Incorporated 1865



# Templeville Comprehensive Plan 2009



### Town of Templeville

## Queen Anne's and Caroline County, Maryland

## Comprehensive Plan 2009

PREPARED BY

MARYLAND RURAL DEVELOPMENT CORPORATION
FOR THE TOWN OF TEMPLEVILLE

WITH ASSISTANCE FROM

THE TEMPLEVILLE PLANNING COMMISSION
THE MARYLAND DEPARTMENT OF PLANNING
QUEEN ANNE'S COUNTY PLANNING DEPARTMENT
CAROLINE COUNTY PLANNING DEPARTMENT
URS CORPORATION

#### TOWN OF TEMPLEVILLE RESOLUTION #09-02

#### COMPREHENSIVE PLAN FOR THE TOWN OF TEMPLEVILLE

WHEREAS, pursuant to Article 66B § 3.05(b) of the Annotated Code of Maryland, the Templeville Planning Commission determined that the Comprehensive Plan for the Town of Templeville should be updated and amended; and

WHEREAS, pursuant to Article 66B, as amended by House Bill 1141, 2006, the Town of Templeville is required to incorporate two new elements, a Municipal Growth Element and a Water Resource Element prior to October 1, 2009; and

WHEREAS, the Town of Templeville Planning Commission has researched issues regarding community needs and has assessed the positive and negative factors relative to growth; and

WHEREAS, the Town of Templeville Planning Commission has written a Comprehensive Plan which sets forth a framework that encourages growth while protecting attributes of the existing community; and

WHEREAS, on January 15, 2008 the Templeville Planning Commission notified citizens by advertisement of the ongoing planning to be incorporated into a Comprehensive Plan for the Town of Templeville and invited public participation at regular planning meetings; and

**WHEREAS**, on June 15, 2009 the Templeville Town Council held a duly advertised informational public meeting on the proposed draft of the Templeville Comprehensive Plan to solicit comments and a discussion of citizen concerns; and

WHEREAS, on September 21, 2009 the Templeville Town Commission and Templeville Planning Commission held a joint duly advertised public hearing on the proposed adoption of the Templeville Comprehensive Plan to solicit further comments and a discussion of citizen concerns; and

**WHEREAS**, the Town of Templeville Planning Commission has recommended to the Templeville Town Commission that the Plan as described above be adopted;

*NOW, THEREFORE, BE IT RESOLVED* by the Town Council of Templeville, Maryland, that the attached Comprehensive Plan for Templeville, Maryland, dated September 21, 2009 is hereby adopted as the Templeville Comprehensive Plan;

AND BE IT FURTHER RESOLVED that this Resolution be affixed to and be made a part of the Templeville Comprehensive Plan.

ADOPTED this 21st day of September, 2009.

ATTEST.

Cheryl Lewis, Town Manager

Helen Knotts, Mayor

George Lowe, Councilperson

Edna Garlic, Councilperson

#### **CERTIFICATE OF RECOMMENDED ADOPTION**

This Comprehensive Plan has been designed to guide the physical development of the Town of Templeville pursuant to the provisions of Article 66B of the Maryland Annotated Code.

By majority vote of the Templeville Planning Commission on September 21, 2009, after an advertised informational meeting on June 15, 2009 and a duly advertised public hearing on September 21, 2009, this Plan was recommended to the Town Council of the Town of Templeville for adoption.

Templeville Planning Commission:

William Knotts Brian K. Blanchard

George D. Lowe

Attested:

Cheryl Lewis, Town Clerk

#### **Table of Contents**

1	INT	RODUCTION	4
	1.1	Authority	4
	1.2	Purpose	4
	1.3	The Eight "Visions" of the Planning and Zoning Enabling Act:	4
	1.4	Neighborhood Conservation & Smart Growth Areas Act of 1997	5
	1.5	House Bill 1141	5
	1.6	Components Of A Growth Management Program	6
2	BAC	CKGROUND	7
	2.1	Regional Setting and History	7
3	CON	MUNITY PROFILE	9
	3.1	Population Characteristics	9
4	GO	ALS AND OBJECTIVES	12
	4.1	Goals	12
	4.2	Land Use	13
	4.3	Transportation	13
	4.4	Public Service	13
	4.5	Natural Resources	14
	4.6	Intergovernmental Cooperation	14
	4.7	Esthetics	14
	4.8	Fiscal	15
	4.9	Implementation	15
5	LAN	ID USE & GROWTH PLAN	15
	5.1	Existing Land Use	15
	5.2	Proposed Land Use Districts	17

6	MUN	NICIPAL GROWTH ELEMENT	21
	6.1	Introduction	21
	6.2	Growth of Templeville	21
	6.3	Determining Land Needs in Templeville	22
	6.4	Impacts of Growth	27
7	TRA	NSPORTATION	36
8	CON	MUNITY FACILITIES	38
9	WAT	TER RESOURCES ELEMENT	38
10	HIST	TORIC PRESERVATION	57
11	NAT	URAL RESOURCES & SENSITIVE AREAS	59
12	IMPI	LEMENTATION	61
	12.1	Growth Management	62
	12.2	Land Development Ordinances	62
		12.2.1 Zoning Code, Subdivision Regulations and Zoning Map	62
		<ul><li>12.2.2 Town Center/ Neighborhood Commercial</li><li>12.2.3 Neighborhood Conservation</li></ul>	64 64
		12.2.4 Planned Development (PD)	65
		12.2.5 Performance Standards and Environmental Protection	65
		12.2.6 Buffering, Screening, and Landscaping Standards	66
		12.2.7 Administrative/ Site Plan Review	66
	12.3	Annexation	67
	12.4	Building Codes	67
	12.5	Transportation Infrastructure	67

#### 1 INTRODUCTION

#### 1.1 Authority

As the State's pre-eminent growth management law, Article 66B of the Annotated Code of Maryland, Land Use (Planning and Zoning Enabling Act) requires that county and municipal plans be implemented by laws, ordinances, and regulations consistent with the Planning and Zoning Enabling Act and its "Visions." Each county and municipality within Maryland is required to update their comprehensive land use plans and implementing provisions every six years.



#### 1.2 Purpose

The purpose of this Comprehensive Plan is to direct the future of the Town of Templeville, by ensuring coordinated and harmonious development, while preserving its natural village setting. This Plan is to be used as a guide in all land planning decisions pertaining to development, redevelopment and conservation. All future land use laws, ordinances and regulations should be consistent with this comprehensive plan.

#### 1.3 The Eight "Visions" of the Planning and Zoning Enabling Act:

In preparing this Comprehensive Plan, as required by Article 66B, the eight "Visions" of the Planning and Zoning enabling act were addressed and were a steering force in the planning process.

- Development is concentrated in suitable areas;
- Sensitive areas are protected;
- In rural areas, growth is directed to existing population centers and resources are protected;
- #Stewardship of the Chesapeake Bay and the land is a universal ethic;
- Conservation of resources, including a reduction in resource consumption is practiced;
- #Economic growth is encouraged and regulatory mechanisms are streamlined;
- \$\Phi\$ Adequate public facilities and infrastructure under the control of the county or municipal corporation are available or planned in areas where growth is to occur.
- Funding mechanisms are addressed to achieve these "Visions."

Maryland has procedures to insure that public infrastructure improvements are consistent with growth policies, as defined in the law. The Planning and Zoning Enabling Act stipulates that a local government may not approve a local construction project involving the use of State funds, grants, loans, loan guaranties, or insurance, unless the project is consistent with the State's "Visions." This plan has been prepared to meet the State's eight Visions.

The Maryland Economic Growth, Resource Protection and Planning Act of 1992 also added the requirement that the comprehensive plan contain a Sensitive Areas Element, which describes how the jurisdiction will protect the following sensitive areas:

- #Streams and stream buffers,
- \$\psi 100-year floodplains,
- **Endangered** species habitats,
- **\$**Steep slopes, and

Other sensitive areas the Town has determined require protect from the adverse impacts of development.

#### **Neighborhood Conservation & Smart Growth Areas Act of 1997**



of Smart Growth

In 1997, the Maryland General Assembly enacted the *Neighborhood Conservation and Smart Growth Areas Act* (Smart Growth). The intent of the legislation is to marshal the State's financial resources to support growth in Maryland's communities and limit development in agricultural and other resource conservation areas.

At the heart of the Smart Growth concept are the "Priority Funding Areas" (PFA's), which represent local growth areas for targeted State funding. PFA's

include municipalities, such as Templeville, rural villages, communities, industrial areas, and planned growth areas to be served by public water and sewerage. The new 8<sup>th</sup> "Vision" of Article 66B (which is actually vision 7) creates consistency between the Planning and Zoning Enabling Act and Smart Growth by requiring adequate public infrastructure for State funding.

Plans must show designated growth areas including areas planned for annexation by municipalities. Lands within local growth boundaries may be designated as a Priority Funding Area (PFA) provided sewer service is planned in a 10-Year Water and Sewerage Plan and provided such designation is a long-term and planned development policy that promotes efficient land use and public infrastructure. Plans must include areas considered as PFA's, such as planned water and sewerage service, residential development areas, industrial development areas, economic development areas, and neighborhood parks.

#### 1.5 House Bill 1141

Municipal/County coordination became a requirement in 2006 after the Maryland General Assembly passed House Bill 1141. This bill established additional substance and procedural requirements for municipalities preparing comprehensive plans, including minimum municipal/county coordination requirements. These requirements include:

- The Town will include in its comprehensive plan a growth element that specifies where the Town intends to grow outside its existing corporate limits and discusses how the Town intends to address service, infrastructure and environmental protection needs for the growth area and surrounding environs.
- The Town and County must include in their comprehensive plans water resources plan elements that identify drinking water and other water resources to meet current and

future needs and to identify suitable water and land areas to receive stormwater and wastewater derived from development.

- The Town must consult with the County concerning its municipal growth plans. Prior to approving the Town's growth element, the Town must provide a copy of the growth element to the County, accept comments from the County on the growth element, meet and confer with the County regarding the growth element and on request of either party engage in mediation to facilitate agreement on a growth element.
- In order for land annexed after September 30, 2006 to qualify for State assistance as a priority funding the Town must complete an analysis of land capacity available for development, including infill and redevelopment and an analysis of the land area needed to satisfy demand for development at densities consistent with its master plan.
- The bill gives affected local governments until October 1, 2009 to update their comprehensive master plans to include these and other elements required by existing law with the possibility of one to two six-month extensions for good cause. Local governments that have not updated their plans by that time may not change the zoning classification of a property until their updates are complete.
- The Town must develop and share with other planning agencies an annexation plan that is consistent with its growth element in the comprehensive master plan.

