

# Chapter 1: Land Use and Growth Management

## INTRODUCTION

The character of St. Michaels has evolved from its rich history as a maritime community to a quaint small waterfront town which provides our residents and visitors a wide array of residential and commercial opportunities. This plan seeks to maintain our historic character by guiding new development and redevelopment efforts through the creation and implementation of zoning regulations and environmental regulations focused on the core of our Town. The Commissioners of St. Michaels continue to support their limited growth policy concentrating primarily on rehabilitation and redevelopment rather than the extension of the Town's municipal boundaries.

The Town includes a vibrant downtown commercial area that serves the needs of residents and visitors, as well as a waterfront commercial areas consisting of restaurants, marinas and the Chesapeake Bay Maritime Museum. St. Michaels is characterized by a unique blend of waterfront, harbors, public parks, historic structures and wide variety of residential and commercial structures and uses.

Although St. Michaels is a small community, we share some of the same land use, growth, and development issues of larger towns. Our community is concerned with maintaining our unique historic water-oriented character. We are concerned about over-development within the town, as well as inappropriate development in the approaches to the town. We are also committed to maintaining a healthy environment, protecting our harbors and the Chesapeake Bay, and maintaining the town's historic feel.

The St. Michaels Land Use Plan is the fundamental element that will determine the Town's future pattern of growth and development. This plan also provides the underlying guidance when considering changes to our zoning and land-use ordinances, as well as addressing potential development within the Town.

## EXISTING LAND USE

### Residential Areas

Approximately half of the Town's land is devoted to residential use, characterized by single family homes on half acre lots or smaller. As an older community, St. Michaels has many homes and entire neighborhoods that are on very small and/or narrow lots. This gives many sections of town a village feel while still lying in the rural setting of Maryland's Eastern Shore.



### Residential Gateways

Those lands adjacent to the Perry Cabin ball fields and extending to Rolles Range Road which lie at the northern edge of the Town and the land area at the southern end of town known as Marea carry this zoning designation. It is the Town's intent is to use the Residential Gateway Zone to preserve the existing rural appearance up to the current edges of town development. This area allows for an entrance into the Town that is gradual and also acts as a transition to the Talbot County Countryside Preservation Zone, the purpose of which is to slow sprawl by creating a greenbelt.

### Commercial Areas

St. Michaels has two dominant areas of commercial activity. One commercial section is situated along both sides of Talbot Street, providing the majority of goods and services for the day-to-day needs of residents and contains most of the shops as well as some restaurants that appeal to tourists. A second area of commercial activity is located adjacent to the harbor. Larger restaurants, inns, and the Chesapeake Bay Maritime Museum are there. Fremont Street which lies immediately to the west of Talbot Street has long been recognized as an area suitable for neighborhood commercial redevelopment. In recent years, the Police Station, the St. Michaels Library and several small businesses and restaurants have located in that area. The Town recognizing the value of this area is investing in stormwater, street and sidewalk upgrades in an effort to promote the continued re-development of this street.



### Industrial Areas

Much of the industrial activity that existed in the 1970's has ceased. Some limited manufacturing still occurs in the old mill complex on Talbot Street between East Marengo and East Chew. Boat building, electrical fabrication, power generation, and milling either no longer occur or are done at much lower levels of activity. One boat yard has been replaced by the St. Michaels Harbor Inn, reflecting the changing focus away from industry and toward tourism. The only area zoned for industrial uses is located at the north end of Grace Street which is the siting of a large building which is utilized for light manufacturing and a power substation.

### Maritime Uses

The town has a special category of commercial land use related to our waterfront setting; Maritime Commercial, including commercial activities that are water dependent by their nature. They include boatyards, fuel docks, marinas, and restaurants and inns that have docks and landings. Areas

designated for loading and unloading of commercial shellfish and fin fish should be protected by appropriate zoning and other regulations. Existing commercial activity on our harbor should be protected by limiting commercial waterfront uses to these commercially-zoned areas.

Both the Chesapeake Bay Critical Area Overlay District (340-27) and the Waterways Management (333) Chapters of the Town Code, address water dependent uses and the nature of existing and future development along our waterfront. The policies of those plans are incorporated here by reference.

### Waterfront Development

This zone is intended to promote the development of the tourism related activities in the area adjacent to the Town harbor while preserving historic features and protecting adjacent residential areas.



### Museums

The economic impact of the Chesapeake Bay Maritime Museum to the Town of St. Michaels is substantial. The museum's waterfront campus occupies more than 18 acres with approximately 18%, fronting on St. Michaels Harbor. The museum and their surrounding lands carry a Maritime Museum zoning designation which is specific to the use and operation of the museum. The museum continues to expand their exhibits and educational programs concentrating on preserving and exploring the history, environment and people of the Chesapeake Bay.

The Museum at St. Mary's Square continues to provide the Town with a window to its past form and character through their ever increasing collections, three historic buildings and educational walking tours, programs and presentations.

### Community Parks

St. Michaels is proud of its myriad of public parks, ranging from small pocket parks, located throughout the Town to the three waterfront parks fronting on the Harbor, and San Domingo Creek. These parks offer scenic overlooks, passive recreation opportunities, temporary mooring for boaters and a newly created kayak launching ramp. In addition, the Town offers a large childrens park with playground equipment and picnicking facilities which lies adjacent to a 1.3 mile nature trail which is accessible for pedestrian and bicyclists.

### Agricultural and Resource Conservation Areas

Proximity to agricultural and resource conservation activities help anchor the rural setting of St. Michaels and plays an important role in defining the Town's character and sense of place. The transition from agriculture to developed areas establishes a sense of arrival into St. Michaels and is crucial in defining the feel of the Town. The Town has various resource conservation areas near the

Town boundaries that limit growth, including Canton Park Farm at the West of Railroad Avenue. The property known as Miles Point at the northern limit of Town contains 72 acres placed under conservation easement and back into agricultural production increasing the overall acreage of undeveloped lands within the Town. Additionally, the Marea Terrace development at the southern entry of Town has a resource conservation covenant along the front portion of the subdivision to preserve the rural entry and the Inn at Perry Cabin intends to place the front portion of their property at the Northern portion of Town under an agriculture covenant.

The current land use designations are shown on Map 1-1 and summarized in Table 1-1.

