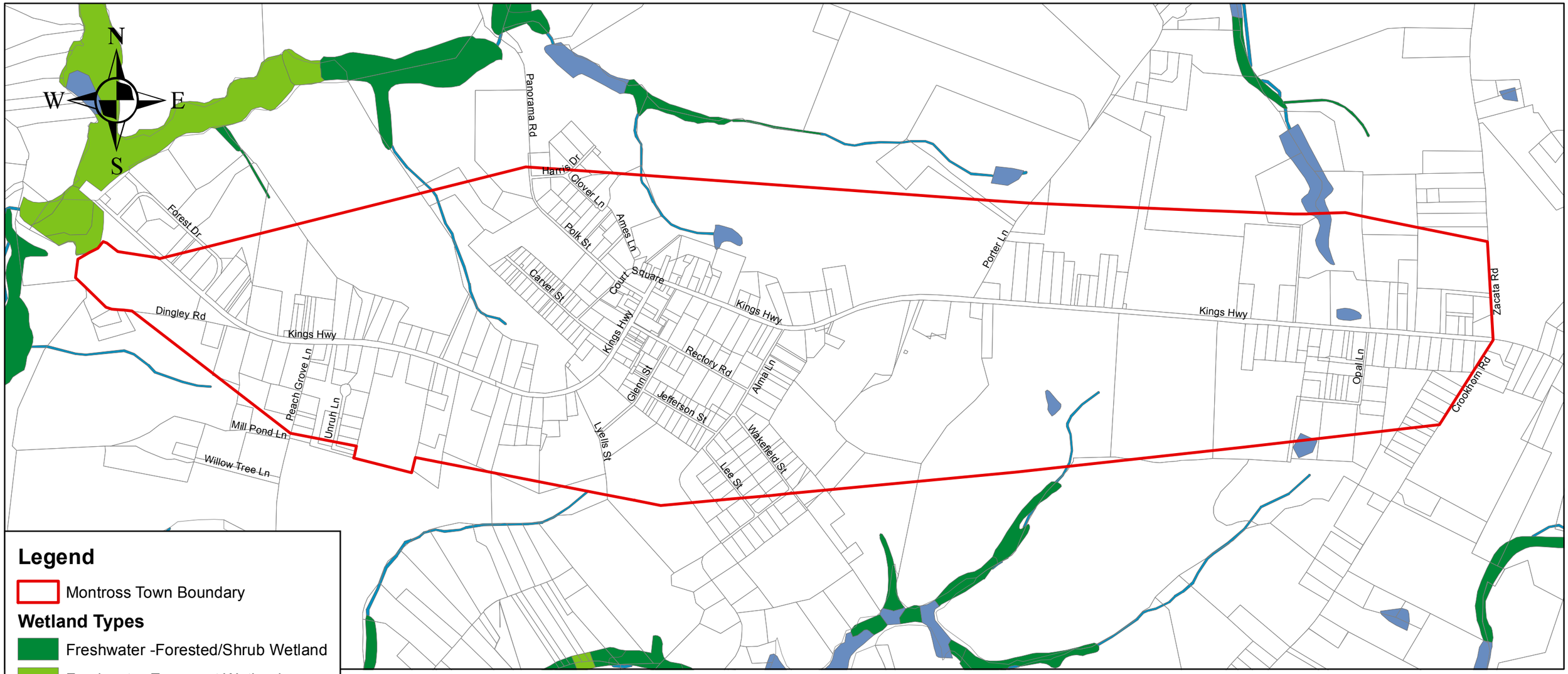
# Town of Montross 2018 Comprehensive Plan
# National Wetlands Inventory Wetlands




## Legend

- Montross Town Boundary

**Wetland Types**

- Freshwater -Forested/Shrub Wetland
- Freshwater Emergent Wetland
- Freshwater Pond
- Estuarine and Marine Wetland
- Riverine
- Lakes
- Estuarine and Marine Deepwater
- Other

0 1,000 2,000 4,000 Feet

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**Map 12**

Town of Montross

2018 Comprehensive Plan

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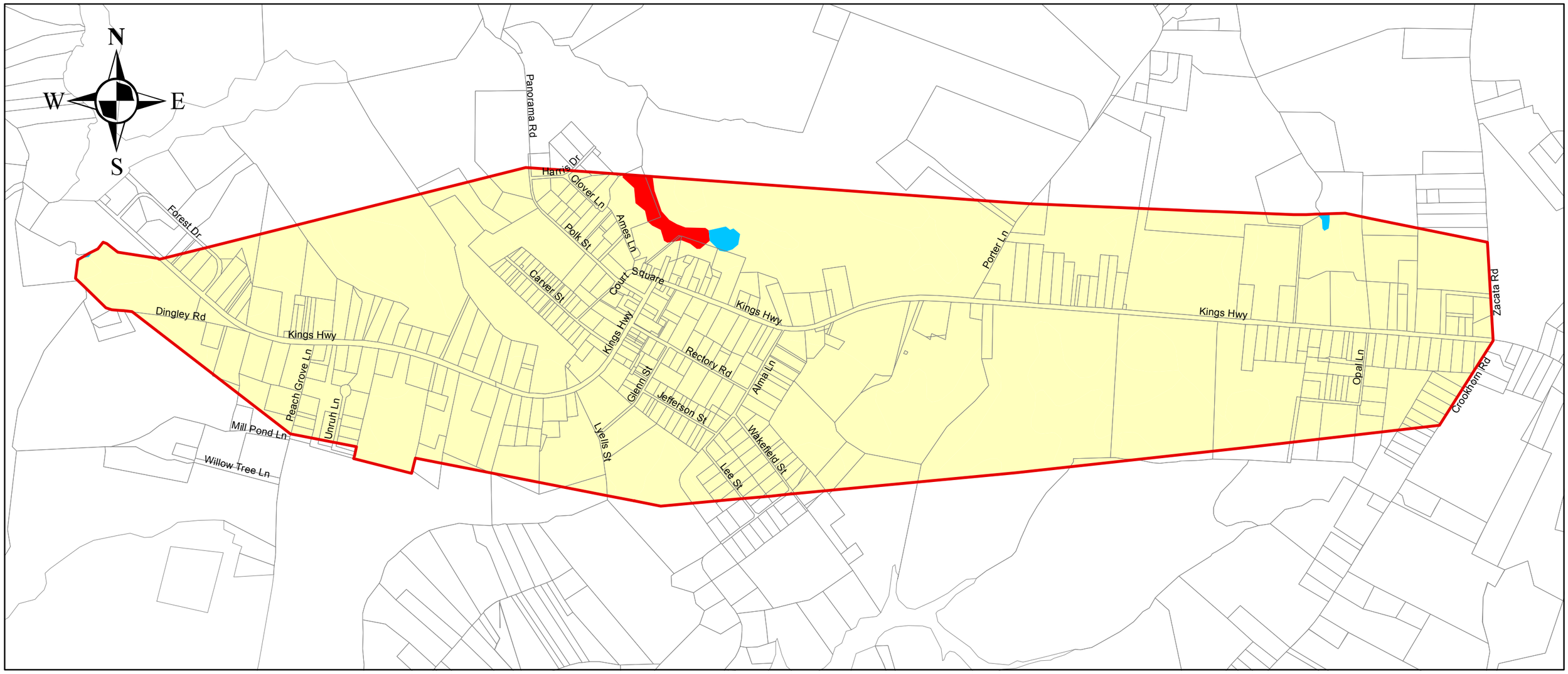
# Town of Montross 2018 Comprehensive Plan
# Flood Prone Areas (As Defined by Soil Survey)