House Bill 1141 also requires the Department of the Environment to provide technical assistance to a local government regarding the development of a comprehensive plan water resources element. The Department of Planning is also required to provide technical assistance to a municipality regarding the development of a comprehensive plan municipal growth element. It encourages municipalities and counties to participate in joint planning processes and agreements.

House Bill 1141 changes the current provisions allowing the County to delay for 5 years the zoning of newly annexed land uses where the proposed municipal zoning designation is found to be substantially different from the land uses specified for the annexed land in the County comprehensive plan. Instead the standard will be whether a substantial difference exists between the land uses and densities permitted under the proposed Town zoning and the land uses for the annexed area and densities permitted under the current county zoning.

#### 1.6 Components Of A Growth Management Program

This Comprehensive Plan is Templeville's first step in its Comprehensive Planning Process. It is not intended to be a stand-alone document but will support and, in turn, be supported by related Planning Programs which the Town will undertake in its implementation process, which may include, but is not limited to the following:

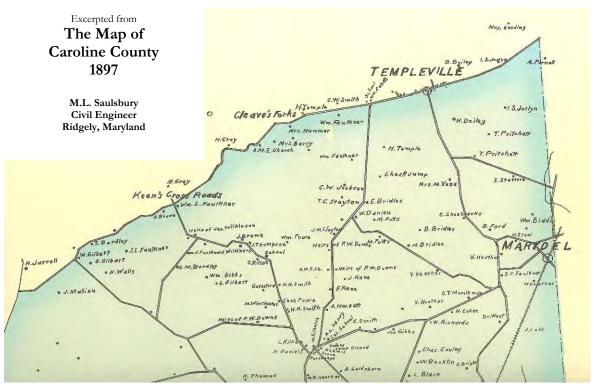
- **†**Zoning Ordinance
- **\$**Subdivision Ordinance
- **\$\Psi\$**Water and Sewer Facility Plan
- **Capital Improvement Budget**

This document along with the proposed documents, when used concurrently, will be the basis for directing and managing growth in Templeville.

#### 2 BACKGROUND

#### **Regional Setting and History**

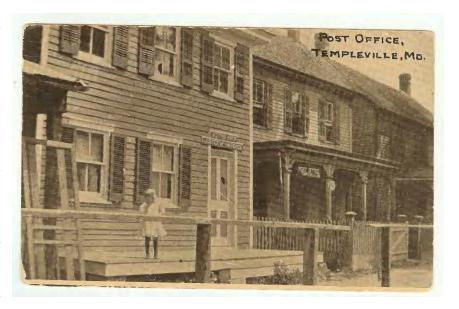
The Town of Templeville is a small rural community that is located on the county line of Queen Anne's and Caroline Counties, Maryland. A portion of the incorporated boundaries of the Town lie in both counties. The Town formerly known as Bullock Town, was changed to Templeville for the Temple family in 1847. One of several historic cemeteries located near the Town dates back to the 1700s and is the resting place of members of the Temple family. Templeville was originally incorporated in 1865; the charter was renewed in 1947.



With Permission from County Commissioners of Caroline County

The first Post Office in Templeville was established in October of 1837. The first Postmaster was James Green, who was succeeded by Thomas Cooper in 1840.

Early businesses included the Whitely Hotel, which also served as a station in the Underground Railroad during the Civil War. The hotel was razed when Maryland Route 454 was widened. Other businesses included a drug store, a



general store and numerous doctors who had practices in Templeville through the years.

Templeville is located on Maryland Route 302 and Route 454. Residences are built along the roads forming a T-shaped community.

Templeville is unique in that its planning must take into consideration the planning of the two counties, which it lies in.

The *Queen Anne's County Comprehensive Plan*, adopted in May 2002, was designed to address State laws, such as Article 66B and Smart Growth, assesses regional needs on a more detailed basis, and develops a plan based on broader public participation and support.

The primary land use and growth management goal is to concentrate future development in planned growth areas and preserve the rural character of the North County region.

The North Caroline County Comprehensive Plan, is a sub-regional plan adopted by Caroline County in 2003, as the first of four sub-regional plans the County is preparing to address State laws, such as Planning and Zoning Act and Smart Growth, assess regional needs on a more detailed basis, and develop a plan based on broader public participation and support. It is anticipated that these four sub-regional



plans will then be included in the updated Caroline County Comprehensive Land Use Plan.

The *North Caroline County Comprehensive Plan* establishes many of the land use and growth management objectives for Caroline County's 1<sup>st</sup> Election District. This plan is unique because it serves as the official comprehensive plan for the three incorporated towns in North Caroline, including Templeville. It was intended that the towns would adopt the plan by resolution and utilize it as the basis for developing town ordinances.

This Templeville Comprehensive Plan will be inclusive of most of the planning recommendations found in the *Queen Anne's Comprehensive Plan* along with the planning recommendations found in the *North Caroline County Comprehensive Plan*.

#### 3 COMMUNITY PROFILE

#### 3.1 Population Characteristics

#### **Population Trend**

Templeville 's population has sustained modest declines over the past several decades. However, demand for rental housing in the community has growth over the past decade. In spite of few if any housing starts, an increase in average household size in the population suggests that substantial growth may be anticipated when the 2010 US Census counts are in.

	1960	1970	1980	1990	2000	
Population	96	102	98	66	80	
% of Change from Previous Period		0.06%	-0.04%	-0.33%	0.21%	
From the 1980, 1990 & 2000 Census of Population US Department of Commerce Bureau of the Census						

#### Age Distribution

	Under 5	18 Years +	65 Years +	Median Age
Population	5	58	14	36.3
% of Population	6.3 %	72.5%	17.5%	

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### **Family Characteristics**

	Male	Female	Average Household Size	Average Family Size
Population	37	43	2.5	3.79
% of Population	46.3 %	53.8%		
Average U.S.			2.59	3.14

From the 2000 Census of Population US Department of Commerce Bureau of the Census

<sup>\*</sup> Note: It appears there may have been errors in the 1990 census, as there was no drastic decrease or increase in actual population during the twenty year period from 1980 to 2000 that would account for the decrease shown here.

#### Sex, Race and Hispanic Origin

	White	African American	Hispanic	Other Race
Population	62	4	4	10
% of Population	77.5 %	5.0 %	5.0 %	12.5 %

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### **Educational Attainment**

	Population 25 years +	High School Graduate	Bachelor's Degree +
Population	55	25	2
% of Population		45.5 %	3.6 %

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### **Employment and Labor Force Characteristics**

	In Labor Force 16 years +	Mean Travel Time in Minutes
Population	42	31.9
% of Population	60 %	

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### Income and Poverty

	Median Household Income	Median Family Income	Per capita Income	Families Below Poverty Level	Individuals Below Poverty Level
Templeville	\$ 15,938	\$ 24,375	\$ 10,202	6 - 40%	35 - 40%
Percent	\$ 41,994	\$ 50,046	\$ 21,587	9.2 %	12.4 %

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### **Housing Characteristics**

	Total Housing	Occupied Housing	Owner Occupied	Renter Occupied	Vacant Housing
Templeville	37	32	21	11	5
Percent		86.5 %	65.6 %	34.4 %	9.0 %

From the 2000 Census of Population US Department of Commerce Bureau of the Census

#### **Population Projections**

There are many questions concerning the population trend for the Town of Templeville. There appears to be a declining population over the last 40 years, yet a physical look at the Town provides a different picture. There are currently very few empty homes and there are numerous residences that appear to be housing more than one family. Both Queen Anne's and Caroline Counties have a population growth trend of 50% or higher for the last 30 year period.

For the purposes of this Comprehensive Plan we will assume an increasing population growth trend to secure a pre-defined target of 50 new households and an additional 125 residents by the year 2030. Templeville has very few sources of income and provides few public services. A number of Town residents are on fixed incomes.

The Town has determined that some growth in population and corresponding increase in tax base is necessary to enhance overall community health and well-being. Current study by the County to evaluate the feasibility of wastewater treatment facility services to serve the Town holds some promise to provide the services necessary to sustain town growth to better support the fiscal picture for Templeville. The Town also hopes that modest growth will help sustain the financial feasibility of wastewater treatment facilities, since a greater number of users can offset the fiscal impact that operation of such facilities might have on current residents. As such, the Town's projections show a substantial increase in population beginning in the year 2020. If these projections prove to be unrealistic or unattainable over the next 20 years, then the Town will revise these projections during the next periodic update of this plan, some 6 years from now.

#### Population Projections 2010-2030

	2000	2010	2015	2020	2025	2030
Population	80	92	98	129	170	217
% of Change from Previous Period		15%	7%	32%	32%	28%

From the 2000 Census of Population US Department of Commerce Bureau of the Census and projections developed by the Town of Templeville.

#### 4 GOALS AND OBJECTIVES

The principal goal of the Town of Templeville is to concentrate development in suitable areas within the incorporated boundaries and the established growth area, while preserving the rural village character of the Town. The Eight Visions of the Planning Act of 1992 provided the foundation for the goals found in this Comprehensive Plan.

#### 4.1 Goals

- 1. Preserve and enhance the village character of the Town through compatible growth and reinvestment in existing properties;
- 2. Improve existing property values and the climate for new investment and reinvestment in the Town by addressing key infrastructure issues, such as water and sewer, roads and streets, and other capital projects;
- 3. Stabilize property values through the adoption of appropriate building and property maintenance codes and other regulations;
- 4. Expand the tax base of the Town by encouraging appropriate infill and redevelopment of vacant and underutilized properties within the Town;
- 5. Ensure new development is consistent with the overall growth objectives of the Town by adopting appropriate development codes/standards and ensuring that development is appropriate in scale and size for Templeville;
- 6. Provide diversity in land-use for all citizens by including mixed land uses for new development;
- 7. Maintain a favorable balance between Town revenues and the expenditures required to meet community needs;
- 8. Improve coordination between Templeville and both Queen Anne's and Caroline County;
- 9. Protect sensitive environmental areas;
- 10. Encourage the restoration, rehabilitation, and adaptive reuse of existing buildings, especially those that have special historical, architectural, and cultural significance;
- 11. Ensure that all current and future residents and businesses in Templeville have adequate public services necessary to protect their health, safety, and welfare and to promote an attractive environment in which to live and work; and
- 12. Enhance the landscape and reinforce Town identity by defining gateways into Town to distinguish the Town from the larger adjacent County landscapes.
- 13. Protect and enhance and visual appeal of Templeville through the development of landscape buffers and future development that is consistent with the character and scale of development manifest today.

In summary the overall goal is to maintain the positive aspects of the Town's rural village character, while improving the economical status of the town and improving the quality of infrastructure available to its citizens.