**Table 1-1**  
Current Land Use  
Town of St. Michaels Area Calculations

<i><b>Zone</b></i>	<i><b>Area Sq. Ft</b></i>	<i><b>Acres</b></i>
Agriculture and Conservation	7,280,572.00	167.14
Commercial	2,073,269.80	47.57
Maritime	1,146,429.00	26.31
Residential	18,531,780	425.43
Waterfront Development	492,634	11.31
Residential Gateway	3,454,831	79.31
Public Facilities	55,063	1.26
Community Park Lands	1,169,586.00	26.85
<b>Total Town Acres</b>		<b>785.18</b>

**Table 1-2**  
Future Land Use  
Town of St. Michaels Area Calculations

<i><b>Zone</b></i>	<i><b>Area Sq. Ft</b></i>	<i><b>Acres</b></i>
Agriculture and Conservation	7,280,572.00	167.14
Commercial	1,809,279.20	41.54
Maritime	1,088,608.60	25.00
Residential	17,263,309.08	396.31
Waterfront Development	1,131,402.90	25.97
Residential Gateway	5,509,258.60	126.34
Public Facilities	1,302,691.00	29.91
<b>Total Town Acres</b>		<b>812.21</b>

## **FUTURE LAND USE CHANGES**

The Comprehensive Plan focuses on infill, revitalization and redevelopment within the Town’s current boundaries rather than significant expansion of the Town municipal boundaries. As such, the following future land uses are anticipated for the next 10 years. As unanticipated projects may require further consideration beyond the future land use in this Plan, changes may be recommended

as part of the Zoning Map amendment process should the projects be found consistent with other portions of the Comprehensive Plan or zoning overlay criteria. The future land use changes noted below are shown on Map 1-2 and summarized in Table 1-2, including areas of potential annexation noted in Chapter 2.

200 Fremont Street	Residential to Commercial
505 South Talbot Street	Residential to Commercial
211 North Talbot Street	Maritime to Commercial
107 Mill Street	Commercial to Maritime
123 Grace Street	Commercial to Residential
Eastern Portion of Inn at Perry Cabin	Residential to Waterfront Development
Habitat at Brooks Lane Annexation	Future Residential
Roles Range Future Annexation	Future Residential
<b>Environmental Concern Annexation</b>	<b>Future Residential</b>

## VISION

St. Michaels is a town, which, through coordinated land use management practices, will succeed in protecting and perpetuating its historic character, green spaces, commercial viability, environmental stewardship and a vibrant residential community.

## OBJECTIVES AND IMPLEMENTATION STRATEGIES

- 1.1 Preserve the Town's unique historic identity in the larger landscape.
  - 1.1.1 Support the County's greenbelt concept to define town edges and to ensure that County development along the borders of the town does not detract from the community's image.
  - 1.1.2 Continue to participate in the County's Technical Advisory Committee, providing the Commissioners and Planning Commission an opportunity to comment on any land subdivision or development proposals in locations near town.
  - 1.1.3 Consistent with The Annotated Code of Maryland (2012), establish a process with the County, similar to their existing technical advisory committee, for the purpose of development, annexation and/or rezoning of land within the Town's "Areas of Interest."
  - 1.1.4 Schedule regular working sessions with representatives of the Talbot County Planning Commission and the St. Michaels Planning Commission and staff to discuss projects which may affect the Town.
- 1.2 Ensure management tools for Town growth are adequate, effective, and consistently executed.

- 1.2.1. To accommodate planned growth, evaluate existing ordinances and fee structures governing necessary services and community facilities. This includes but is not limited to stormwater management, public water, public sewer, infrastructures, parks, open space, roads and public landscaping.
- 1.2.2 Continue to review, establish and adopt environmental ordinances as required by State law.
- 1.2.3 Evaluate policies to ensure that developers pay for all the direct and associated costs of development as well as for independent studies of development impacts when such studies are determined by the Town Commissioners to be necessary.
- 1.2.4 Ensure that development occurs within those areas as identified on the St. Michaels Growth Tier Map (Map 1-3) as incorporated within the St. Michaels Comprehensive Plan.
- 1.2.5 Support appropriate infill and mixed-use development projects that are compatible with the existing community fabric.
- 1.3 Ensure Town codes are effective, enforced, and simplified to the extent possible.
  - 1.3.1 Review permitting processes and procedures.
    - Conduct a comprehensive review of the Zoning Ordinance.
    - Conduct a comprehensive review of the Subdivision Ordinance.
- 1.4 Continue to work with those businesses on Rt. 33 within the commercial zone which borders the town boundaries to maintain and enhance the historic character of the Town.
  - 1.4.1 Continue to work with the County regarding the southern approach to the Town in an effort to implement and strengthen their gateway zoning and to restrict any expansion of this commercial district or intensification of its table of approved uses.
- 1.5 Enhance the development of the commercial district.
  - 1.5.1 Develop and implement a redevelopment plan for Fremont Street.
  - 1.5.2 Develop and implement a commercial street plan which encompasses pedestrian corridors, lighting, parking and aesthetics.
  - 1.5.3 Promote the use of funding sources available through the Sustainable Community Program, Legacy Plan and other grant opportunities.

- 1.5.4 Investigate the benefits to the Town of establishing St. Michaels as a “Main Street Community.”
- 1.5.5 Encourage business owners to maintain their storefronts in keeping with the historic character of the town.
- 1.5.6 Continue to Support redevelopment of the Mill as a mixed-use project.
- 1.6 Recognize the concerns of multi-generational residential needs with consideration being given to accommodations for in-law suites or facilities for care givers.
- 1.7 Connectivity.
  - 1.7.1 Continue to evaluate the feasibility of burying or relocating utility lines.
  - 1.7.2 Pursue opportunities to optimize internet accessibility, connectivity and speed for the businesses and residents of the Town in an effort to enhance economic opportunities.
  - 1.7.3 Encourage the upgrade and construction of sidewalks, walking and bike paths, which will allow residents and visitors to pass from one end of St. Michaels to the other with as much ease as possible. Such improvements should enhance the ability of residents and visitors to safely walk or bike to businesses, restaurants, museums and other community amenities.

## **POLICIES**

It is the policy of the Town that new development and redevelopment be focused in the core of our Town as to limit outward growth.

It is the policy of the Town that existing commercial activity on our harbor shall be protected by limiting commercial waterfront uses to maritime areas.

# Chapter 2: Municipal Growth and Development Regulations

## INTRODUCTION

The Annotated Code of Maryland requires that all municipalities exercising zoning authority develop a municipal growth element. The purpose of this element is to attempt to quantify the potential impact of growth that may occur as a result of potential annexations beyond the existing municipal boundaries. The Town of St. Michaels currently receives sewer services from Talbot County and Growth Tiers are mapped consistent with [Talbot County Comprehensive](#)



[Water and Sewer Plan](#) and comply with the [State of Maryland's SB236 - Growth and Agricultural Preservation Act](#) as it relates to growth tier mapping.

After October of 2009, an area may not be annexed by the Town of St. Michaels unless the impact of that annexation has been analyzed and made a part of this element as required by the State of Maryland. This analysis was completed and included within this Chapter during the 2008 Plan update and updated herein. The Town recognizes that inclusion of an area in this element is a *prerequisite* for any consideration of annexation in the future or, until this Plan is amended. The Town has no plans to expand the municipal boundaries with the possible exception of the area adjacent to Rolles Range Road as noted below and shown on Map 2-1. The update to this plan will therefore focus on infill, revitalization and redevelopment within the Town's current boundaries rather than extensive expansion of the Town. In making this decision, consideration was given to potential growth on those properties immediately adjacent to the Town and possible impacts associated with development as they relate to this Chapter. The Municipal Growth Element seeks to analyze potential growth in the Town of St. Michaels based on existing and projected land use policies. It will assess how that growth will impact existing and future facilities and services. Instead of using traditional population projections, which can become inaccurate over time due to the change of growth rates, this growth element seeks to understand how full build-out conditions in the Town would affect the Town's services and infrastructure.