## Legend

- Montross Town Boundary

**Flood Prone Areas**

- Water
- Not Prone to Flooding
- Prone to Flooding

0 1,000 2,000 4,000 Feet

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**Map 13**

Town of Montross

2018 Comprehensive Plan

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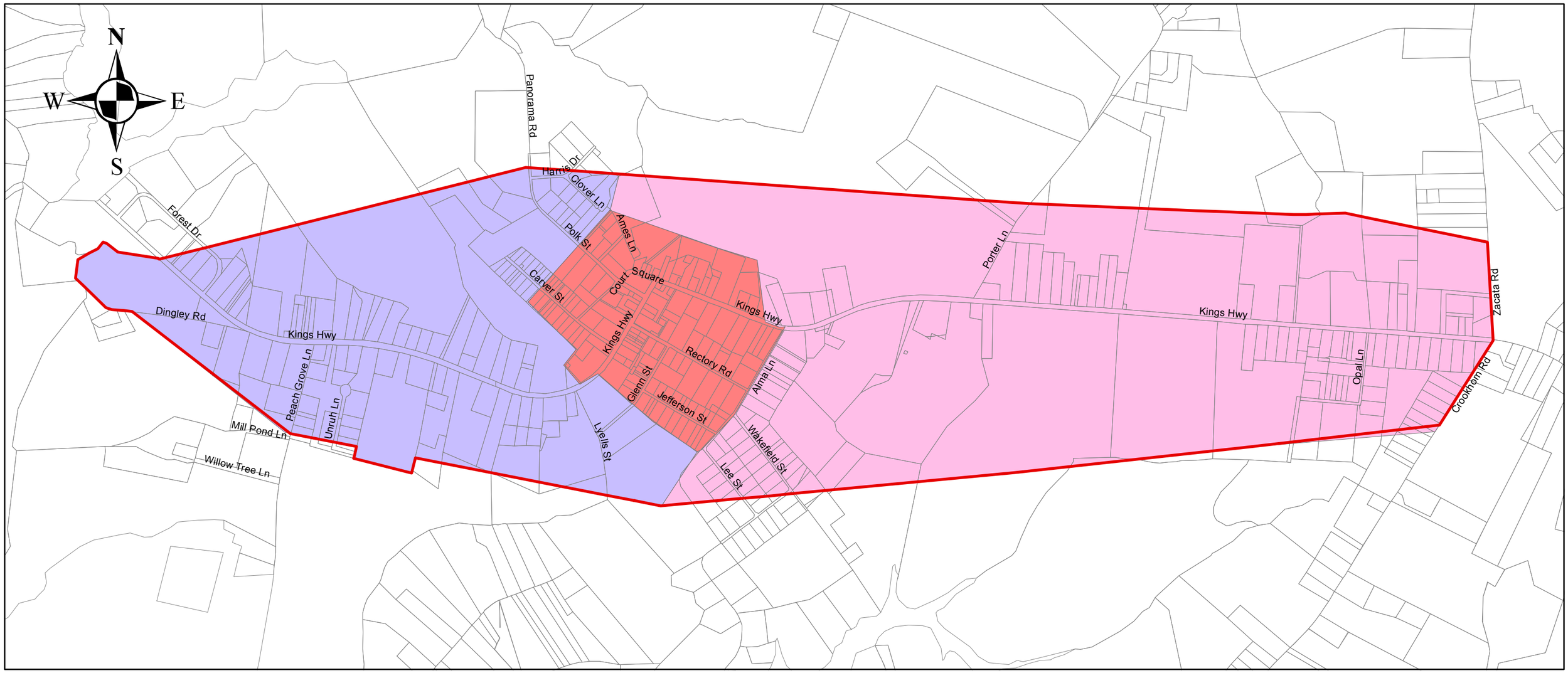
# Town of Montross 2018 Comprehensive Plan
# Planning Areas