#### 4.2 Land Use

As a designated growth area for both Queen Anne's and Caroline County, it is important to address the land use and growth management objectives of the Town. Development within the Town and its growth area should incorporate the following objectives:

- 1. Conserve existing residential areas by protecting them from incompatible uses the could adversely effect property values and quality of life;
- 2. Encourage appropriately sized commercial development to serve the community and surrounding rural area;
- 3. Discourage potential large lot residential sprawl, on well and septic, within the Town boundaries and in the adjacent Town growth area that will be difficult to absorb into any future water and sewer service areas; suburban sprawl in the planning areas is inefficient to serve with public facilities.;
- 4. Encourage development in areas which can be economically served by future Town or County water and sewer infrastructure;
- 5. Provide adequate open space and park areas within the Town and any new development areas;

#### 4.3 Transportation

The center of the Town is at the crossroads of Maryland Routes 302 and 454. This poses some problems for a residential village and traffic safety will always be a concern. The following objectives seek to address this issue:

- 1. Improve pedestrian safety by providing safe routes for pedestrians, including sidewalks and walkways or trails through out the town and in any future development areas;
- 2. Ensure the development of appropriate vehicle and pedestrian circulation systems to serve designated growth areas;
- 3. Ensure the continuity of future transportations systems to create an effective traffic circulation system that is not solely dependent on state roads and assures connection between existing and future development;

#### 4.4 Public Service

Currently the Town provides a minimum of public services to its citizens, which include street lighting, solid waste disposal and recreation. Our public services objective is to improve the services available to the citizens.

- Any significant development in the growth areas will require additional funding for public services. Those developers or property owners proposing development in the growth areas should be economically responsible for adequate public facilities, including public services for those areas.
- 2. Future public services for the Town, dependant on significant development, should include adequate water, sewer and storm water systems; adequate level of police protection;

adequate level of fire protection and ambulance service; and adequate facilities for community recreation to meet the Town's needs.

#### 4.5 Natural Resources

The Planning and Zoning Enabling Act requires the Town of Templeville to adopt measures to protect environmentally sensitive areas, which include:

- **Streams** and Stream Buffers
- **\$**Steep Slopes;
- #100 Year Flood Plain;
- #Habitat of Threatened and Endangered Species; and
- ⊕Wetlands.

To preserve and protect sensitive areas, the following objectives have been established:

- 1. Ensure environmentally sensitive areas within the Town are protected through adequate Town policies and regulations;
- 2. Ensure environmentally sensitive areas within the growth area are protected upon annexation with adequate Town policies and regulations;
- 3. Coordinate with State, Counties and other government groups on all significant actions affecting unique wildlife habitats;
- 4. Promote a universal stewardship ethic toward our land, water, air and other natural resources.

#### 4.6 Intergovernmental Cooperation

As an incorporate municipality, we maintain contact with other governmental jurisdictions and local groups. The size and the limited fiscal resources of the Town make us dependent upon other government bodies for most services at this time. Accordingly, we should:

- Coordinate closely with the both Queen Anne's and Caroline Counties in decisions affecting use of land within our planning area.
- Provide State Highway Administration with input regarding the future of Routes 302 & 454 and our needs for safe vehicular and pedestrian traffic with in our Town.
- Explore ways in which we can provide more of our own government services.

#### 4.7 Esthetics

Templeville has a disproportionately high percentage of housing stock in need of improvements. The Town will continue to seek financial support to improve housing, improve our park facility, and enhance the character of our Town gateways.

#### 4.8 Fiscal

The size and the limited fiscal resources of the Town, at the present time, make us dependent upon other government bodies for most services at this time. We hope that modest growth can reduce this dependency over time.

#### 4.9 Implementation

This Comprehensive Plan represents a new beginning for Templeville. This is our first Comprehensive Plan and we intend the preparation of first zoning ordinance and land development regulations once this plan is adopted. We recognize that greater demands will be placed on the community for administration and enforcement of these new ordinances and others, including building and housing codes that will require attention in the future.

#### 5 LAND USE & GROWTH PLAN

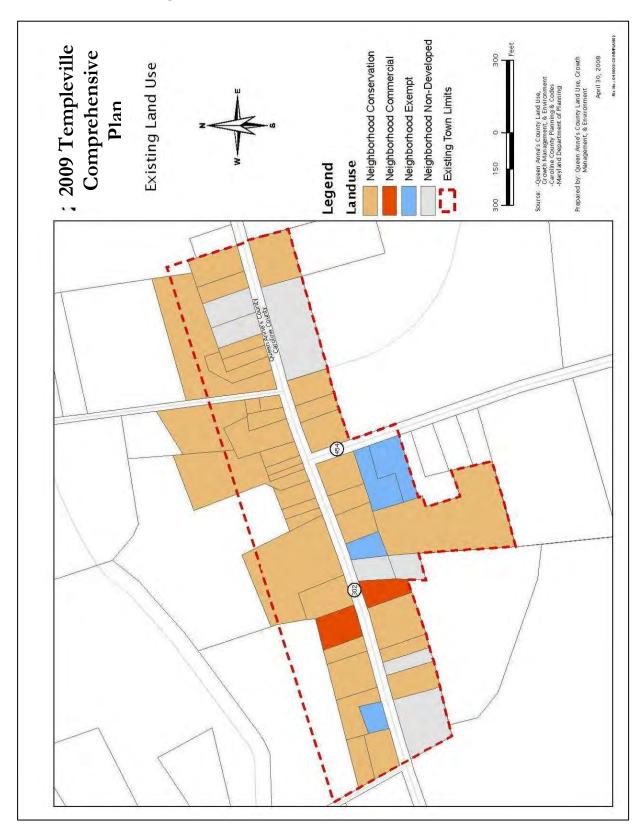
#### 5.1 Existing Land Use

Templeville, Maryland Land Use in Acres 2000								
County	Residential	Commercial	Industrial	Vacant	Total Acreage	Density units/acre		
Queen Anne's	26	1	0	2	30	1.03		
Caroline	10	1	0	7	18	1.1		
Total Templeville	36	2	0	9	48	2.13		

Templeville consists of approximately 18 acres in Caroline County and 30 acres in Queen Anne's County for a total of 48 acres. The predominant land use is low-density residential. The Town can be characterized as a crossroads rural settlement. Among the public uses of land is a post office, which rents space from a business. There are also the newly constructed church/community center, which sits on the site of the former church which burn down in 2005. The Town has very limited commercial business, consisting of a small grocery store and a grainery. Although the Town sits on two state roads, it is no longer used as a major corridor, which prohibits the type of commercial business usually found along highways. There is substantial vacant land (approximately 10 acres) within Templeville that may provide opportunities for infill development in the future. Such infill should be in accordance with designated land uses as presented in Map 1 – Existing Land Use.

Templeville has shown very little growth in the last several decades. This is due to natural soil limitations in and around the Town, high water table and slow percolation rates, which preclude the approval of on-site sewage disposal systems and the lack of public water and sewer facilities.

Map 1. Existing Land Use



#### **5.2** Proposed Land Use Districts

#### **Neighborhood Conservation**

The Neighborhood Conservation district encompasses existing medium-density residential properties, primarily in detached single-family dwellings with some multi-family dwellings. This district includes some vacant properties, marked as Non-Developed, that could be candidate sites for infill or redevelopment projects. Historic properties located in these districts may be appropriate for adaptive reuse strategies. Zoning for these areas should address the need to protect existing residential areas from incompatible uses and activities. Zoning for these areas should allow for setback variances and other exceptions to retain the historic nature of the community. Design guidelines for appropriate infill and reconstruction projects would be applicable.

#### **Neighborhood Commercial**

The Neighborhood Commercial District includes scattered business and commercial sites located with in the current Town. The purpose of this district is to recognize existing land use and/or zoning decisions. In the future, any new commercial zoning should include these properties and be contiguous with these areas. These properties are located in an area that would be appropriate for future commercial businesses, as long as they are either located within the current or rehabilitated buildings or in buildings that are constructed in a way that is in keeping with the historic nature of the community. Overlay zoning, allowing for low impact commercial business mixed with residential properties maybe appropriate for this area.

#### Neighborhood Exempt

There are several properties designated as exempt. The properties consist of a parcel on which a community building stands and two parcels which are currently open space/ park areas. These properties should only be considered exempt as long as their use remains community oriented. It should be noted that community parking is very limited and use of one of these parcels for parking in the future maybe necessary.

#### **Town Expansion Area**

The Town Expansion Area constitutes the future growth area, which is currently outside of the municipal boundaries of Templeville that could be annexed at some future date. This district consists of lands, which are currently located in both Queen Anne's County and Caroline County, and the Town has no authority to determine land use opportunities and policies until annexation. However, current state policies and regulations do encourage new growth and development around existing communities. As a result, it is likely that this outlying area will be incorporated into Templeville should municipal water and sewer become available. The Harman Subdivision, south of Town, is in the Expansion Area and is likely to be part of any shared sewer and water opportunities in the future. Before land is either annexed or proposed for annexation, Templeville will develop zoning and land use criteria for new development consistent with this Comprehensive Plan.

Consideration should be given by Queen Anne's and Caroline Counties Planning policies and their efforts to protect farmland through zoning and easement purchase programs in areas beyond the Town's designated future growth area as development occurs in these areas.

The North Caroline County Land Use Plan (2006) identifies these areas as Town Expansion Areas, which include land around the Towns planned for growth in the future. The Queen Anne's County Land Use Plan (2002) does not include a growth area for Templeville, although Templeville would like the area identified in this plan to be incorporated in to their next update. Orderly development should be accomplished through the annexation process, whereby, they become part of the Town. Community quality objectives for these growth areas should be clearly stated at the time of annexation and be based on the following design principles:

- New neighborhoods should accommodate a mix of uses;
- New neighborhoods should be compact and identifiable with visually discernible boundaries;
- New neighborhoods streets should extend existing street patterns to enhance views and landmarks;
- Street blocks should be consistent with existing block patterns and help describe component neighborhoods, suggesting the role of the street as a channel for social interaction;
- All parking should be accommodated through a mix of on-street and unobtrusive off-street strategies, avoiding large-scale parking lots;
- New neighborhoods should be visually coherent and establish community character through consistent rules of organization and architecture;
- Streets in new neighborhoods should be visually bounded with street trees, sidewalks, and front-yard design elements to create visual layers and contribute to the intimacy of streetscape;
- Most important, new neighborhoods and their settings should make a positive contribution to the existing town character.

The proposed Land Use Plan represents the town's long-range growth expectations and designated priorities for annexation. The "Town Expansion Area" consists of 48 parcels totaling 324 acres in land area, as shown on Map 2 - Land Use Plan. The Town Expansion Area is divided into short-term and long-term growth areas, which are further discussed in the Municipal Growth Element and displayed on Map 3 - Growth Area Plan.