While the Town is not concentrating on large scale expansion, there is one area which lies between Rolles Range Road and the Strausburg Farm area, which is the northwest boundary of the Town, which may be considered for possible annexation. The Town would plan that the Rolles Range Road annexation area be a future land use of residential and should meet the priority funding criteria required in the Sewer Plan for Talbot County for proper sewer



allocation. There are several areas in the County which lie either in immediate adjacency or close proximity to the Town of St. Michaels which if new development or redevelopment were to occur, may impact the many public services already granted to Town residents. These areas are noted in the following table and further identified on Map 2-2. These lands are further described in that portion of this Chapter entitled “*Areas of Mutual Interest*”.

It should be noted that the original build-out analysis conducted in 2008 for the purpose of determining the impact of potential development on existing public facilities and services in the Town showed that capacity was available for an additional town build out of 538 dwelling units. These numbers included the development of the Miles Point Property which was slated to include single family dwellings, limited commercial areas and a small hotel. Since that analysis was completed, the Miles Point property has been placed under a perpetual conservation easement eliminating the potential development of these lands and their need for such services. As evidenced in the 2008 Plan adequate capacity was available to serve the proposed annexation areas as well as those “Areas of Mutual Interest”, should redevelopment occur at some future date. It should be noted that several areas which were proposed as future growth areas in the 2008 Plan have also been deleted from this plan update. Many areas noted as “Areas of Mutual Interest” are already developed and are served by Municipal water and County Sewer, so there is a very limited opportunity for future development/redevelopment. As will be noted in the following section, with the deletion of the Miles Point Development and several “Growth Areas” additional capacity for residential build out is available.

The State of Maryland Annotated Code, Land Use Article (Division 1, Title 3, Subtitle 1), which governs the required elements of a Comprehensive Plan, calls for the inclusion of a ‘Development Regulations Article.’ As such, the Town considers are development regulations to be consistent with Smart Growth related policies. St. Michaels continues to look for innovative ways to promote social, economic and environmental development and remains flexible in our plans, mostly in the use of general land uses shown in this Plan and the use of various overlay zones to encourage non-traditional development practices.

## **ANALYSIS OF DEVELOPMENT CAPACITY AND BUILD-OUT CONDITIONS**

The Town has determined that future growth should be limited to within municipal boundaries and those areas noted for future annexation. Calculations for those “*Areas of Mutual Interest*” have also been included and are based on the computations contained in the 2008 Comprehensive Plan. While these areas are not identified as future areas of annexation, they are being identified and included in this Chapter as they are areas around the Town that have a direct impact or receive services from the Town of St. Michaels currently. Should any of these areas request annexation for future servicing purposes, the Town recognizes a Plan update would be required to annex any of the “Areas of Mutual Interest,” but recognizes under this current plan that adequate facilities would be available to annex any of these areas. If the demographics of St. Michaels should significantly change, the population estimates generated may not accurately account for growth. Build-out numbers were generated using the analytical processes within Geographic Information Systems (GIS) and Microsoft Excel to calculate buildable area on existing lots.

To create a baseline for assessing the differences between the existing Town boundary and those “Areas of Mutual Interest” any build-out numbers were generated for the Town of St. Michaels simulating infill and community redevelopment. It was assumed that areas within existing residential zones would experience infill development where possible. After all the data was gathered, as detailed above, the number of existing dwellings was subtracted from the total possible dwellings the parcel could sustain, creating the build-out number for that parcel. For areas already built to its designated density, or previously developed at a higher density, the total buildable area was zero. In comparing the numbers from the 2008 Plan to this Plan update, it should be noted that the Miles Point Property which was to be developed with 278 homes, has been placed under a conservation easement with no development proposed. Therefore, even with the possible annexations, the number of projected dwelling units is considerably less than that set out in the 2008 plan. Based on the 2008 Plan, the projected number of dwelling units would have been 864 dwelling units. The proposed annexation area ,which is adjacent to Rolles Range Road, if developed under the Gateway Residential standards of 1 home per 5 acres would result in an additional 17 dwelling units, four of the lots are already improved with dwelling units. The proposed annexation area, which fronts on Brooks Lane, if developed at the Residential 1 standard of 1 home per 7200 s. feet would result in an additional 8 dwelling units. Combining the total dwellings permitted as noted in the 2008 Plan (1143-278 (Miles Point) = 865 + 21 (annexations) results in a potential build out of 886 dwelling units. According to the tax records for the Town of St. Michaels, there are 711 dwelling units in the Town leaving adequate capacity for an additional 260 dwelling units without the need to upgrade the facilities currently available to the residents of the Town.

As noted previously, this process was also utilized in determining the potential build out for each of the “Areas of Mutual Interest” which are identified in this Plan. While these areas are not identified as future areas of annexation, they are being noted and included in this Chapter to demonstrate that should annexation requests be filed with the Town in the future, adequate facilities would be available.

**Table 2-1: Build-out Results for St Michaels and Areas of Mutual Interest**

<i>Reference Name</i>	<i>Proposed Zoning</i>	<i>Use</i>	<i>Density</i>	<i>Total Dwellings (permitted)</i>	<i>Existing Dwellings</i>	<i>Dwelling Balance</i>
<b>In-Town</b>	N/A	N/A	N/A	865	711	153
<b>Potential Annexation Area “A”</b>	Residential 1	Low density residential	1 du/7,200 sq. ft.	17	4	13
<b>Potential Annexation Area “B”</b>	Residential 1	Low density residential	1 du/7,200 sq. ft.	8	0	8
<b>Potential Annexation Area “C”</b>	Residential 1	Low density residential	1 du/20 acres	1	0	1
<b>Areas of Mutual</b>						

Interest						
Area 1	Residential Gateway (RG)	Large Lot Residential	1 du./ 5 acres	16	14	2
Area 2	Agriculture B	Greenway	1 du./ 20 acres	0	0	0
Area 3						
Rio Vista /Bentley Hay	Residential (TR)	Residential	1 du./ 7200 square feet	422	379	43
Area 4A & B	Commercial Gateway	Commercial		0	0	0
Area 5 Tricefields	Residential Gateway (RG)	Tricefields	Maximum 21 lots	21	21	0
Totals				1349	1128	220

*Potential Annexation Area (A)*

This area lies to the northwest boundary of the Town and lies between Rolles Range Road and the Strasburg Farm area and is shown on the following map 2-1 (Potential Annexation Area). The area is approximately 35 acres in site, is improved with several residential dwellings and a Bed and Breakfast facility. The area has been identified as containing soils having limited suitability for an on-site septic system.

*Potential Annexation Area (B)*

The property currently under consideration is split between two jurisdictions, the Town and County. Habitat for Humanity has entered into a contract to purchase this property, but due to the difficulties encountered when trying to develop within two jurisdictions, have approached the Town reference the annexation and development of this property under the Town’s zoning regulations.