**Legend**

- Montross Town Boundary

**Planning Areas**

- West Planning Area
- Downtown Planning Area
- East Planning Area

0 1,000 2,000 4,000 Feet

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

**Map 14**

Town of Montross

2018 Comprehensive Plan

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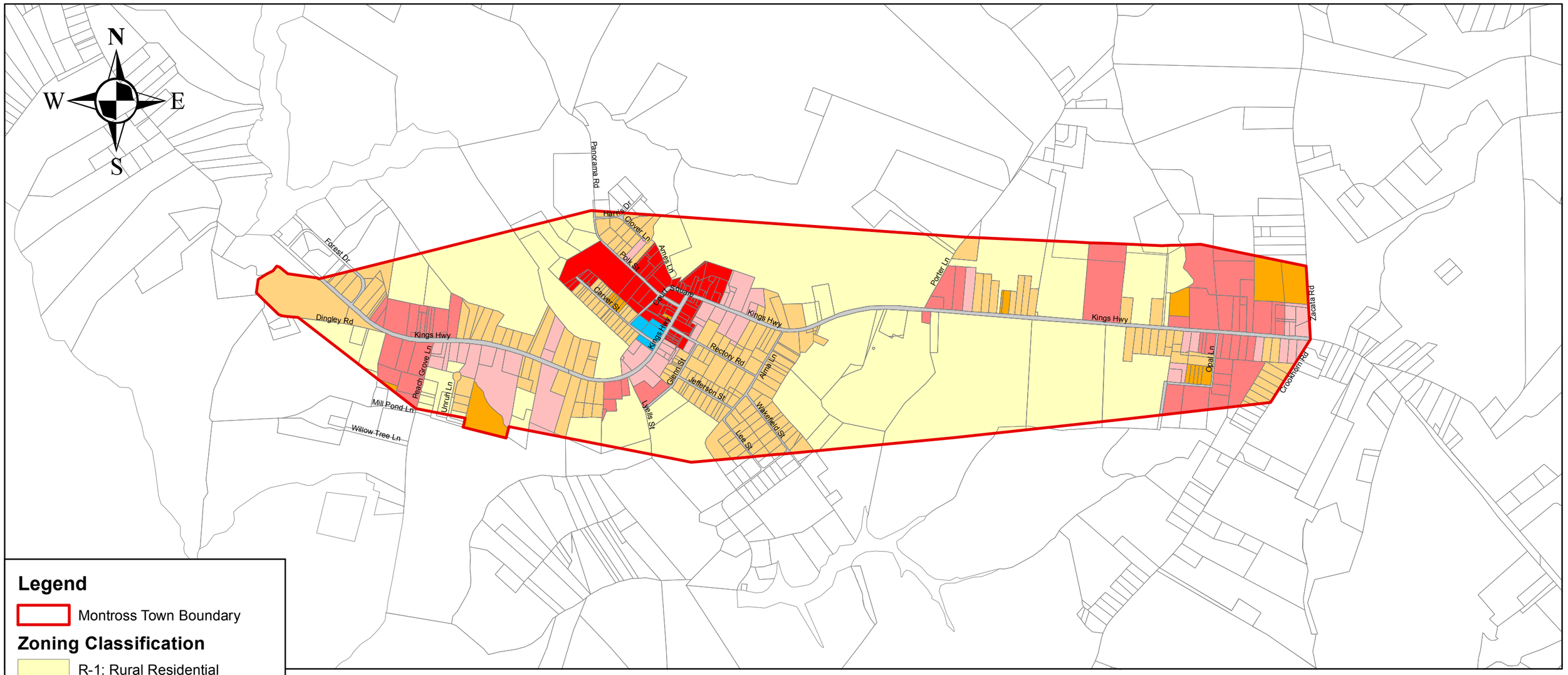
# Town of Montross 2018 Comprehensive Plan
# Future Land Use (As Defined by Official Zoning)




## Legend

- Montross Town Boundary

### Zoning Classification

- R-1: Rural Residential
- R-2: Single-Family Residential
- R-3: General Residential
- B-1: Limited Business
- B-2: General Business
- B-3: Central Business
- M-1: Light Industrial
- Road

0 1,000 2,000 4,000 Feet

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA17NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

**Map 15**

Town of Montross

2018 Comprehensive Plan

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# Town of Montross 2018 Comprehensive Plan
# Major Roads and Highway

N
W E
S

3
KINGS HIGHWAY
DINGLEY ROAD
FOREST DRIVE
LEGION LANE
ANORAMA ROAD
HARRIS DRIVE
CLOVER LANE
POLK STREET
AMES LANE
COURT SQUARE
CARVER STREET
RECTORY ROAD
GLENN STREET
JEFFERSON STREET
ALMA LANE
LEE STREET
WAKEFIELD STREET
MONROE STREET
LYELLS STREET
PORTER LANE
REED DRIVE
ZACATA ROAD
OPAL LANE
CROOKHORN ROAD
MILLPOND LANE
UNRUH LANE
WILLOW TREE LANE
CH GROVE LANE
775
622
1214
1213
1209
1208
1201
1204
1203
1202
1205
1207
1211
1212
681
647
656
645
1210

## Legend

- Montross Town Boundary
- Roads

NORTHERN NECK PLANNING DISTRICT COMMISSION

NOAA — National Oceanic and Atmospheric Administration — U.S. Department of Commerce

Virginia Coastal Zone MANAGEMENT PROGRAM

0 1,000 2,000 4,000 Feet

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**Map 16**

Town of Montross

2018 Comprehensive Plan

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# Town of Montross 2018 Comprehensive Plan
# 2013 Aerial Photograph and Tax Parcels