The short-term expansion area includes portions of the several large tracts surrounding current town boundaries. Lands within the short-term area are the first phase of annexation to be considered by the town during this planning period if and when wastewater treatment facilities are provided in the Town. The majority of these lands are currently used for agriculture.

This plan anticipates that Templeville will expand in the future to the north, south and west with residential development that is similar in scale to the existing town and fosters a traditional neighborhood development form through a grid or modified grid street system. Its future development is expected to be consistent with previously described community design principles. The area is a logical outward extension of the existing town boundaries that maintains identifiable municipal boundaries. The short-term expansion area totals approximately 77 acres.

The long-term expansion area includes the remaining portions of the parcels in the short-term expansion area as well as the Harman Subdivision, south of town. The town considers these lands as a logical expansion of town, over 50 years from now, following the annexations of the short-term

areas. The majority of theses lands, consisting of approximately 182 acres are presently undeveloped and used for agriculture.

Surrounding agricultural land cover represents a key element of the Town Growth Plan reflected in Map 3. Agriculture provides the context and setting for Templeville and is therefore a key component of Town identity. Through annexation these lands may someday represent a larger part of the Town. Agricultural and/or Agri-tourism land uses will be promoted to accommodate the Town's interest in promoting agriculture as a part of the community, and to accommodate growth while at the same time realizing objectives to sustain a greenbelt over time. Within these growth areas the Town proposes the future creation of a zoning district that will provide density incentives on near town portions of farms that may be annexed in exchange for conservation easements on remaining portions of those same farms that are further removed the Town Center. The zoning ordinance will implement the intent of this district and after consideration of an appropriate balance between density incentives that encourage appropriate development forms on annexed lands and the percentage of land on farms to be preserved through conservation easements. This concept or zoning treatment will be further explored at such time as the ordinance is established to include this district.

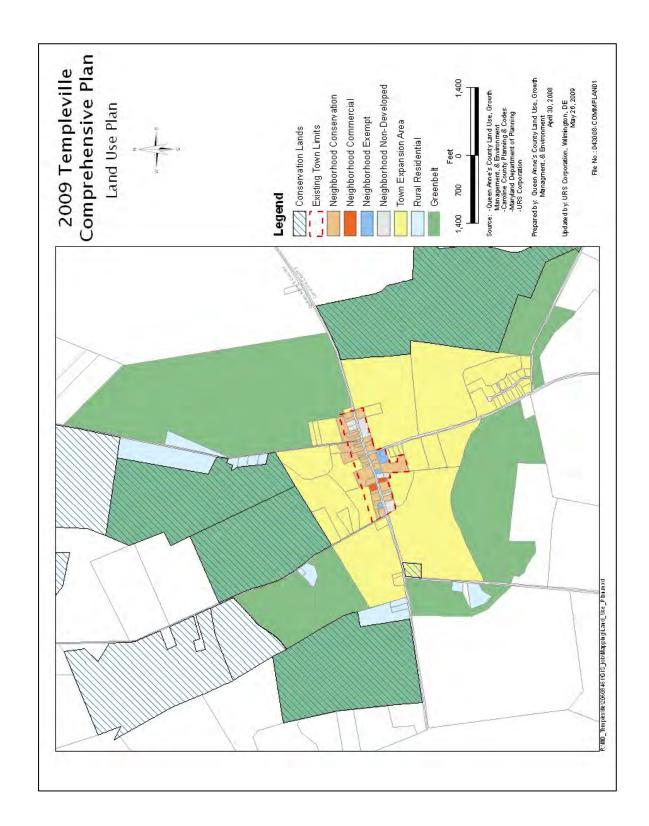
The long term growth or expansion area also includes, the Harman Subdivision, which consists of 20 lots totaling 16.76 acres. Although it may not be annexed by Templeville in the future, it is currently planned to be part of any shared sewer and water opportunities in the future.

#### Greenbelt District

The greenbelt concept is a transitional land use area located at the edge of the growth area boundaries of a municipality intended for low-density residential and agricultural uses. The greenbelt will help create a distinct rural edge for the designated growth areas characterized by open space, natural resources, and low density residential uses. Greenbelts are most effective when the lands within them have been placed into some type of a conservation program. Both the Caroline and Queen Anne's County Comprehensive Plans support this concept. Both Counties treat agriculture as a preferred use adjacent to Templeville and accordingly maintain very low densities for any residential development. Currently approximately 50% of the lands designated as the Greenbelt District surrounding Templeville are designated as a Maryland Agricultural Land Preservation Foundation (MALPF) easement or district lands. Future annexations within the long term expansion area would allow opportunities place up to 50% of the long term expansion area in the Greenbelt district over time to reinforce the adjacent County greenbelts dedicated to agricultural use. This could be accomplished through mandatory clustering, transferred development rights and/or in conjunction with County and State conservation and preservation programs.

Properties currently participating in a agricultural district program or easement restricted from future development are identified on Map 2 – Land Use Plan.

Map 2. Land Use Plan



#### 6 MUNICIPAL GROWTH ELEMENT

#### 6.1 Introduction

The Municipal Growth Element (MGE) for the Town of Templeville presents analyses of land consumption and facilities impacts that can be expected as a result of the projected growth of the town's population from 82 in 2007<sup>1</sup> to 217 in the year 2030.

The MGE specifies where Templeville intends to grow outside its existing corporate limits. The MGE provides town officials with a better understanding of the impacts of growth, and affords a framework for establishing land use and growth management policies going forward. It discusses how the town intends to address services, infrastructure, and environmental protection needs within the designated Expansion Area. As the population and housing units increase, there will also be growth in demand for increased services and facilities.

Future growth in the Counties and Templeville will require multi-jurisdictional strategies to address such issues as school capacity, demands on emergency services, and public infrastructure.

Currently, the town provides a minimum of public services to its citizens, which include street lighting, solid waste disposal and recreation. Any significant development in the expansion areas will require additional funding for public services. Those developers or property owners proposing development in the expansion areas should be economically responsible for adequate public facilities, including public services for those areas. Future public services for the town, dependant on significant development, will include adequate water, sewer and storm water systems to meet the town's needs; adequate level of police protection; adequate level of fire protection and ambulance service; and adequate facilities for community recreation.

#### 6.2 Growth of Templeville

#### 6.2.1 Population: Past Growth Trends and Patterns

Located on Maryland Route 302 and Route 454, Templeville can be characterized as a crossroads rural settlement. Residences are built along the roads forming a T-shaped community. Templeville consists of approximately 18 acres in Caroline County and 30 acres in Queen Anne's County for a total of 48 acres.

The predominant land use is low-density residential. There are currently very few empty homes and there are numerous residences that appear to be housing more than one family. Among the public uses of land is a post office, which rents space from a business. There are also the newly constructed church/community center and the Community Park. The town has a very limited number of commercial businesses, consisting of a small convenience grocery store, a bakery and a grainery.

<sup>&</sup>lt;sup>1</sup> Maryland Department of Planning Population Estimates

Table 1 below shows population growth over recent decades.

Table 1. Population Trend

	1960	1970	1980	1990	2000
Population	96	102	98	66	80
% of Change from		0.06%	-0.04%	-0.33%	0.21%
Previous Period					

From the 1980, 1990 & 2000 Census of Population US Department of Commerce Bureau of the Census

#### 6.2.2 Issues/ Development Limitations

Templeville has shown very little growth in the last several decades. This is due to natural soil limitations in and around the town, high water table and slow percolation rates, which preclude the approval of on-site sewage disposal systems and the lack of public water and sewer facilities. Although the town sits on two state roads, it is no longer used as a major corridor, which prohibits the type of commercial business usually found along highways. Future Town growth is virtually dependent on future construction of a public wastewater treatment system and waste treatment collection facilities. Consideration of such facilities is currently being undertaken by Caroline County Government in cooperation with Maryland Environmental Service with consultant assistance. The County is evaluating the feasibility of providing such services to Templeville in combination with neighboring communities to the South including the Towns of Henderson, Marydel and Goldsboro. This Municipal Growth Element assumes such facilities will be provided over the next 10 years. If they are not, then future prospects for growth in Templeville will be severely limited, and the matter of Wastewater system infrastructure and its influence on projected growth will be reconsidered during the course of updating this plan, some six years from now.

#### 6.3 Determining Land Needs in Templeville

#### 6.3.1 Population Projections

As discussed at the beginning of this Plan element, Templeville's population is projected to grow by about from 92 residents to 217 by 2030. Over the 20 year period the Town has projected available wastewater facilities constructed in the future will need to support growth by some 50 new households adding 125 new residents to the current population. Table 2 below shows population projections to the year 2030.

**Table 2. Population Projections** 

	2000	2010	2015	2020	2025	2030
Population	80	92	98	129	170	217
% of Change from Previous Period		15%	7%	32%	32%	28%

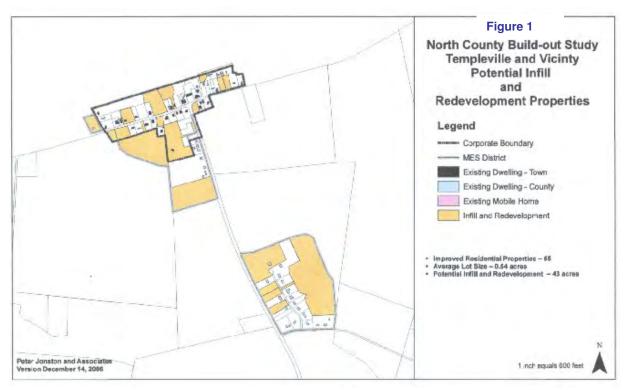
From the 2000 Census of Population US Department of Commerce Bureau of the Census and projections developed by the Town of Templeville.

#### **6.3.2 Infill & Redevelopment Capacity Analysis**

There is some vacant land (approximately 10 acres) within Templeville that provides opportunities for infill development in the future. Such infill should be in accordance with designated land uses as presented in the Land Use Plan on Map #2.

Per the North County Water and Sewer Service Area Build-out Study for Caroline County, the build-out of the potential infill or redevelopment sites in town could result in 15 new dwelling units.<sup>2</sup> The location of these infill and redevelopment properties within the town is shown in Figure 1 (also identified as figure 8 in the initial report). This estimate was based on the most aggressive growth scenario in the report, and assumed that all properties with development potential would be developed in some way to the maximum extent possible. The residential properties were assumed to be developed at moderate densities (average lot size of 7,000 square feet) in accordance with anticipated zoning density standards.