*Potential Annexation Area (C)*

Potential Annexation Area (C) is the remaining 2.983 acres of parcel 1952, also already partially within the Town. The property is currently used as a commercial plant nursery. The owners currently pay town taxes and enjoy town benefits such as trash and recycling pickup. Any future development would be required to conform to the current Critical Area designation of Resource Conservation Area or seek a growth allocation.

*Areas of Mutual Interest to the Town and County*

Each area as designated below corresponds to the following Map 2-2 (Areas of Mutual Interest) and represents those areas within the County and which directly abuts or is in close proximity to the municipal boundaries of the Town. Further development or redevelopment in these areas may have an impact on the Town, and as such the Town has an interest in monitoring such activities. However, should the property owners in these areas, desire annexation, at some future date in time, the Town of St. Michaels would consider such request in that the properties are adjacent to the municipal boundaries and adequate public facilities would be available. However, it should be noted that annexation can only occur by request of the property owners.

Area 1

Area 1 is located within the planning area around the Town of St. Michaels, just north of Yacht Club Road. This area is located within Talbot County's Countryside Preservation Zone and is currently developed in a large lot estate subdivision. No changes are planned for this area, but homes have individual septic systems to treat wastewater. Consideration should be given to the extension of public wastewater and stormwater facilities to this area to avoid future water quality problems in Long Haul Creek and the Miles River.

Area 2

Area 2 is adjacent to the Town's western boundary corresponding with the location of a proposed bypass/parkway. With the apparent demise of the bypass, this area has been targeted for the extension of the nature trail. Both Talbot County and the Town support this effort. Development of any other nature would be inconsistent with the parks and recreation element of our plan.

Area 3 Rio Vista/Bentley Hay

Area 3 comprises the subdivisions of Rio Vista/Bentley Hay and is adjacent to the, south and eastern boundaries of Historic St. Michaels and adjacent to the Miles River. The communities of Rio Vista/Bentley Hay are served by both community sewer and municipal water services. These areas are currently developed with limited opportunities for additional development or redevelopment.

Area 4

Area 4 includes land on both the east and west sides of Route 33, and are located at the south end of Town, defining the entrance or gateway to the Town. A mix of uses are located in this area, including a strip mall, service station, personal service shops, a restaurant and antique sales among others. Within this area, redevelopment over time should be designed to enhance the character of the Town's Gateway which serves as the front door to St. Michaels. Since these properties currently sustain non-residential development, the build-out analysis was not applied to this property.

Area 5

Area 5 encompasses the existing community of Tricefields. Residents are dependent on utilization of Boundary Lane, a Town Street, for access to and from their community. Tricefields is already developed in large lot estate form and is adjacent to the Town's Marea

subdivision. This area is currently developed with limited development/redevelopment opportunities existing. With the approval of the Marea Subdivision, public sewer was made available to this development.

## **ASSESSMENT OF IMPACTS ON INFRASTRUCTURE AND SERVICES**

This section describes the impact of build-out conditions on existing public facilities and services in the Town of St. Michaels. The information discussed here includes just the analysis of the proposed growth, by individual areas and as a total; however, the information is further discussed in ancillary chapters of the Comprehensive Plan. To reduce overlap, general descriptions of the facilities can be viewed under the Community Facilities and Public Services chapter of this plan.

### Public Schools

St. Michaels' students attend the St. Michaels School Complex, housing an elementary and middle/high school. These schools can account for a State Rated Capacity of 491 and 503 students, respectively. Currently, the cumulative student population is 758, which is well below the above noted capacity figures. Should the annexation and full build out of the above referenced area (A as shown on Map 2-1) occurs, it is anticipated that an additional seven (7) students could be incorporated in the St. Michaels school population. The calculations for public school impacts use a rate of 0.2 elementary school students per dwelling, and a rate of 0.25 middle/high school students per dwelling.

### Libraries

The Talbot County Public Library System operates a branch in the Town of St. Michaels. The facility is 3,000 square feet offering enough square footage for a population of 30,000 people, according to the American Library Association. The library has indicated that future expansion of the facility may be required in the future to accommodate the ever increasing needs of St. Michaels' residents and visitors.

### Public Safety

The potential increase in land area and population will have a minimal impact on the Emergency Services offered by the Town of St. Michaels. The Police Department has a relatively new facility located on Fremont Street. The Town has eight police officers, including the Police Chief. The number of officers is more than the commonly used ratio of 1.6 police officers per 1,000 people. There is currently no need, even with build-out conditions, for more police officers. Likewise, the Fire Department already has six engines for use in case of emergency. For further information on public safety, please see Chapter 5: Community Facilities and Public Services.

### Water & Sewerage

Based on the total water usage from existing residences and the residents of Rio Vista who are already on the Town of St. Michaels water system, the Town of St. Michaels is within the limits of their Water Appropriation and Use Permit from the Maryland Department of the Environment. Should the additional in-town possible build-out residences be constructed, the water usage would increase to 248,031 gallons per day which is still within the limits of the Water Appropriation and Use Permit.

If the Town of St. Michaels were fully built out and the potential annexation area was annexed and fully built out, the total water usage would rise to 365,211 gallons per day, which would still be within the limits of the Water Appropriation and Use Permit. As the build-out analysis indicates the potential demand for additional development due to annexation would be 13 units. Assuming that each unit would contribute 185 gallons per unit additional flows would be 2,405 gallons per day. Any existing units in the potential annexation areas (Rio Vista is an example) would already have allocated capacity in the system. It is clear that full build-out is not constrained by sewer capacity.

A more detailed discussion of these issues may be found in Chapter 4 – Water Resources Element.

#### Recreation

The Town of St. Michaels has 14 Town Park Facilities including a 1.3 mile nature trail which lies adjacent to the Town's western boundary and encompasses 98.45 acres of land. The State suggests a total of 30 acres of parkland per 1,000 people. Based on the projections contained in Table 2-1, there is no need for additional park facilities.

#### Stormwater Management Systems

All new development and re-development will be required to comply with Stormwater Management Regulations, utilizing both low-impact on-site stormwater management techniques and also off-site techniques, if warranted. These requirements will be governed by the Town and the State to ensure compliance. If it is found that stormwater management issues will arise with additional redevelopment, these areas should be incorporated with new development stormwater management as applicable.

To reduce redundancy, further discussion of stormwater management will be completed in the Water Resources Element of this Comprehensive Plan.

#### Financing of Infrastructure Expansions Needed

Current analysis of growth shows that the Town of St. Michaels already has sufficient infrastructure to handle some of the areas of interest that may be considered for annexation. New development will require water and sewer lines and stormwater management. The Town should continue to require developers to incur costs relating to water and sewer lines and stormwater management systems.

State and County financial help should be examined for help updating the existing infrastructure for redevelopment areas. Funding opportunities associated with the Town's Community Legacy programs could be utilized to help maintain streets and create streetscapes. Additionally, Neighborhood Conservation programs will help improve the infrastructure to increase redevelopment potential.

#### Burdens on Municipally Provided Services and Infrastructure Lying Beyond Proposed Municipal Growth Area

St. Michaels does not have major infrastructure lying outside of its Town boundary, though it does share infrastructure with Talbot County. This includes the Wastewater Treatment Plant (WWTP) currently serving the Town and other County areas. The Town and County should work together to allow for appropriate capacity and expansion. Further discussion on the WWTP can be found in the Water Resources Element of this Comprehensive Plan.