## Legend

- Montross Town Boundary
- Tax Parcels

0 1,000 2,000 4,000 Feet

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**Map 17**

Town of Montross

2018 Comprehensive Plan

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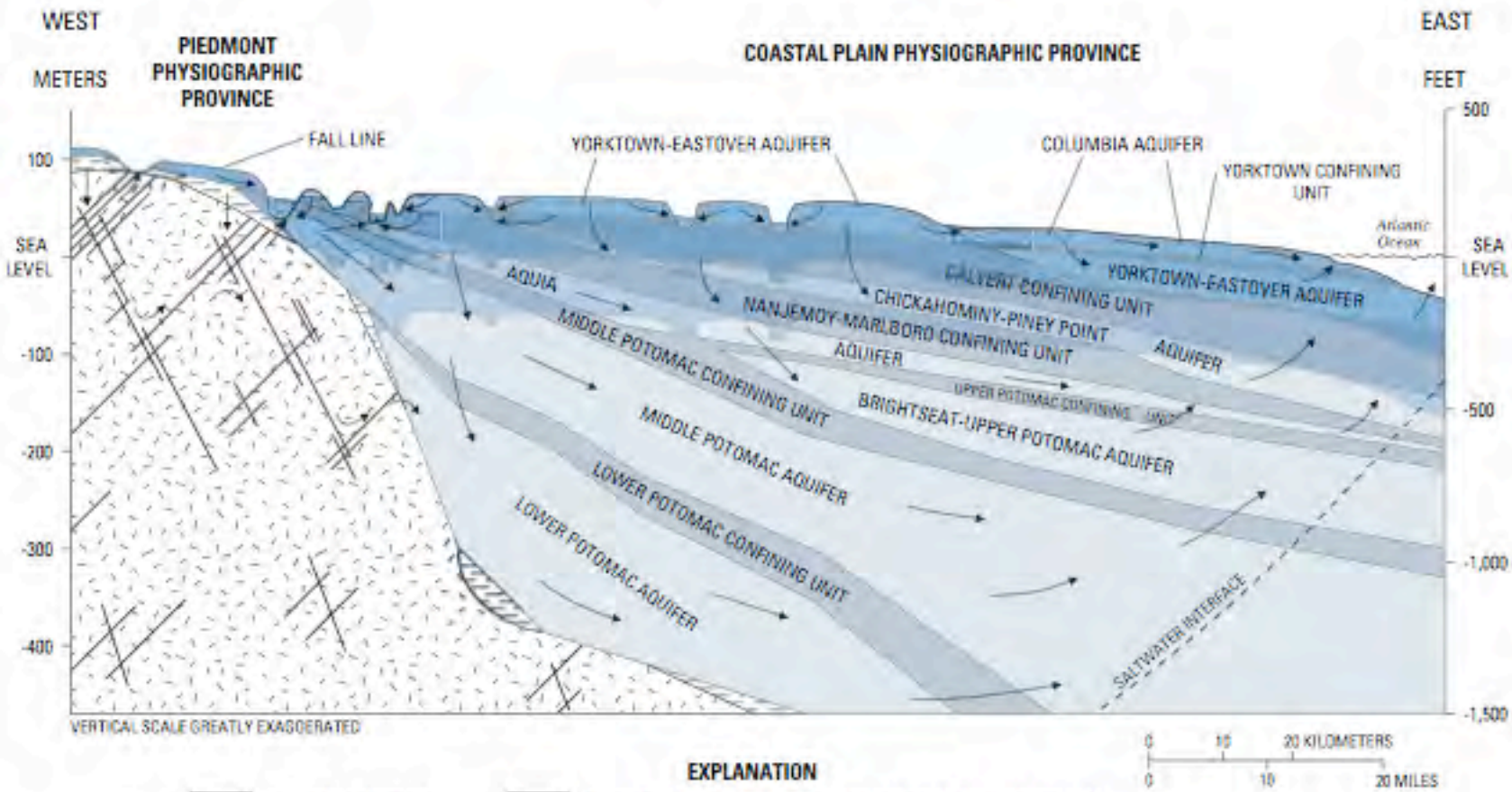
# Montross 8

## APPENDICES

# 8. APPENDICES

8.1 Coastal Plain Aquifers
8.2 Water Cycle
8.3 Additional Statistics & Resources
8.4 Montross Survey Sample


WEST
EAST
METERS
FEET
PIEDMONT PHYSIOGRAPHIC PROVINCE
COASTAL PLAIN PHYSIOGRAPHIC PROVINCE
FALL LINE
YORKTOWN-EASTOVER AQUIFER
COLUMBIA AQUIFER
YORKTOWN CONFINING UNIT
Atlantic Ocean
SEA LEVEL
100
-100
-200
-300
-400
500
-500
-1,000
-1,500
AQUIA
CALVERT CONFINING UNIT
CHICKAHOMINY-PINEY POINT AQUIFER
NANJEMOY-MARLBORO CONFINING UNIT
MIDDLE POTOMAC CONFINING UNIT
UPPER POTOMAC CONFINING UNIT
BRIGHTSEAT-UPPER POTOMAC AQUIFER
MIDDLE POTOMAC AQUIFER
LOWER POTOMAC CONFINING UNIT
LOWER POTOMAC AQUIFER
SALTWATER INTERFACE
VERTICAL SCALE GREATLY EXAGGERATED
0 10 20 KILOMETERS
0 10 20 MILES
EXPLANATION
COLUMBIA AQUIFER
CONFINING UNIT
BEDROCK
DIRECTION OF GROUND-WATER FLOW
AQUIFER
SAPROLITE
FRACTURES
COASTAL PLAIN REGIONAL AQUIFER SYSTEM
Shallow (Depths less than 200 feet)
Middle (Depths between 200 and 400 feet)
Deep (Depths greater than 400 feet)