It can be expected that there is sufficient capacity within the existing town limits for the Town of Templeville's to absorb a portion of projected growth by the year 2030. Given a projection of 15 new households in areas shown for infill and redevelopment on figure 1, there is a capacity for approximately 37 new residents in those areas assuming a sustained average household size of 2.50 persons per household for the town as existed in 2000 within the current town limits. Infill and re-development within the Town will the first priority of any sewer capacity allocated to the Town.



Map reproduced from "North County Water and Sewer Service Area Build-out Study Caroline County, Maryland", December 22, 2008; prepared by Peter Johnston and Associates

Templeville Comprehensive Plan September 2009

<sup>&</sup>lt;sup>2</sup> "North County Water and Sewer Service Area Build-out Study Caroline County, Maryland", December 22, 2008; prepared by Peter Johnston and Associates

#### 6.3.3 Growth Area Capacity Analysis

#### **Town Expansion Area**

The Town Expansion Area constitutes the future growth area, which is currently outside of the municipal boundaries of Templeville that could be annexed. This district consists of lands, which are currently located in both Queen Anne's County and Caroline County, and the town has no authority to determine land use opportunities and policies until annexation. However, current state policies and regulations as well as the land use plan policies in both Counties encourage new growth and development around existing communities. As a result, it is likely that this outlying area, with cooperation and support from both Counties, will be incorporated into Templeville should municipal water and sewer become available.

The proposed Growth Area Plan provides a concept plan that represents the town's long-range growth expectations and designated priorities for annexation. The "Town Expansion Area" consists of 48 parcels totaling 324 acres in land area. The Town Expansion Area is divided into short-term and long-term growth areas. The short-term growth area defines that land area where growth would be expected to occur over the 20 year planning period. Projected growth over the 20 year period would occupy roughly 1/3 the land area shown on Map #3 as short term expansion area. The Town Expansion Area strives to:

- Identify areas most suitable for growth and where the most cost-effective infrastructure improvements can be made
- Assure development occurs in a serviceable form
- Build a pattern of contiguous development in keeping with current town character and scale and foster a future development form that is consistent with other traditional small town communities on the Eastern Shore.
- Adequately and appropriately guide the timing, character, and pattern of growth by preventing spot development that is not contiguous with existing density and highway infrastructure
- Support a land base for phased residential development within a greenbelt designed to provide a hard edge and long-term definition of the Town of Templeville

#### Short-term Expansion Area

The short-term expansion area includes portions of the several large tracts surrounding current town boundaries. Lands within the short-term area are the first phase of annexation to be considered by the town. The majority of these lands are currently used for agriculture. This plan anticipates that Templeville will expand in the future to the north, south and west with residential development that is similar in scale to the existing town. The area is a logical outward extension of the existing town boundaries that maintains identifiable municipal boundaries.

This plan envisions a street grid network that connects future development on adjoining parcels and with the existing streets. The short-term expansion area totals approximately 77 acres. This area is illustrated on the Land Use Plan Map in yellow and includes areas for streets and roads and conservation corridors to manage stormwater. Map 3 provides an illustration of potential lotting and road system pattern of development shown on the growth area concept plan map. The proposed development layout is for illustration purposes only as lots are anticipated to be smaller

than those shown to achieve a "smart growth" density of closer to 3.5 units per acre within this area. With greater density more land would likely be committed to roads and stormwater management functions leaving an estimated 42 acres of the 77 available to support approximately 147 units: a net density of 3.5 units per acre. Nevertheless, the plan illustration serves to demonstrate the development design principles intended to guide the character of development including connection between existing and proposed future roads, reservation of corridors for storm-water management, and opportunities along conservation corridors and streets for alternative trail and sidewalk connections to support pedestrian movement. throughout the community.

#### Long-term Expansion Area

The long-term expansion area includes the remaining portions of the parcels in the expansion area. The town considers these lands as a logical expansion of town following the annexations of the short-term areas. The majority of theses lands are undeveloped and used for agriculture. The Harman Subdivision, which consists of 20 lots totaling 16.76 acres, is already developed and may never be annexed by the Town, but is planned to be part of any shared sewer and water opportunities in the future.

The town recognizes that development of these parcels are in the long-term future and outside of the scope of this planning period; therefore, additional residential growth in this area is unlikely within the 20 year planning period. Parcels within the long-term expansion area will only be considered after parcels within the short-term area have been annexed and developed, unless a proposal complies with the annexation criteria and policies described in the next subsection.

Table 3. Build-out Analysis of Town Expansion Area

Town Expansion Area	Acres*	Net Density (Dwelling Units/Acre)	Estimated New Dwelling Units	Population Increase
Short-Term	42	3.5	147	368
Long-Term	55 (30% of 182 acre area)**	3.5	192	481
Total	97	3.5	340	850

<sup>\*</sup> Acres shown are acres remaining after land for roads, stormwater management and proposed parkland and conservation corridors are subtracted from gross land area and represent about 60% of total land area. Acres shown do not include the Harman Subdivision south of Town.

As shown in Table 3 the short term and long term town expansion areas combined can support an estimated 329 new households. Assuming 2.5 persons per household, the 329 estimated new residential units or households in Templeville will generate a population increase of approximately 823 new residents at complete build-out of the Town Expansion Area. The current expectation is that this build-out will not occur within the next 50 years. Within the more immediate 20 planning horizon, expectations are that the town population may grow by approximately 50 new households or approximately 125 new residents by 2030. Even these modest growth projection will be dependent on the availability of public sewer facilities and services within the next 10 years.

#### **Annexation Criteria & Policies**

Orderly, phased development should be accomplished through the annexation process, whereby, areas shown for short term and long term expansion become part of the town. Templeville has defined and articulated several reasons for annexation of these areas including:

<sup>\*\*</sup> Area shown for acres to be developed in long term growth area assumes a gross density of only one unit per acre, but mandatory clustering on only 1/3 the total acres to achieve a density of approximately 3.5 residential units per acre.

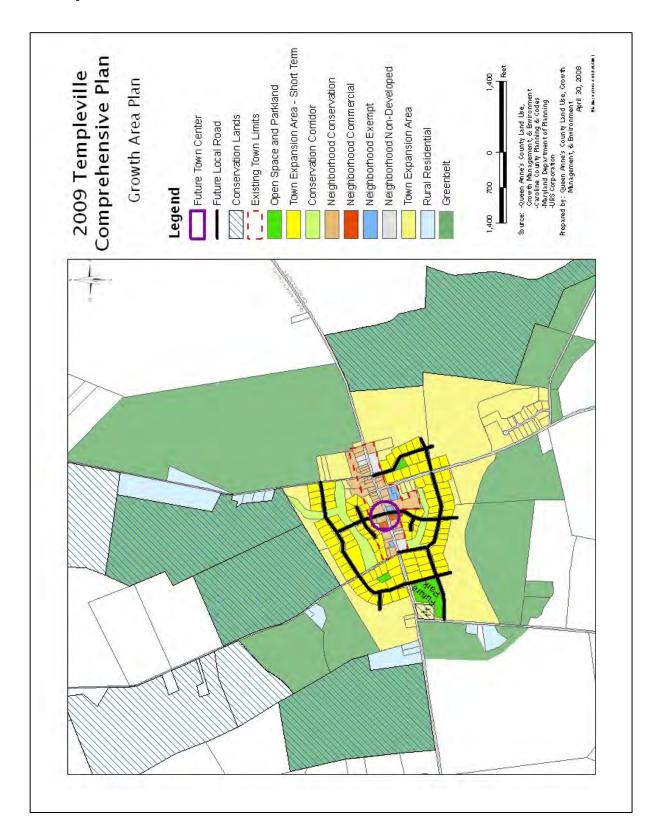
- Requiring development site design that focuses on "place-making" and smart growth principles;
- Ensuring that new development is in scale and harmony with the existing community character;
- Enabling and requiring Smart Growth densities for new development;
- Requiring appropriate stormwater Best Management Practices (BMP's) to enhance and protect water quality in area stream systems;
- Minimizing the future development of on lot septic systems in areas surrounding the town.
- Ensuring an adequate tax base providing sufficient public services to residents.

Properties designated within the mapped short-term expansion area, or municipal growth area will be considered candidate areas eligible for future annexation. This policy includes small properties where annexations will be undertaken to clarify boundaries, prevent "enclaves," and/or extend service to areas in need of municipal services for health or safety reasons when such services can be provided by the Town.

Prior to annexing any land area not included in the Town Expansion Plan, the town will first consider appropriate amendments to this Comprehensive Plan and will follow the procedural requirements for comprehensive plan amendments and annexation established in State law (Articles 66B and 23A), including those of Maryland House Bill 1141. This will ensure that the proposed annexation is consistent with the goals and objectives of this comprehensive plan, that appropriate consideration has been given to the adequacy of public facilities and services, and that County and State agencies are afforded an opportunity to comment on the proceedings. In addition, the following annexation policies will apply to future annexations:

- Proposed annexation areas will be economically self-sufficient and will not result in larger municipal expenditures than anticipated revenues, which would indirectly burden existing town residents with the costs of services or facilities to support the area annexed.
- The costs of providing roads, utilities, parks, other community services will be borne by those gaining value from such facilities through either income, profits, or participation.
- Specific conditions of annexation will be made legally binding in an executed annexation agreement. Such agreements will address, among other things, consistency with the goals, objectives and recommendations contained in the *Templeville Comprehensive Plan*, zoning and development expectations, responsibility for appropriate studies, and preliminary agreements concerning responsibilities for the cost of facilities and services provided by the town. These preliminary agreements may be further revised in a Developers Rights and Responsibility Agreement (DRRA).
- For annexations involving larger parcels of land, the town may require appropriate impact studies, including a fiscal impact study and an environmental impact assessment that addresses the potential impact of the proposed annexation and planned development on the environment of the site and surrounding area.
- If considered necessary or appropriate, applicants for annexation shall pay the cost of completing all studies related to expanding capacity of existing public facilities and/or services.

Map 3. Growth Area Plan



#### 6.4 Impacts of Growth

#### Overview

Population growth will have impacts on public services and facilities provided by the town and Queen Anne's County and/or Caroline County. The growing population will be served by the proposed North Caroline County Water and Sewer Service Area as delineated by the Maryland Environmental Service (MES). The following table summarizes the estimated potential impacts on public facilities and services associated with town growth. Infill and redevelopment within Templeville will result in the potential for an additional 15 residential units. The impacts of potential "in-town" growth for Templeville from 2010 to 2020 are summarized in Table 4. Impacts include total projected dwelling units from infill and redevelopment, projected population increases, sewer and water, as well as demand for other public facilities and services such as schools, libraries, police, recreation land demand, and fire and rescue (emergency services).