#### Protection of Sensitive Areas

A substantial percentage of the Town's land area lies within the Chesapeake Bay Critical Area, included in the Critical Area Regulations as set out in the Town Code are protection clauses to ensure that parcels are developed in such a manner as to assure the protection of the sensitive Chesapeake Bay areas, including the Miles River. National Wetland Inventory and FEMA Floodplain information were used as environmental constraint criteria through the build-out analysis. Wetlands were not counted as developable land and floodplain areas were considered developable given adherence to development regulation.

## **VISION**

The vision of the Town of St. Michaels includes maintaining its historic character, environmental quality and enhanced economic development opportunities. The areas of mutual interest described in this chapter ensure that the gateway into Town will develop into areas that welcome people into the Town. Overall, the areas of mutual interest could serve to create functional transition areas into and out of the Town, and/or provide valuable greenbelt opportunities. St. Michaels recognizes that rapid growth and development would have a detrimental impact on the town's historic character and as such the placement of regulations which control the type and scale of development and/or redevelopment will be pursued.

## **OBJECTIVES AND IMPLEMENTATION STRATEGIES**

- 2.1 Ensure future annexations occur within the appropriate zoning classifications as dictated in this element.
  - 2.1.1 Preserve those areas identified for possible greenway and/or park/trail development.
  - 2.1.2 Ensure development is consistent with the Town's Tier Map.
  - 2.1.3 Monitor growth in residential areas.
- 2.2 Coordinate with Talbot County to monitor development on those lands identified as "Areas of Mutual Interest" to assure such development is consistent with the goals of the Town.
- 2.3 Monitor community and public facilities to ensure that upgrades and additions occur when needed.

- 2.4 Ensure sufficient police, medical emergency and fire station staff exists for increased demands of the tourist industry and population.
- 2.5 Work cooperatively with Talbot County to ensure those areas identified as “Areas of Mutual Interest” are developed in a manner consistent with the goals of the Town.
- 2.6 The Planning Commission shall serve as a recommending body that provides flexible land development regulations and reviews developments to consistency with the Comprehensive Plan.
- 2.7 The development regulations element shall encourage:
  - The use of flexible development regulations to promote innovative and cost saving site design and protect the environment; and
  - Within the areas designated for growth in the plan; and
  - Economic development through the use of innovative techniques; and
  - Streamlined review of applications for development, including permit review and subdivision plat review.

## **POLICIES**

The Town maintains a policy that developers shall bear the costs associated with installation and maintenance of water, sewer, sidewalk, stormwater and other infrastructure related systems caused by new development to reduce the financial burden of the Town and neighboring properties.

It is the policy of the Town that the Planning Commission shall have the powers necessary to enable it to fulfill its functions, promote planning, and execute the purposes of the Code of the Town of St. Michaels.



# Chapter 4: Water Resources Element

## Introduction

This Water Resources Element is required by Section 3-106 of the Annotated Code of Maryland (Land Use) as amended in 2012. It requires all counties and municipalities that have planning and zoning authority to incorporate a Water Resources Element into their Comprehensive Plans as it relates to water supply, wastewater services, water quality and stormwater management.

The Town of St. Michaels recognizes our shared water resources with Talbot County are vital to the overall water quality, especially as it relates to the Talbot County Region II Waste Water Treatment Plant (St. Michaels) and the [Comprehensive Water and Sewer Plan](#). Specific flow data, forecasted nutrient loads, equivalent dwelling units (EDU) allocation amounts and full service information are maintained by Talbot County, but should be evaluated by the Town as it relates to future developments, water resource upgrades and associated impacts in the region. The Town has limited growth planned but shall evaluate growth annually as it relates to the State of Maryland Priority Funding Act and Smart Growth policies for water resources.

The purpose of this Water Resources Element is to ensure that any future development plans of the Town of St. Michaels take into account the opportunities and limitations of local water resources. It is required to evaluate both the wastewater generated and the available drinking water supply. This will serve to better protect both state water resources and public health while meeting state smart growth policies.

## Water Resource Element Goals

The goals of the water resource element are to:

- Maintain an adequate water supply for the Town of St. Michaels to serve not only the current water demands but future water needs resulting from population growth and development including both residential and commercial capacity.
- Protect and maintain water quality standards by reducing pollutant loadings, identifying potential pollution sources, and potential impacts of future land development to ensure public health and safety. Strategies to achieve this goal include upgrading all town water distribution lines to PVC pipe; an arsenic removal system on all Town wells to bring the arsenic levels into compliance with Environmental Protection Agency (EPA) standards; and updating the Town water distribution maps to reflect the most current data.
- Monitor nutrient or sediment total maximum daily loads (TMDL) derived from future development, wastewater and stormwater to determine the least impact on receiving waters.

- Provide adequate wastewater and stormwater systems. Costs for new or expanded facilities should be allocated so that they are equitably and proportionally shared by all those who benefit. Technical review of development projects should be coordinated with required County and/or Town departments to ensure that easements are provided. Stormwater issues should be addressed as an element of the street upgrade program.



- Install stormwater management best management practices (BMPs) to treat water flowing from the older parts of the Town that were built before such practices were required. When doing this work, care should be taken to improve, where possible, stormwater drainage from streets and private lots, but certainly not to make existing drainage problems worse or to create new drainage problems. A policy has been established to incorporate in all government construction activity, where possible, added stormwater BMPs with the capacity to treat untreated water coming from surrounding parts of town. BMPs are being retrofitted into the street renovation project that began in FY 2007 and is scheduled to be completed in 2015. Additional BMPs practices were incorporated into the Nature Trail Project that was completed FY 2008 to treat stormwater flowing from the older parts of town into waters that feed the Bay. Incentives should be developed for owners to install individual lot BMPs, such as roof-top disconnects, rain gardens, and French drains. Town support should be lent to construction of tidal-marshes and other programs designed to remove pollutants that continue to enter nearby rivers and streams.

## Public Utility Services of St. Michaels

### Water Supply System

According to the Talbot County Comprehensive Water and Sewer Plan, the existing water system consists of two deep wells, 500,000 gallons of elevated storage, and about 11 miles of distribution mains. The Town of St. Michaels water system also serves the Rio Vista area south of Town which includes a population of approximately 400 residents. In 2007, a new wastewater treatment facility located on the same site as the existing plant was constructed to treat up to 660,000 gallons per day (MGD) to serve St. Michaels and surrounding areas. Water bills are sent to 366 accounts in this area which include residents of the Bentley Hay area north of Seymour Avenue and east of Meadow Street. Total water usage ranges from about 0.16 million gpd in the winter to 0.32 million gpd in the summer. Maximum demand for one day has been just over .35 million gallons.