Town of Montross

2018 Comprehensive Plan

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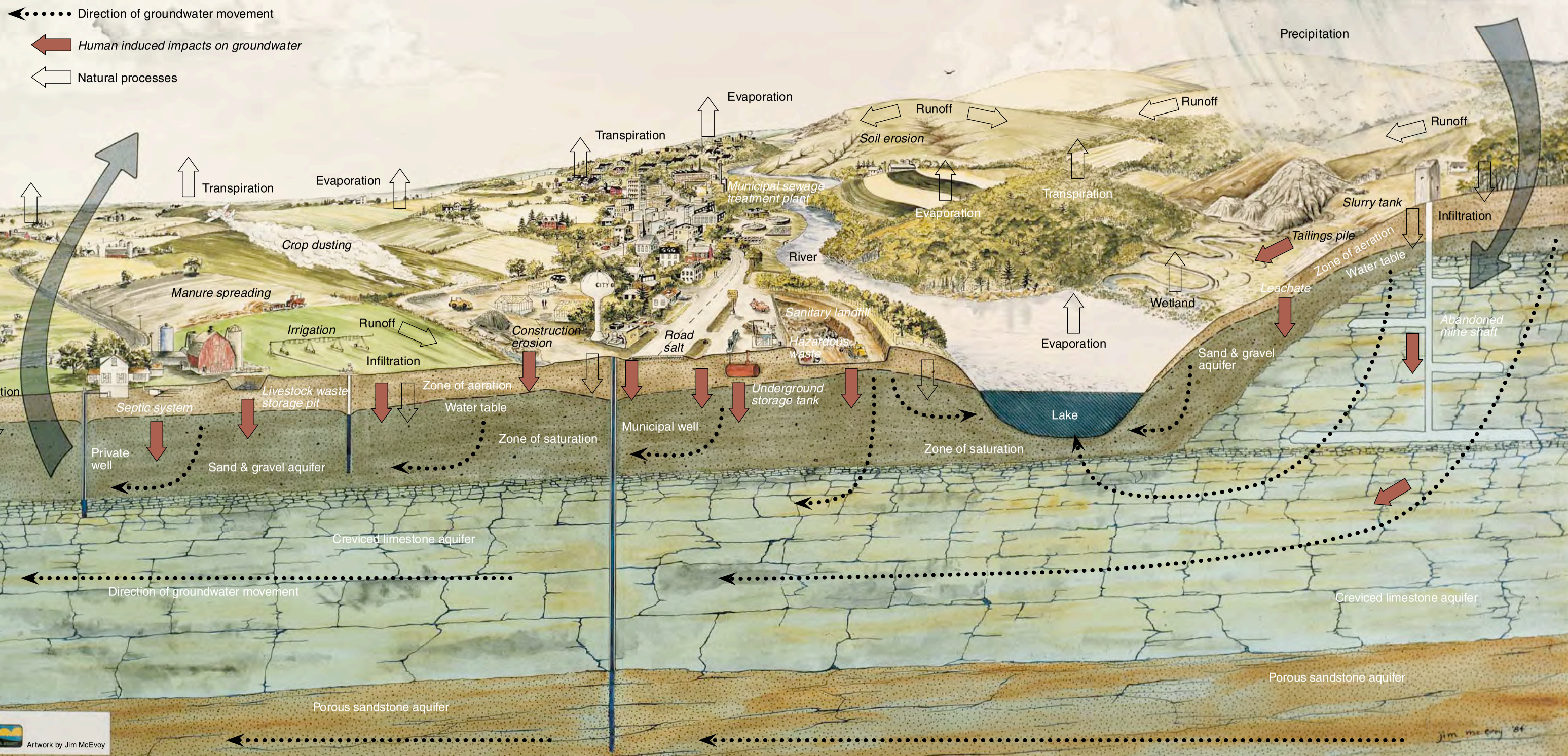
# Groundwater and land use in the water cycle



Town of Montross

2018 Comprehensive Plan

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## 8.3 Additional Statistics & Resources

**Population Statistics**
https://factfinder.census.gov

**Civilian Labor Force - Westmoreland County**
https://fred.stlouisfed.org/series/VAWEST3LFN

**Westmoreland Co. & Virginia Labor Statistics**
https://fred.stlouisfed.org/tags/series?t=westmoreland%20county%2C%20va

https://www.bls.gov/regions/mid-atlantic/news-release/countyemploymentandwages_virginia.htm

**Westmoreland County Community Profile**
http://virginialmi.com/report_center/community_profiles/5104000193.pdf

**Groundwater Report (1977)**
http://www.deq.virginia.gov/Portals/0/DEQ/Water/GroundwaterCharacterization/GROUND_WATER_OF_THE_NORTHERN_NECK_PENINSULA_VA.pdf

**FEMA Flood Map Service Center**
https://msc.fema.gov/portal

**Traffic Data**
http://www.virginiadot.org/info/2016_traffic_data_by_jurisdiction.asp

**2017 Montross Survey Results (Interactive)**
https://docs.google.com/forms/d/1dwp0M_vjDaQyzhaQyatJ1cbfganiX6sX4NK4JmLKelw/viewanalytics

DP-1

# Profile of General Population and Housing Characteristics: 2010

## 2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see http://www.census.gov/prod/cen2010/doc/dpsf.pdf.

**Geography: Montross town, Virginia**

| Subject | Number | Percent |
|---|---|---|
| SEX AND AGE | | |
| Total population | 384 | 100.0 |
| Under 5 years | 16 | 4.2 |
| 5 to 9 years | 18 | 4.7 |
| 10 to 14 years | 17 | 4.4 |
| 15 to 19 years | 29 | 7.6 |
| 20 to 24 years | 14 | 3.6 |
| 25 to 29 years | 15 | 3.9 |
| 30 to 34 years | 18 | 4.7 |
| 35 to 39 years | 14 | 3.6 |
| 40 to 44 years | 29 | 7.6 |
| 45 to 49 years | 23 | 6.0 |
| 50 to 54 years | 23 | 6.0 |
| 55 to 59 years | 23 | 6.0 |
| 60 to 64 years | 29 | 7.6 |
| 65 to 69 years | 34 | 8.9 |
| 70 to 74 years | 21 | 5.5 |
| 75 to 79 years | 16 | 4.2 |
| 80 to 84 years | 27 | 7.0 |
| 85 years and over | 18 | 4.7 |
| | | |
| Median age (years) | 49.8 | ( X ) |
| | | |
| 16 years and over | 330 | 85.9 |
| 18 years and over | 317 | 82.6 |
| 21 years and over | 298 | 77.6 |
| 62 years and over | 133 | 34.6 |
| 65 years and over | 116 | 30.2 |
| | | |
| Male population | 171 | 44.5 |
| Under 5 years | 9 | 2.3 |
| 5 to 9 years | 8 | 2.1 |
| 10 to 14 years | 5 | 1.3 |
| 15 to 19 years | 14 | 3.6 |
| 20 to 24 years | 9 | 2.3 |
| 25 to 29 years | 7 | 1.8 |
| 30 to 34 years | 10 | 2.6 |
| 35 to 39 years | 4 | 1.0 |
| 40 to 44 years | 19 | 4.9 |
| 45 to 49 years | 9 | 2.3 |
| 50 to 54 years | 13 | 3.4 |
| 55 to 59 years | 12 | 3.1 |
| 60 to 64 years | 11 | 2.9 |