Classification and standard used	Infill/Redevelopment Areas
Total New Dwelling Units	15
Total Population Increase (assumes 2.5 persons per household)	37
Sewer (gallons per day) GPD (250 per dwelling unit)	3,750
Water (gallons per day) GPD (250 per dwelling unit)	3,750
School (new students) (.476 per dwelling unit)	7
-High School (.154 per dwelling unit)	2
-Middle School (.107 per dwelling unit)	2
-Elementary School (.215 per dwelling unit)	3
Library (gross floor area) GFA (.25 sf per unit)	3.7
Police (personnel) (1.6 officers per 1,000 pop).	.06
Recreation Land (acres) (30 acres per 1,000 pop)*	1.1
Fire and Rescue (Emergency Services)	
-Personnel (one per 500 pop)	.07
-Facilities (gross floor area) GFA (.7 sf per pop)	25.9

#### Sources:

- Maryland Department of Planning MDP: Municipal Growth Element Model (Smart Growth lot size, underbuild assumptions, school enrollment multipliers, and recreation land demand);
- 2. Maryland Department of the Environment MDE: Water and Wastewater Capacity Management Plans (sewer and water gpd demand estimates 250 gpd per dwelling unit):
- 3. American Library Association (library facility square footage multiplier);
- 4. International Association of Police Chiefs and other organizations (personnel multiplier);
- 5. 2000 U.S. Census for Templeville /Maryland Department of Planning Population Projections;
- 6. International City Management Association. (fire personnel multiplier); and National Planning Standard (fire facility square footage multiplier).

Beyond the impacts of potential infill development or re-development of lands within the current corporate limits, growth in designated areas for future annexation will also prompt demands on public facilities and services. Additional growth is anticipated in areas for potential

<sup>\*</sup> Recreation land standard represents land provided by State, County, and Town.

annexation shown on Map 3 as "Short-term Town Expansion Area". Potential growth in these areas could represent an additional 147 residential units through future annexation over time.

Table 5 reflects the potential impacts that development in future growth and annexation areas may have on sewer and water system demands, as well as demands on other public facilities and services such as schools, libraries, police, recreation land demand, and fire and rescue (emergency services).

Table 5: Potential Impacts of future growth in designated growth and annexation areas on Public Facilities & Services

Classification and standard used	Short-Term Town Expansion Area	Town Expansion Area (Short & Long-term)
Total New Dwelling Units	147	329
Population Increase (assumes 2.5 persons per household)	368	823
Sewer (gallons per day) GPD (250 per dwelling unit)	36,750	82,250
Water (gallons per day) GPD (250 per dwelling unit)	36,750	82,250
School (new students) (.476 per dwelling unit)	70	157
-High School (.154 per dwelling unit)	23	51
-Middle School (.107 per dwelling unit)	16	35
-Elementary School (.215 per dwelling unit)	32	71
Library (gross floor area) GFA (.25 sf per unit)	37	82
Police (personnel) (1.6 officers per 1,000 pop.).	0.5	.8
Recreation Land (acres) (30 acres per 1,000 pop.)*	11	24.7
Fire and Rescue (Emergency Services)		
-Personnel (one per 500 pop.)	0.7	1.6
-Facilities (gross floor area) GFA (.7 sf per person)	258	576

#### Sources:

- 1. Maryland Department of Planning MDP: Municipal Growth Element Model (Smart Growth lot size, underbuild assumptions, school enrollment multipliers, and recreation land demand);
- 2. Maryland Department of the Environment MDE: Water and Wastewater Capacity Management Plans (sewer and water gpd demand estimates 250 gpd per dwelling unit);
- 3. American Library Association (library facility square footage multiplier);
- 4. International Association of Police Chiefs and other organizations (personnel multiplier);
- 2000 U.S. Census for Templeville /Maryland Department of Planning Population Projections;
- 6. International City Management Association. (fire personnel multiplier); and National Planning Standard (fire facility square footage multiplier).

#### Implications of Growth

A review of Tables 4 and 5 indicate that the implications of growth on the town will be significant at build-out. For example, the combined impacts of growth through infill and potential future annexations will result in an increase of up to 157 new students in the County School system. While such impacts are moderate, they represent projections for demands and impacts at build-out, which can be expected over a period in excess of 50 years.

<sup>\*</sup> Recreation land standard represents land provided by State, County, and Town.

Table 6 provides a more realistic assessment of impacts that might be anticipated within a 20 year planning horizon based on the rate of growth projected over the next 20 years as identified earlier in this Chapter. It is estimated that the town will sustain an increase of approximately 50 new households or 125 new residents over the period, resulting in a total town population projection of 207 residents by the year 2030.

This section projects the impacts that the roughly 50 person increase in the planning period will have on public services and facilities in and around the Town of Templeville. It should be noted that important related material also appears in other elements of this comprehensive plan, and that the entire document must be reviewed in order to obtain a clear and complete picture.

Classifica	tion and standard used	Infill/Redevelopment and/or Expansion
		Areas
Total new	Dwelling Units	50
Added Pop	pulation Increase (assumes 2.5 persons per household)	125
Sewer (gallons per day) GPD (250 per dwelling unit) + 1,000 gallons for non-residential use		13,500
Water (gallons per day) GPD (250 per dwelling unit) + 1,000 gallons for non-residential use		13,500
School (ne	w students) (.476 per dwelling unit)	23.8
	-High School (.154 per dwelling unit)	7.7
	-Middle School (.107 per dwelling unit)	5.3
	-Elementary School (.215 per dwelling unit)	10.7
Library (gross floor area) GFA (.25 sf per unit)		12.5
Police (personnel) (1.6 officers per 1,000 pop).		0.2
Recreation Land (acres) (30 acres per 1,000 pop)*		3.7
Fire and R	escue (Emergency Services)	
-	-Personnel (one per 500 person)	0.2
	-Facilities (gross floor area) GFA (.7 sf per person)	87.5

#### Sources:

- Maryland Department of Planning MDP: Municipal Growth Element Model (Smart Growth lot size, underbuild assumptions, school enrollment multipliers, and recreation land demand);
- Maryland Department of the Environment MDE: Water and Wastewater Capacity
  Management Plans (sewer and water gpd demand estimates 250 gpd per dwelling
  unit);
- 3. American Library Association (library facility square footage multiplier);
- 4. International Association of Police Chiefs and other organizations (personnel multiplier);
- 2000 U.S. Census for Templeville / Maryland Department of Planning Population Projections;
- 6. International City Management Association. (fire personnel multiplier); and National Planning Standard (fire facility square footage multiplier).

#### Water and Sewerage Facilities

Currently, the Town of Templeville is not on a central wastewater collection system, and residents utilize on-site septic systems. In addition, the residents of Templeville draw their water from private wells. Contamination of the drinking water supply from failing septic systems is a major issue currently facing the town.

<sup>\*</sup> Recreation land standard represents land provided by State, County, and Town.

Templeville lies within the proposed North County Water and Sewer Service Area as delineated by the Maryland Environmental Service (MES). It is anticipated that upon the project's completion, all existing residences will be connected to the central water and sewer system. Also, ten additional EDUs were allocated for new lots.

The projected growth of the town will moderately increase the capacity needs of both water and sewage treatment and distribution/collection facilities. It is assumed that both the sewage generation and water needs of each household are 250 gallons per day (gpd), as per standards used by the Maryland Department of the Environment. Given that 250 gpd measure, total demand for both water and sewage treatment generated over the next 20 years by the town will require an additional 12,500 gpd (125 persons x 250 gpd). The design capacity of the new facility should accommodate the waste and water treatment demand of 12,500 gpd resulting from projected growth in population over the 20 year planning horizon.

#### Fire and Police Protection

Police service is currently provided through the Maryland State Police. The projected 125 additional people projected in Templeville over the next 20 years will place additional demands on local public safety and police resources. A national standard used by the International Association of Chiefs of Police and other agencies when calculating needs for police is 2.6 police offices for every 1,000 persons of population. Based on that standard, 0.2 police officers would be needed to provide full-time protection in the town.

Emergency response services such as firefighting, medical service and rescue are provided Sudlersville Station 6 and the Marydel Volunteer Fire Company, Inc. A national standard used by the International City Management Association when calculating needs for fire protection and rescue personnel is 1 per every 500 persons. The fire facility square footage multiplier of 0.7 gross floor area (GFA) per person was used to calculate facility needs. Based on these standards, 0.2 emergency service personnel and 87.5 GFA would be needed for fire and rescue services.

Templeville's assessable tax base increases due to population and/or business growth, emergency services funding should correspondingly increase to support the additional demand for services, thus ensuring adequate emergency services and personnel for the future are commensurate with increased population. The town and counties may need to monitor this funding source in the future to assure its adequacy.

#### **Schools**

Templeville is located within the Queen Anne's School District. Population and enrollment projections, as well as facility needs are provided in the Board of Education of Queen Anne's County Educational Facilities Master Plan, June 2008.

The growth of Templeville over the next 20 years will have minor impacts on the Sudlersville Elementary, the Sudlersville Middle School and the Queen Anne's High School. The student yield from the 50 units projected to be approved and built over the next 20 years is estimated per school as follows:

Sudlersville Elementary: 10.7
Sudlersville Middle: 5.3
Queen Anne's High: 7.7
Total: 23.8

These estimates are then compared to the State Rated Capacity of each school to determine the impacts.

#### Sudlersville Elementary

Per the County Educational Facilities Master Plan, the elementary school is currently 82% utilized of the State Rated Capacity of 562, with 461 students enrolled. The projected 11 new students from Templeville will increase enrollment to 472 within 20 years, increasing the utilization to 83%, which will not overtax the school. According to the Board of Education in 2008, growth is anticipated to be slow but steady growth throughout the District increasing utilization to 137% by 2017. Upcoming updates of the Master Plan will need to address capacity increase of the facilities to accommodate future growth.

#### Sudlersville Middle School

Per the County Educational Facilities Master Plan of 2008, the middle school is presently utilized near capacity at 96% of the State Rated Capacity of 374, with 359 enrolled students. The projected 5 new students from Templeville will increase enrollment to 364 within 20 years, increasing the utilization to 97%. According to the Board of Education in 2008, the utilization is projected to be 151% by 2017. A renovation/ addition project will replace the existing middle school. A request for planning in FY2009 and funding in 2010 has been submitted to IAC.

#### Queen Anne's High School

Per the 2008 Master Plan, the high school is utilized beyond capacity at 102% of the State Rated Capacity of 1,156, with 1,179 enrolled students. The projected 8 new students from Templeville will increase enrollment to 1,187 within 20 years, increasing the utilization to 103%. According to the Board of Education in 2008, the utilization is projected to be 92% by 2017. The existing building is anticipated to continue to house high school students for years to come; however, both existing high schools in the District are over capacity and the need for a third high school is in the District's future. A request for FY 2011 has been submitted in the District's Capital Improvement Program request.