Only two of the three wells utilized in the past are currently in operation. Both wells are about 450 feet deep and draw from the Aquia Aquifer. Well No.1 is an eight-inch diameter well drilled in 1928. A new pump was installed in 1986 to increase capacity to 285 gallons per minute. Well No.2 is a ten-inch well drilled in 1965 with a capacity of 480 gallons per minute. Well No.3 is a 12-inch well completed in 1990 with a capacity of 600 gallons per minute. Following construction of well No.3, well No.1 was taken out of service because of age and excessive amounts of sand passing through the screens. This well has been sealed with concrete and the well pump and motor have been removed. Both wells No.2 and No.3 are in good condition. However, in order to provide redundancy in the system in the case of well failure an additional well and water storage tower will be needed.

Maryland's approval guidelines stipulate that community wells be capable of meeting the maximum daily water demand with all wells in service and be able to meet the average daily demand with the largest well out of service. The Town's system meets these criteria assuming the pumps run an average of 16 hours per day.

The 500,000 gallons of elevated storage is comprised of one 200,000 gallon tank and one 300,000 gallon tank. The 200,000 gallon tank, constructed in 1981, is in good structural condition, but requires periodic painting. The 300,000 gallon elevated storage tank, referred to as the North Tank, located next to Perry Cabin Park has been in operation since 1999. By locating this tank at the opposite end of the water system from the existing tank, head pressure losses in the distribution lines have been minimized and flow rates improved. The Town has installed a new Supervisory Control and Data Acquisition (SCADA) system that controls the on-off operation of the No.2 and No.3 well pumps, as well as monitors the North and South tank levels. This system enables the operations staff to closely monitor the Town's water supply and make necessary adjustments.

The Federal Government passed a law in 2001 requiring public water systems to have an arsenic level of less than 10 parts per billion (ppb), replacing the old standard of 50 ppb. The rule became effective on February 22, 2002. The date by which systems must comply with the new 10 ppb standard was January 23, 2006. The natural arsenic level in the water in St. Michaels is 34 ppb. The town constructed arsenic removal plants at both wells, using an absorption technique with a media that attracts the arsenic to the media particles. This system has been successful for Glory Avenue Well #3, but not at Well #2 on E. Marengo Street. The town is in the process of switching over to a filtration system for arsenic removal at the E. Marengo Street well, the work is scheduled to be complete during 2015.

#### Water Supply Resources

The Maryland Department of the Environment (MDE) is the agency responsible for authorizing use of all waters of the State. MDE issues the required Water Appropriation and Use Permit. The permit authorizes the Town of St. Michaels a water withdrawal limited to a daily average of 325,000 gallons on a yearly basis and a daily average of 450,000 gallons for the month of maximum use. The water withdrawn is to be used for the community water supply for the Town and is drawn from two wells in the Aquia aquifer. The location of the wells are at the Public Works facility located on Glory Avenue, and on the east side of Marengo Street at New Lane.

Growth Assessment

There are currently 711 residences existing in the Town of St. Michaels. To calculate the daily water usage for the Town, it was estimated that the average household size was 2.02 persons and the average water usage was 100 gallons per person per day. Based on the existing 711 residences, each using an estimated 202 gallons per day, a total of 143,622 gallons of water is being used per day.

Based on the build-out analysis completed in Chapter 2 – Municipal Growth Element, there is land available in the Town of St. Michaels to add an additional 154 residences. Applying the estimated average household size and the average water usage, these possible residences could use an additional 31,108 gallons of water per day.

In addition, there are 3 possible annexation areas which are described further in Chapter 2 – Municipal Growth Element. If these areas were annexed, 4 existing residences and up to 22 new residences could be added to the Town and would use an additional 5252 gallons of water per day. These numbers do not include the Rio Vista area which is already on the Town water system. Table 4.1 shows both the existing Town residences and possible annexation residences. Those lands identified as “Areas of Mutual Interest” and identified in Chapter 2 (Municipal Growth Element) have not been included in computations as they are governed by Talbot County and included in their Comprehensive Plan.

**TABLE 4.1  
EXISTING AND POSSIBLE FUTURE WATER USAGE**

Area	# of Existing Dwellings	# of Build-Out Dwellings	Total # of Possible Dwellings	Total potential water usage
<b>Current</b>				
Residences	711	154	865	174,730
<b>Potential Annexation</b>				
Area A	4	013	17	3434
Area B	0	8	8	
Area C	0	1	1	202
<b>TOTAL</b>	<b>715</b>	<b>176</b>	<b>891</b>	<b>179,982</b>

Based on the total water usage from existing residences and the residents of Rio Vista (410 du) who are already on the Town of St. Michaels water system, the Town of St. Michaels is within the limits of their Water Appropriation and Use Permit from the Maryland Department of the Environment. Should the additional in-town build out of 176 residences be constructed, the water usage would increase to 179,982 gallons per day which is still within the limits of the Water Appropriation and Use Permit.

If the Town of St. Michaels were fully built out and the possible annexation area was annexed and fully built out, the total water usage would rise to 179,982, which would still be within the limits of the Water Appropriation and Use Permit.

Sewer Service

In the spring of 2008 Talbot County completed construction of a 660,000 gallons/day (GPD) treatment plant which will include Biological Nutrient Removal technology. The plant discharge concentrations for total nitrogen will be 3.0 mg/l or less with the total phosphorus concentrations of 0.3 mg/l or less.

The latest information available from Talbot County relating to wastewater treatment flow and capacity volume of the Talbot County region II Wastewater treatment Plant allocated for use within the municipal boundaries of St. Michaels indicates the following:

St. Michaels – Existing flows:	133,950 GPD
Future Flows:	109,700 GPD
Reserved Capacity for I&I:	151,600 GPD
<b>Total Flows:</b>	<b>395,250 GPD</b>

The Town of St. Michaels has evaluated flow contributions from potential infill and development projects not fully completed as follows utilizing an average of 125 gpd per dwelling unit:

Marea	2,000 GPD	16 dwelling units
Chesapeake Avenues	875 GPD	7 dwelling units
The Point at Perry Cabin	1,750 GPD	14 dwelling units
<b>Total potential flow of</b>	<b>4,625 GPD</b>	

Based on the potential for build-out in accordance with future land use in the Town of St. Michaels and taking into account the existing proposals enumerated above, an additional 154 units could be built in the existing Town limits. Assuming flow contributions of 125 gallons per unit, the Town could contribute an additional total of 19,250 GPD.

Existing Flow	133,950 GPD
Development Projects not completed as of plan preparation	4,625 GPD
New units under build-out	19,250 GPD
<b>Total future flow contributions</b>	<b>157,825 GPD</b>

As the build-out analysis indicates the potential demand for additional development due to annexation would be 22 units. Assuming that each would contribute 125 gallons per unit additional flows would be 2750 gallons per day. It is clear that full build-out is NOT constrained by sewer capacity.

Additional capacity may be gained by addressing infiltration and inflow (I&I). County policy makes it clear that the Town of St. Michaels does not gain 1 gallon of capacity for every gallon of I&I reduced. Nevertheless any reductions achieved should be documented and the capacity gained incorporated into the flow allocation calculations.

### Capacity Management Plan

Current State regulations require that a wastewater capacity management plan be established to manage new hookups when flow in any system reaches 80 percent of capacity. As the Region II Wastewater Treatment System is owned and operated by Talbot County, the preparation of any such capacity management plan would be the responsibility of the Talbot County Department of Public Works. The Town of St. Michaels would assist in any data and participation necessary for any requirement capacity management.