| Subject | Number | Percent |
|---|---|---|
| 65 to 69 years | 14 | 3.6 |
| 70 to 74 years | 8 | 2.1 |
| 75 to 79 years | 9 | 2.3 |
| 80 to 84 years | 4 | 1.0 |
| 85 years and over | 6 | 1.6 |
| | | |
| Median age (years) | 45.3 | ( X ) |
| | | |
| 16 years and over | 149 | 38.8 |
| 18 years and over | 140 | 36.5 |
| 21 years and over | 134 | 34.9 |
| 62 years and over | 49 | 12.8 |
| 65 years and over | 41 | 10.7 |
| | | |
| Female population | 213 | 55.5 |
| Under 5 years | 7 | 1.8 |
| 5 to 9 years | 10 | 2.6 |
| 10 to 14 years | 12 | 3.1 |
| 15 to 19 years | 15 | 3.9 |
| 20 to 24 years | 5 | 1.3 |
| 25 to 29 years | 8 | 2.1 |
| 30 to 34 years | 8 | 2.1 |
| 35 to 39 years | 10 | 2.6 |
| 40 to 44 years | 10 | 2.6 |
| 45 to 49 years | 14 | 3.6 |
| 50 to 54 years | 10 | 2.6 |
| 55 to 59 years | 11 | 2.9 |
| 60 to 64 years | 18 | 4.7 |
| 65 to 69 years | 20 | 5.2 |
| 70 to 74 years | 13 | 3.4 |
| 75 to 79 years | 7 | 1.8 |
| 80 to 84 years | 23 | 6.0 |
| 85 years and over | 12 | 3.1 |
| | | |
| Median age (years) | 52.8 | ( X ) |
| | | |
| 16 years and over | 181 | 47.1 |
| 18 years and over | 177 | 46.1 |
| 21 years and over | 164 | 42.7 |
| 62 years and over | 84 | 21.9 |
| 65 years and over | 75 | 19.5 |
| | | |
| RACE | | |
| Total population | 384 | 100.0 |
| One Race | 382 | 99.5 |
| White | 306 | 79.7 |
| Black or African American | 75 | 19.5 |
| American Indian and Alaska Native | 0 | 0.0 |
| Asian | 1 | 0.3 |
| Asian Indian | 0 | 0.0 |
| Chinese | 0 | 0.0 |
| Filipino | 0 | 0.0 |
| Japanese | 0 | 0.0 |
| Korean | 1 | 0.3 |
| Vietnamese | 0 | 0.0 |
| Other Asian [1] | 0 | 0.0 |
| Native Hawaiian and Other Pacific Islander | 0 | 0.0 |
| Native Hawaiian | 0 | 0.0 |
| Guamanian or Chamorro | 0 | 0.0 |
| Samoan | 0 | 0.0 |

| Subject | Number | Percent |
|---|---|---|
| Other Pacific Islander [2] | 0 | 0.0 |
| Some Other Race | 0 | 0.0 |
| Two or More Races | 2 | 0.5 |
| White; American Indian and Alaska Native [3] | 0 | 0.0 |
| White; Asian [3] | 0 | 0.0 |
| White; Black or African American [3] | 2 | 0.5 |
| White; Some Other Race [3] | 0 | 0.0 |
| | | |
| Race alone or in combination with one or more other races: [4] | | |
| White | 308 | 80.2 |
| Black or African American | 77 | 20.1 |
| American Indian and Alaska Native | 0 | 0.0 |
| Asian | 1 | 0.3 |
| Native Hawaiian and Other Pacific Islander | 0 | 0.0 |
| Some Other Race | 0 | 0.0 |
| | | |
| HISPANIC OR LATINO | | |
| Total population | 384 | 100.0 |
| Hispanic or Latino (of any race) | 39 | 10.2 |
| Mexican | 38 | 9.9 |
| Puerto Rican | 0 | 0.0 |
| Cuban | 0 | 0.0 |
| Other Hispanic or Latino [5] | 1 | 0.3 |
| Not Hispanic or Latino | 345 | 89.8 |
| | | |
| HISPANIC OR LATINO AND RACE | | |
| Total population | 384 | 100.0 |
| Hispanic or Latino | 39 | 10.2 |
| White alone | 39 | 10.2 |
| Black or African American alone | 0 | 0.0 |
| American Indian and Alaska Native alone | 0 | 0.0 |
| Asian alone | 0 | 0.0 |
| Native Hawaiian and Other Pacific Islander alone | 0 | 0.0 |
| Some Other Race alone | 0 | 0.0 |
| Two or More Races | 0 | 0.0 |
| Not Hispanic or Latino | 345 | 89.8 |
| White alone | 267 | 69.5 |
| Black or African American alone | 75 | 19.5 |
| American Indian and Alaska Native alone | 0 | 0.0 |
| Asian alone | 1 | 0.3 |
| Native Hawaiian and Other Pacific Islander alone | 0 | 0.0 |
| Some Other Race alone | 0 | 0.0 |
| Two or More Races | 2 | 0.5 |
| | | |
| RELATIONSHIP | | |
| Total population | 384 | 100.0 |
| In households | 384 | 100.0 |
| Householder | 184 | 47.9 |
| Spouse [6] | 60 | 15.6 |
| Child | 79 | 20.6 |
| Own child under 18 years | 53 | 13.8 |
| Other relatives | 36 | 9.4 |
| Under 18 years | 13 | 3.4 |
| 65 years and over | 8 | 2.1 |
| Nonrelatives | 25 | 6.5 |
| Under 18 years | 1 | 0.3 |
| 65 years and over | 3 | 0.8 |
| | | |
| Unmarried partner | 11 | 2.9 |
| In group quarters | 0 | 0.0 |