#### **Library Services**

Templeville presently has no town library branch, and patrons must use the Sudlersville Memorial Library. An American Library Association standard suggests 0.25 square feet of library space for each residential dwelling. By that standard, population growth in Templeville over the next 20 years would necessitate an increase of 12.5 square feet of library space. This modest demand should not prompt needs for expansion of facilities over the next 20 years.

#### Parks and Recreation

Community facilities located within the town include the Templeville Community Park (1.22 acres), which currently includes a pond, open space and recycling receptacles. A State standard recommends 30 acres of parkland per 1,000 persons. The 125 additional persons in the town will generate a need for 3.7 acres of parkland.

As growth occurs, the demand for an additional 5 acres of parkland will need to be assessed by both town and county officials. Some portion of this parkland may be provided by the town as development occurs through mandatory requirements for dedication of recreation lands as a condition of development approval or an alternative requirement for payment of a fee-in-lieu of dedication for use by the town to purchase land. Some portion of the demand for recreation land should be shared by the County, since Templeville could serve as a center for recreation land and facilities that are used by County residents.

#### **Additional Facility Needs**

Additional community facilities located within the town include the new Templeville Community Center and the historic Community Hall. The Community Center serves as a church for two different religious groups, a meeting room for the Town Council, and a multifunctional facility for citizens to gather in. The Community Hall is an historic African American School Building that was moved from Delaware to the town in 1950. It is currently used as the Grange meeting hall.

The town recognizes that any gain in population will require an equivalent increase in municipal meeting space, town administrative staff, and municipal services (street repairs, trash collection, etc.). The existing Town Hall may prove to be limited in its size to handle these functions in the future.

A review of staffing levels for both administrative and public works employees should be conducted periodically (or every five years) to determine adequacy. Expansions of the Town Hall, Town staff, and municipal services can be made and funded as the assessable tax base in the town expands and may be considered in conjunction with planning for a community center and meeting center to satisfy all needs under one roof.

In the future, large-scale developments with significant potential impacts will be required to conduct a fiscal impact analysis to determine if revenues will cover the cost of public services and facilities. If a shortfall is determined, the town will require a Developer Rights and Responsibilities Agreement (DRRA) that includes offsetting fees, or may enact appropriate impact fees.

#### Recommendations to Mitigate the Impacts of Growth

#### Greenbelt

It is the intention of Templeville to provide a Greenbelt around the Expansion Area. The purpose is to create an edge or terminus to the proposed development and a distinguishing

feature adjacent to the rural land uses in the Counties. The Greenbelt would be made up of open space lands that would be prevented from development by a variety of means, including acquisition, dedicated easements or other land conservation techniques. These lands would be within the Expansion Area and would be considered in tabulation of the gross density of the area. Within these Greenbelt parcels near town portions of the parcel would be permitted to develop in exchange for conservation easements on remaining portions of each parcel that would remain in agricultural or agri-business use. Combinations of low intensity recreation and conservation uses would also be permitted, such as forest conservation, passive recreation activities, hiking/biking trails and agricultural uses.

Acquisition of parcels that would make up the Greenbelt could occur as part of the development review process by dedication of individual areas of open space. Larger or connecting parcels may be acquired by fee simple purchase by the town or a land conservancy.

#### **Protection of Sensitive Areas**

The Town of Templeville is relatively flat with no major water courses within the current town boundaries. There are no known habitats of threatened and endangered species within or near the town. Sensitive areas include small-scattered areas of non-tidal wetlands. Beyond current town boundaries are two small drainage ditches, which could effect future development in the Expansion Areas. A conservation corridor/ buffer is proposed around these streams, or drainage areas which will also be needed to support stormwater management functions.

#### Vision of Templeville's Future Character

Templeville is expected to remain a largely residential community with limited employment opportunities locally. The crossroads nature of Templeville will continue to provide convenient access to towns and areas east and west along Route 452 and Route 302. In addition, the proximity to Dover will provide convenient access to large employment centers and consumer services. The areas around Templeville are expected to remain agriculturally oriented, due in large part to participation in agricultural preservation programs.

#### Managing Development Form and Character

This Comprehensive Plan for the Town of Templeville is the first step in allowing the town to have its own planning authority. Growth occurring around the Templeville of today will be expected to maintain a similar appearance with connected and compact development. The Templeville transportation and growth plan sets forth a vision to create a town center with mixed-uses surrounded by a grid street network, neighborhood parks and conservation corridors.

The town will adopt and use development review procedures and legislation to insure that future growth is consistent with this Plan. Accordingly, zoning ordinances, subdivision regulations and other development controls that manage development form and character will be implemented. In addition, future developments within the Expansion Areas will be subject to annexation and the provision of public water and sewer facilities.

Orderly development should be accomplished through the annexation process, whereby, they become part of the town. Community quality objectives for these expansion areas should be clearly stated at the time of annexation and be based on the following design principles:

- New neighborhoods should accommodate a mix of uses;
- New neighborhoods should be compact and identifiable with visually discernible boundaries;
- New neighborhoods streets should extend existing street patterns to enhance views and landmarks;
- Street blocks should be consistent with existing block patterns and help describe component neighborhoods, suggesting the role of the street as a channel for social interaction;
- All parking should be accommodated through a mix of on-street and unobtrusive off-street strategies, avoiding large-scale parking lots;
- New neighborhoods should be visually coherent and establish community character through consistent rules of organization and architecture;
- Streets in new neighborhoods should be visually bounded with street trees, sidewalks, and front-yard design elements to create visual layers and contribute to the intimacy of streetscape;
- Most important, new neighborhoods and their settings should make a positive contribution to the existing town character.

## **7 TRANSPORTATION**

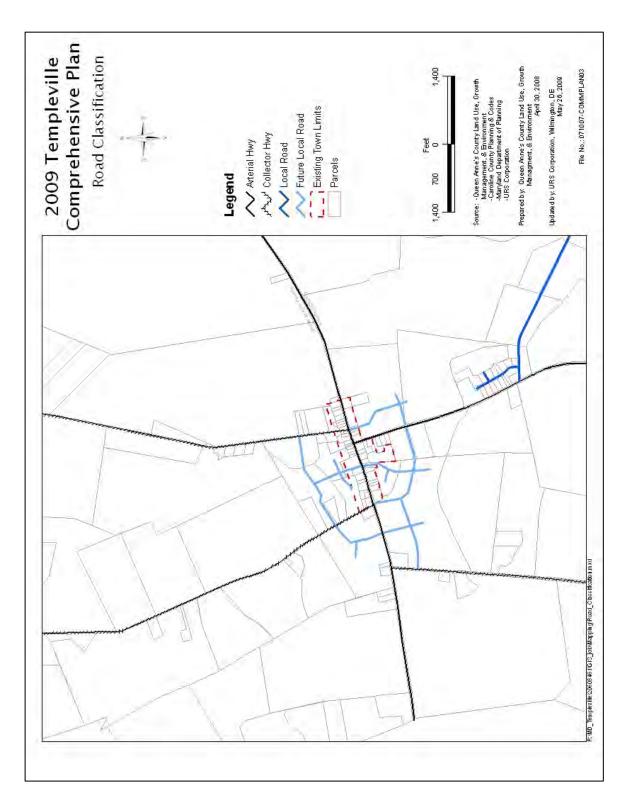
Primary access to the Town of Templeville is by Maryland Route 454, which connects to Marydel to the east and Maryland Route 302, which connects to US Route 301 to the west. Minor collector routes to surrounding areas include Bear Pond Road and Templeville-Peters Corner Road.

Templeville is within a short drive of Dover, Delaware at a driving distance of less than 20 miles. Other close regional cities include Wilmington, Philadelphia, Annapolis, Baltimore, and Washington D.C, all of which are within 2 hours driving time.

The Templeville transportation and growth plan sets forth a vision to create a town center surrounded by a grid street network. Refer to Map 3 – Growth Area Plan and Map 4 – Road Classification. Future development of the Town Expansion Area should incorporate comprehensive transportation planning. These areas should include collector roads, which will allow for primary circulation routes through out the planning area, as well as local roads, which provide connections between the collector roads, the proposed town center and potential future developments. Areas being developed should allow for connections to future development areas, to insure appropriate connectivity between existing and new neighborhoods and between residential neighborhoods and local activity centers.

As described in the Municipal Growth Element herein, new neighborhoods streets should extend existing street patterns to enhance views and landmarks. In addition, street blocks should be consistent with existing block patterns and help describe component neighborhoods, suggesting the role of the street as a channel for social interaction. All future roads should include either sidewalks or walking paths, visually bounded with street trees to safely allow for pedestrian and bicycle travel throughout the town.

**Map 4. Road Classification** 



## 8 COMMUNITY FACILITIES

Community facilities located within the Town include the Templeville Community Park and the new Templeville Community Center, which serves not only as a church for two different religious groups, and as a meeting room for the Town Council, but also as a multifunctional facility for citizens to gather in. Growth planned as shown on Map 3 proposes additional parkland be provided in proximity to the cemetery. As noted, the future development of the Town in accordance with the Plan is dependent on the availability of future public wastewater treatment facilities. If such facilities are not developed based on current County feasibility assessment, the Town will explore alternative options to support growth, or revise this plan in future updates.

### 9 WATER RESOURCES ELEMENT

The "Water Resources Plan Element" (WRE) is mandated to assure compliance with the requirements of Maryland House Bill 1141 (HB 1141). The purpose of the WRE is to provide additional layers of planning for water resources in relation to existing use and proposed land use, based on an analysis of growth and development trends to assure demands for water supply can be satisfied as Town growth occurs and to assure measures are taken to minimize impacts to water quality.

The Templeville WRE is directly linked to a number of other Plan elements. They include: 1) the Land Use Plan; 2) the Municipal Growth Element; 3) Community Facilities; and 4) Resource Conservation elements. The Water Resources element addresses three major areas including water (both supply and quality), wastewater treatment and discharge, and stormwater management.

Among other things, preparation of the WRE is an exercise intended to test water resource capacity limits, determine the potential implications of water resource issues for future growth, and facilitate development of coordinated management strategies. The Town of Templeville represents a very small portion of the much larger Choptank River watershed. Since water resource protection issues are of concern watershed wide, much of the effort to protect or enhance water quality will be dependent on County and State actions and programs. Nevertheless, this plan element evaluates Templeville's role in protection of water resources in this larger context.

The WRE establishes a clear relationship between existing and proposed future development. It further establishes the relationship between drinking water sources and wastewater facilities that will be necessary to serve that development and measures to limit or control the stormwater and nonpoint source water pollution that will be generated by new development.