## **Point and Nonpoint Source Stormwater**

According to Chapter 281 of the Code for the Town of St. Michaels (Town Code), the purpose of proper stormwater management is to minimize damage to public and private property, reduce the effects of development on land and on the quality of water in the Chesapeake Bay and its tributaries, control stream channel erosion, reduce local flooding, and maintain after development, as nearly as possible, the predevelopment runoff characteristics.

The objectives of stormwater management are to:

- Reduce or eliminate water pollution by reducing the amount and nature of impervious cover, increasing groundwater recharge, eliminating sources of contaminants, and removing pollutants from stormwater runoff;
- Design, construct, operate, and maintain stormwater management systems to control runoff from all land developed in accordance with Chapter 281 of the Town Code;
- Design stormwater management systems used for new development to the limit of technology and meet any pollutant removal goals established by the Town for a specific project.
- Ensure the use of decentralized nonstructural stormwater management practices to the maximum extent reasonably practical; and
- In conjunction with a proposed stormwater management system, establish controls and enforcement procedures applicable to the land area to be served by that proposed stormwater management system, to reduce the unnecessary use of pollutants on that land.

Stormwater management practices that control and manage stormwater runoff are to be applied to any land developed for residential, commercial, industrial, or institutional uses in accordance with an approved stormwater management plan. Stormwater management practices should be designed, constructed, and operated in accordance with the standards set forth in the Stormwater Design Manual and Chapter 281 of the Town Code.

A variance can be granted from any requirement of the Stormwater Management Criteria of Chapter 281 of the Town Code by the St. Michaels Board of Zoning Appeals if extenuating circumstances are met. More information on the special circumstances to be met can be found in Section 281-9 of the Town Code.

For any proposed development, the owner shall submit a stormwater management plan or waiver application to the enforcement authority for review and approval.

- Prior to granting approval, the endorsement authority shall review the plan to determine compliance with the requirements of the stormwater management code. The process for the review shall be the same as for applications for subdivisions and shall include a review by the Technical Advisory Committee.
- Major projects shall not be approved earlier than 45 days after a complete application is received by the enforcement authority.
- The approved stormwater management plan shall serve as the basis for all subsequent construction.

Notification of approval or reasons for disapproval or modification shall be given to the owner. If a decision is not made within 90 days, the owner shall be informed of the status of the review process and the anticipated completion date. The stormwater management plan shall not be considered approved without the inclusion on the plan of the dated signature of the enforcement authority.

There is not yet in place a Total Maximum Daily Load (TMDL) strategy which affects St. Michaels, but we are trying to do our part to reduce pollutant loadings by imposing the 10% pollutant reduction standard on those lands which lie within the mapped Chesapeake Bay Critical Area. It should be noted that approximately 75% of the Town lies within that area. In addition, the Town has adopted a no net loss policy for the removal of trees. Any tree removed must be replaced on an equal basis, utilizing the requirement that the tree be 2” in diameter at breast height and be of a native species.

The Town recognizes the impact of lawn-applied fertilizer on the waters quality of our rivers. The State of Maryland is requiring home improvement and similar stores to begin selling non-phosphorous lawn fertilizer. This will hopefully help to reduce the negative water quality impact associated with lawn fertilization in the future.

## **VISION**

The Town of St. Michaels seeks to protect its water resource and control development to allow for the conservation of these resources.

## **OBJECTIVES AND IMPLEMENTATION STRATEGIES**

- 4.1 Ensure that the Town has an adequate safe and sanitary water supply.
  - 4.1.1 Continue to coordinate water system master planning with the Town’s Comprehensive Plan and Tier Map.
  - 4.1.2 Construct the capital improvements as required to satisfy the Federal Government’s standards for arsenic levels.
- 4.2 Provide adequate wastewater treatment service to the Town.

- 4.2.1 Encourage the County to continue their efforts to reduce infiltration and inflow in the sewer system to create additional capacity.
  - 4.2.2 Continue to coordinate sewer planning with the Town's Comprehensive Plan.
  - 4.2.3 Continue to work with Talbot County to assure that any modifications to sewer allocations will not diminish the Town's ability to grow in accordance with this plan.
- 4.3 Effectively treat stormwater runoff and reduce pollutant loadings entering St. Michaels' waterways.
- 4.3.1 Incorporate the latest guidance and requirements as found in the State Stormwater Design Manual following its approval.
  - 4.3.2 Provide educational opportunities focusing on water quality improvement methods which can be implemented by individual property owners.
  - 4.3.3 Consider incentives which may encourage the residents and or businesses to pursue best on-site management practices.
  - 4.3.4 Review the effectiveness of the existing practice of installing silt fences at construction sites. Adopt policies that establish more effective run-off protection and/or ensure more careful monitoring by responsible inspection agencies.
  - 4.3.5 Continue to work cooperatively with Talbot County to obtain grant funding for projects that address water quality to the Miles River and San Domingo Creek.
  - 4.3.6 Continue to Work with Talbot County and the State of Maryland to develop comprehensive projects and strategies to improve the water quality of stormwater runoff.
  - 4.3.7 Consider converting open ditch systems to bioretention systems in an effort to address water quality associated with stormwater.