| Subject | Number | Percent |
|---|---|---|
| Institutionalized population | 0 | 0.0 |
| Male | 0 | 0.0 |
| Female | 0 | 0.0 |
| Noninstitutionalized population | 0 | 0.0 |
| Male | 0 | 0.0 |
| Female | 0 | 0.0 |
| | | |
| HOUSEHOLDS BY TYPE | | |
| Total households | 184 | 100.0 |
| Family households (families) [7] | 91 | 49.5 |
| With own children under 18 years | 32 | 17.4 |
| | | |
| Husband-wife family | 60 | 32.6 |
| With own children under 18 years | 21 | 11.4 |
| Male householder, no wife present | 12 | 6.5 |
| With own children under 18 years | 6 | 3.3 |
| Female householder, no husband present | 19 | 10.3 |
| With own children under 18 years | 5 | 2.7 |
| Nonfamily households [7] | 93 | 50.5 |
| Householder living alone | 85 | 46.2 |
| Male | 24 | 13.0 |
| 65 years and over | 12 | 6.5 |
| Female | 61 | 33.2 |
| 65 years and over | 45 | 24.5 |
| | | |
| Households with individuals under 18 years | 40 | 21.7 |
| Households with individuals 65 years and over | 96 | 52.2 |
| | | |
| Average household size | 2.09 | ( X ) |
| Average family size [7] | 2.92 | ( X ) |
| | | |
| HOUSING OCCUPANCY | | |
| Total housing units | 207 | 100.0 |
| Occupied housing units | 184 | 88.9 |
| Vacant housing units | 23 | 11.1 |
| For rent | 1 | 0.5 |
| Rented, not occupied | 1 | 0.5 |
| For sale only | 6 | 2.9 |
| Sold, not occupied | 2 | 1.0 |
| For seasonal, recreational, or occasional use | 5 | 2.4 |
| All other vacants | 8 | 3.9 |
| | | |
| Homeowner vacancy rate (percent) [8] | 5.0 | ( X ) |
| Rental vacancy rate (percent) [9] | 1.4 | ( X ) |
| | | |
| HOUSING TENURE | | |
| Occupied housing units | 184 | 100.0 |
| Owner-occupied housing units | 112 | 60.9 |
| Population in owner-occupied housing units | 235 | ( X ) |
| Average household size of owner-occupied units | 2.10 | ( X ) |
| Renter-occupied housing units | 72 | 39.1 |
| Population in renter-occupied housing units | 149 | ( X ) |
| Average household size of renter-occupied units | 2.07 | ( X ) |

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six

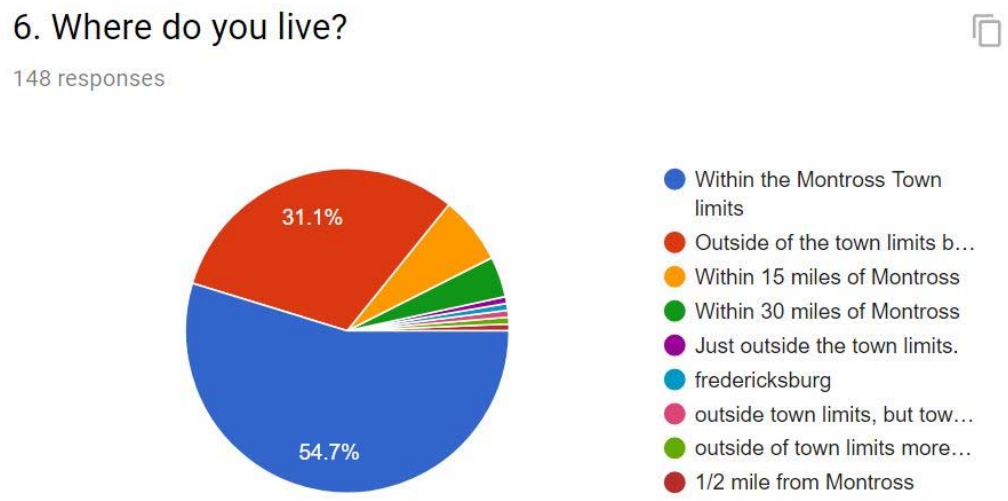
percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."
[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."
[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.
[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.
Source: U.S. Census Bureau, 2010 Census.

## 8.4 Montross Survey Sample

**2017 Montross Community Survey**




A community survey was conducted in the second half of 2017. The results were tabulated and are best displayed online at this address:

https://docs.google.com/forms/d/1dwp0M_vjDaQyzhaQyatJ1cbfganiX6sX4NK4JmLKelw/viewanalytics

A paper sample of the survey used follows in the next two pages.

# Montross Survey 2017

The Town of Montross is updating its Comprehensive Plan, which is normally updated every five years. Our last Comprehensive Plan was completed in 2007. Updates, until now, were postponed until our Montross Revitalization project was completed in 2016. Please help guide the future of Montross by completing this survey as accurately as you can while keeping in mind "What should Montross look like over the next 10 to 20 years?" Survey results will be available through several public hearings that will be held over the next few months. **This Survey is also available online at wwwVisitMontross.com** **DEADLINE to submit survey: 08/31/17**

* Required

## Household & Lifestyle

1. What is your age? *
- ○ Under 18
- ○ 19 to 25
- ○ 26 to 35
- ○ 36 to 45
- ○ 46 and above

2. What are the ages of your household members? (Check N/A if you live alone) *

| | 1 | 2 | 3 | 4 | N/A |
|---|---|---|---|---|---|
| Under 18 - How many? | ○ | ○ | ○ | ○ | ○ |
| 19 to 25 - How many? | ○ | ○ | ○ | ○ | ○ |
| Over 25 - How many? | ○ | ○ | ○ | ○ | ○ |

3. What type of housing do you live in? *
- ○ Single family house
- ○ Apartment
- ○ Mobile home
- ○ Duplex
- ○ Townhouse
- ○ Other: _____

4. Do you own or rent your home? *
- ○ Own
- ○ Rent

5. How long have you lived in this area? *
- ○ Less than 5 years
- ○ 5 to 10 years
- ○ More than 10 years

6. Where do you live? *
- ○ Within the Montross Town limits
- ○ Outside of the town limits but have a 22520 area code
- ○ Within 15 miles of Montross
- ○ Within 30 miles of Montross
- ○ Other: _____

7. How many family members work . . . *

| | None | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Within the Town limits | ○ | ○ | ○ | ○ | ○ |
| Within 30 miles of Montross | ○ | ○ | ○ | ○ | ○ |
| More than 30 miles from Montross | ○ | ○ | ○ | ○ | ○ |

8. What type of housing do you think is needed the most in Montross? *
- ○ Single-family homes
- ○ Townhouses/condominiums
- ○ Mobile homes
- ○ Apartments
- ○ Senior living
- ○ Mix of the above
- ○ None
- ○ Other: _____

9. What do you see as Montross's greatest problems now or in the future? *

10. What should be the Town's image to visitors in the next 10-20 years?

11. Where do you get most of your local news & information? *
- ○ Newspaper
- ○ Radio
- ○ TV
- ○ Internet / Online subscription
- ○ Social Media
- ○ Other: _____

12. How would you rate priorities for improving or expanding the following public services and facilities? *

| | Very Important | Important | Not Important | No opinion |
|---|---|---|---|---|
| Public Parks | ○ | ○ | ○ | ○ |
| Public Recreation Programs | ○ | ○ | ○ | ○ |
| Social Services | ○ | ○ | ○ | ○ |
| Medical Services | ○ | ○ | ○ | ○ |
| Children's Playground | ○ | ○ | ○ | ○ |

13. With respect to future growth and development of Montross, how important are the following issues to you? *

| | Very Important | Important | Not Important | No opinion |
|---|---|---|---|---|
| Encouraging tourism | ○ | ○ | ○ | ○ |
| Attracting new businesses | ○ | ○ | ○ | ○ |
| Preserving Montross's small-town character | ○ | ○ | ○ | ○ |

*Turn Page* ☞

| | | | | |
|---|---|---|---|---|
| Keeping taxes at present level | ○ | ○ | ○ | ○ |
| Expanding recreational opportunities | ○ | ○ | ○ | ○ |
| Creating bike trails | ○ | ○ | ○ | ○ |
| Creating more downtown parking | ○ | ○ | ○ | ○ |

14. What employment opportunities would you like to see locally? * (select all that apply)
- ☐ Commercial /retail /wholesale
- ☐ Manufacturing, processing, distributing
- ☐ Farm related/agribusiness
- ☐ Construction
- ☐ Technical
- ☐ Business Incubator (flex space/tele commuter offices)
- ☐ Other: _____

## Shopping & Businesses

15. Do you own a business in Montross? *
- ○ Yes
- ○ No

16. What types of services/businesses do you feel are needed? *

17. If the following businesses were located in Montross how often would you use them? *

| | 5 or more times per week | 2 to 4 times per week | Once a week | Once a month or less often | Never |
|---|---|---|---|---|---|
| Auto Parts/Service/Gas | ○ | ○ | ○ | ○ | ○ |
| Dental care | ○ | ○ | ○ | ○ | ○ |
| Dry cleaners | ○ | ○ | ○ | ○ | ○ |
| Healthcare | ○ | ○ | ○ | ○ | ○ |
| Physical therapy / wellness | ○ | ○ | ○ | ○ | ○ |

18. How often do you shop at the following locations? *

| | 5 or more times per week | 2 to 4 times per week | Once a week | Once a month or less often | Never |
|---|---|---|---|---|---|
| Town of Montross | ○ | ○ | ○ | ○ | ○ |
| City of Richmond | ○ | ○ | ○ | ○ | ○ |
| City of Fredericksburg | ○ | ○ | ○ | ○ | ○ |
| Town of Warsaw | ○ | ○ | ○ | ○ | ○ |
| Town of Tappahannock | ○ | ○ | ○ | ○ | ○ |

19. If retail store hours were extended, which time period would appeal to you most? *
- ○ Monday to Friday from 7am to 10am
- ○ Monday to Friday from 5pm to 9pm
- ○ Saturday from 12pm to 3pm

20. I shop for these SERVICES in. . . *

| | Montross | Elsewhere | Nowhere |
|---|---|---|---|
| Auto repair | ○ | ○ | ○ |
| Barber/Hair salon/Nails | ○ | ○ | ○ |
| Gym / Fitness | ○ | ○ | ○ |
| Insurance | ○ | ○ | ○ |
| Yard and garden supplies | ○ | ○ | ○ |

21. If you DO NOT shop in Montross for any of the above, indicate why you shop elsewhere. *

22. Which businesses would you like to see, and would you go to, if opened in Montross? Check your top three. *
- ☐ Art center
- ☐ Bakery
- ☐ Home and garden
- ☐ Sports and recreation center (e.g., batting cage, skateboarding, climbing wall, etc.)
- ☐ Used bookstore
- ☐ Nail salon and day spa
- ☐ Fitness Center / Gym
- ☐ Other: _____

23. What in Montross makes it difficult to utilize the available businesses and services? (Check all that apply)
- ☐ Access to building
- ☐ Road crossings
- ☐ Parking
- ☐ Other: _____

## Recreation

24. Which of the following events have you attended in the last 12 months in Montross? *
- ☐ Montross Fall Festival
- ☐ Civic & Church
- ☐ Ruritan/Lions/Moose/Veterans events
- ☐ Fire/Rescue department events
- ☐ Montross First Friday Market & Music Events
- ☐ None of the above

25. List THREE community assets that you or your family use or would use if developed.

26. Which of the following items would most improve safety in Montross? * (Select one)
- ○ Slowed-down traffic
- ○ Bike lane
- ○ Improved parking facilities
- ○ Other: _____

**Drop off completed survey at the Montross Town Hall or mail it to P.O. Box 126, Montross, Virginia 22520**


**Town of Montross**
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