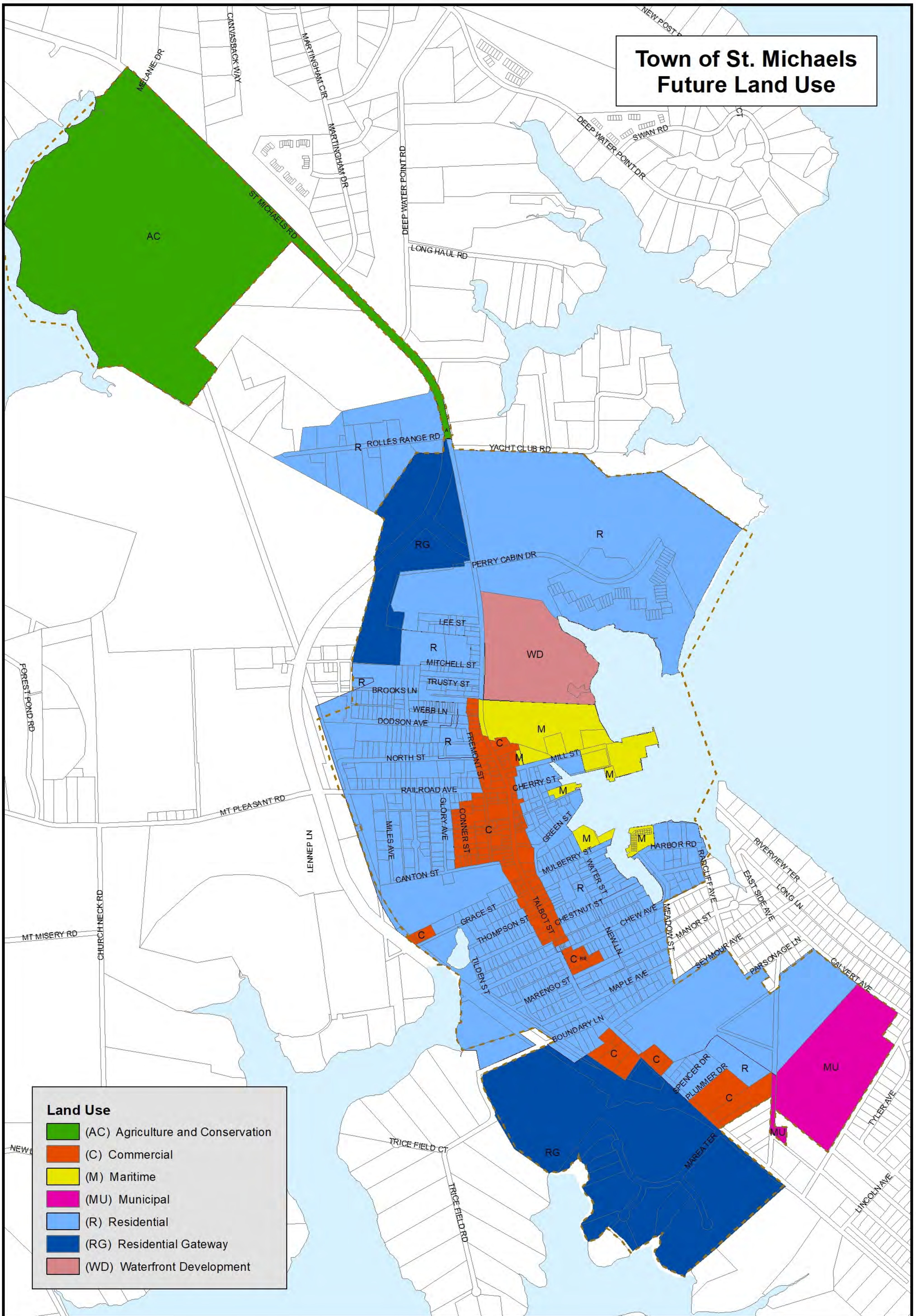
## **POLICIES**

The Town maintains a policy to continue joint efforts with Talbot County as it relates to future water resources.

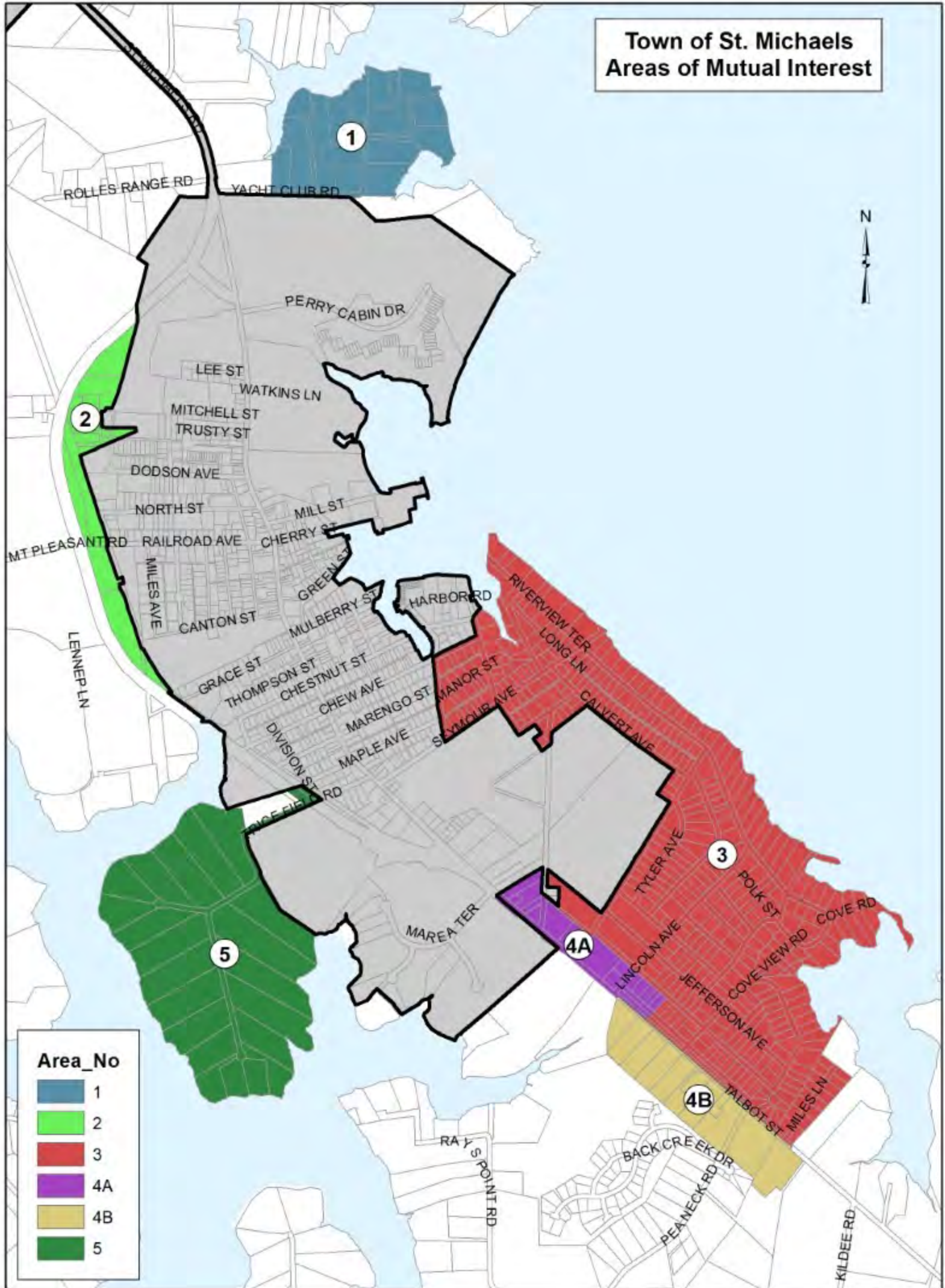
It is the policy of St. Michaels that future development plans are evaluated on wastewater generated, available drinking water and stormwater mitigation to protect water resources and public health while meeting State smart growth laws.



# Town of St. Michaels Future Land Use



Land Use	
<span style="color: green;">■</span>	(AC) Agriculture and Conservation
<span style="color: orange;">■</span>	(C) Commercial
<span style="color: yellow;">■</span>	(M) Maritime
<span style="color: magenta;">■</span>	(MU) Municipal
<span style="color: lightblue;">■</span>	(R) Residential
<span style="color: darkblue;">■</span>	(RG) Residential Gateway
<span style="color: red;">■</span>	(WD) Waterfront Development



**Town of St. Michaels  
Areas of Mutual Interest**

Area_No	
<span style="display:inline-block; width:15px; height:15px; background-color:blue; border:1px solid black;"></span>	1
<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span>	2
<span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span>	3
<span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span>	4A
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span>	4B
<span style="display:inline-block; width:15px; height:15px; background-color:darkgreen; border:1px solid black;"></span>	5