Specifically, the statutory requirements are:

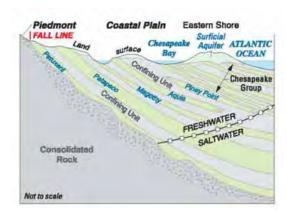
• Identify drinking water and other water resources that will be adequate for the needs of existing and future development proposed in the land use element of the plan, considering available data provided by the Maryland Department of the Environment (MDE).

- Identify suitable receiving waters and land areas to meet the stormwater management and wastewater treatment and disposal needs of existing and future development proposed in the land use element of the plan, considering available data provided by MDE.
- Adopt a WRE in the comprehensive plan on or before October 1, 2009, unless extensions are granted by Maryland Department of Planning (MDP) pursuant to law. Zoning classifications of a property may not be changed after October 1, 2009 if a jurisdiction has not adopted a WRE in its comprehensive plan.

This element of the Plan assesses the Town's drinking water sources and wastewater treatment and their ability to support existing and future development. The Town of Templeville has prepared this Water Resources Element to assure the Town will focus growth to areas best suited to use any future planned water and wastewater infrastructure; to nurture efficient patterns of growth, protect and preserve the natural environs, promote economic growth, and support diversity of living environments in the Town.

### Water Resources

The Town of Templeville, Queen Anne's County and Caroline County lie within the Northern Atlantic Coastal Plain (NACP) aquifer system. The NACP system extends from the North/South Carolina border to Long Island, New York. In Maryland, the NACP is bounded in the west by the Fall Line and in the east by the Atlantic Ocean. The Coastal Plain system consists of sand and gravel aquifers interspersed with layers of silt and clay called confining beds. Beneath this system lies a layer of consolidated rock at depths ranging from zero at the Fall Line to about 8,000 feet at Ocean City.



The Northern Atlantic Coastal Plain Aquifer System

Source: A Science Plan for a Comprehensive Regional Assessment of the Atlantic Coastal Plain Aquifer System

Templeville has no water system. Current residents utilize individual wells to draw water from surficial aquifers and in some cases may utilize confined aquifers for supply sources. A confined aquifer has a layer of clay or fine silt above it (a 'confining' layer) that allows very little water to travel vertically into the aquifer. Confined aquifers receive recharge from leakage through confining beds from surficial aquifers and lateral movement of water from adjacent aquifers and thus are less vulnerable to drought conditions.

Water quality in the confined aquifers that could serve as community water supply sources in the future is generally good. In 2003, Maryland Department of the Environment conducted Source Water Assessments for 19 community water systems and 9 non-community systems located in Caroline County. MDE researched and identified potential sources of contamination for confined aquifers and analyzed each water system for susceptibility to pollutants originating

at the land surface. MDE concluded that due to the protected nature of confined aquifers, the water supplies were not susceptible to surface contaminants. Some naturally occurring pollutants, such as arsenic and fluoride, do pose a risk to water systems supplied by the Aquia and Piney Point Aquifers but do not exceed EPA's maximum contaminant level (MCL). Tests conducted as part of MDE's Source Assessments indicated that that arsenic and fluoride levels measured less than 50 percent of the EPA's MCL in Templeville's water supply.

In 2000, USGS recorded that surface and groundwater withdrawals in Caroline County totaled 21,380,000 gallons per day. Unlike counties on the western shore, the largest water use in Caroline County was irrigation, which averaged 15.48 million gallons per day. The amount of groundwater withdrawn for irrigation purposes in the County is nearly five times higher than the next heaviest use (mining) and more than six times higher than domestic use.

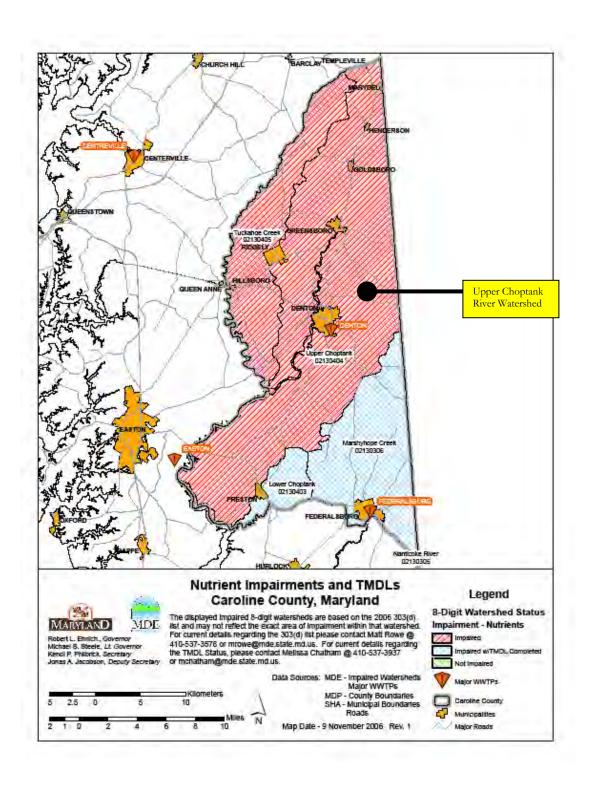
## Watershed Characteristics and Conditions

Templeville drains into the Choptank River Basin, which is a State-designated 6-digit watershed. State designated 8 digit watersheds (a subset of the 6-digit basin) within the Choptank Basin include the Tuckahoe River, Upper Choptank, and Lower Choptank Watersheds. 58% of Caroline County including the Town of Templeville is located in the Upper Choptank Watershed. The Town's location is at the northernmost reaches of the Upper Choptank.

The Upper Choptank River Watershed covers approximately 118,000 acres of land in Caroline County. Land use within the Caroline portion of the watershed is predominantly agriculture (59 percent), followed by forest (29 percent), urban land (8 percent), and wetlands (3 percent). As of 2005, the largest source of nitrogen in the Choptank River Basin was agriculture (70 percent). Agriculture was also the largest contributor of phosphorus (62 percent) and sediment loads (85 percent). In 2007, agricultural land contributed more than two-thirds of the total nutrient loads in the Basin.

A significant portion of the land in the Basin is drained via public ditches that were dug decades ago, primarily to drain land for farming. These ditches cover 368 miles, and including their buffers, occupy 70,137 acres of County land. They are generally kept clear of plants and other vegetative growth, which contributes to increased stream flows and speeds delivery of nutrients to water bodies before they have had a chance to be absorbed into the soil.

The Upper Choptank River is included on the State's 2008 Integrated Report as a Category 5 impaired water body, with increases in total nitrogen and phosphorus recorded between 2006 and 2008. Category 5 indicates that a water body is impaired and an assignment of Total Maximum Daily Loads (TMDL) for nitrogen and phosphorus is needed, but not yet established. The watershed has been cited for several impairments including biological, fecal coliform, nutrients and sediments. A watershed plan prepared for the Upper Choptank in 2003 recommended a number of strategies to address water quality issues; a plan update is currently scheduled and will include the establishment and funding of a long-term cover crop program, implementation of improved maintenance and buffer programs for public drainage ditches, better enforcement of local sensitive areas protection measures, flood protection and stormwater management ordinances, and management policies for on-site sewage disposal systems.



## Total Maximum Daily Loads (TMDLs)

A TMDL is a calculation of the maximum amount of a pollutant that a body of water can receive and still meet water quality standards. Point sources include urban stormwater systems and wastewater treatment plants with direct discharge permits into waterways (National Pollutant Discharge Elimination System Permits-NPDES). Non-point sources are all discharges other than point source discharges, including stormwater runoff from land and erosion of stream and river banks. A TMDL is used as a regulatory mechanism to identify and implement additional controls on both point and non-point source discharges in water bodies that are impaired from one or more pollutants and are not expected to be restored through normal point source controls.

TMDLs establish limits or "caps" on the amount of pollutants permitted from point and non-point sources through an allocation system. A primary determinant of future growth is the assimilative capacity of local receiving waters for the input of pollutants. Assimilative capacity is expressed in the TMDLs for the receiving waters.

According to a report issued by DNR in 2002, the impairments in the Upper Choptank and Tuckahoe Creek watersheds "will be the subject of TMDL programs within the next few years." However, to date no nutrient TMDLs have been set for either watershed, or for any of Caroline County's major tributaries or sub watersheds, however, MDE's Statewide Implementation Plan includes data on basin nutrient loads and "recommended" nutrient caps the Choptank River Basin.

Caroline County's allocations of the load caps for each basin were determined by using the percentage of Caroline County land in each basin, and calculating Caroline County's share using the same percentage of each basin's caps. Caroline County comprises about 40 percent of the land in the Choptank River Basin. Table 71 identifies possible loading caps for County portion of the basin assuming the County would be allocated 40 percent of the total recommended caps that are yet to be established.

Table 7: Possible future Nutrient Caps for Caroline County Portion of Choptank River Basin					
Source	Nitrogen Cap (lbs/yr)	Phosphorus Cap (lbs/yr)			
Point Sources	70,076	6,510			
Non Point Sources	705,124	64,890			
Total Sources 775,210 71,400					

Source: Caroline County Dept. of Planning, Codes and Engineering, 2008.

An estimate of nutrient loads to the watershed from point and non-point sources within the Town of Templeville are provided later in this Chapter.

## Watershed Improvement Initiatives

The Federal Clean Water Act (CWA) provides the framework for managing the nation's water resources. Water quality standards were developed "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" (Clean Water Act §101). The standards

include designated uses for waterways as well as specific criteria that indicate whether or not the uses are able to be achieved in each waterway. Uses are identified through a public process and are based on the use and value of the water body for 1) public water supply; 2) protection of fish, shellfish, and wildlife; and/or 3) recreational, agricultural, industrial, and navigational purposes.

A waterway is identified as impaired when it no longer meets the water quality criteria established for it and it is unable to achieve the use for which it is designated. All of Caroline County's major tributaries – Choptank River, Marshyhope Creek and Tuckahoe Creek – are all listed as impaired on the State's 2008 Integrated Report (formerly the 303(d) list).

A report on water quality in Maryland issued by the U.S. Geological Survey in 2004 indicates that the combination of soil and aquifer conditions and the regional predominance of agricultural land use are responsible for the concentrations of nitrogen, phosphorus, and pesticides in streams and rivers on the Eastern Shore. While there are other, lesser contributors to nutrient levels in the region's tributaries including septic systems, wastewater treatment plants, and urban and suburban chemical applications, the study noted that primary sources of nutrients on the Delmarva Peninsula are inorganic fertilizer, and that the concentrations of nitrogen, phosphorus, and herbicide compounds in streams on the Delmarva Peninsula are similar to those in other predominantly agricultural areas of the United States.

In addition to the Federal Clean Water Act, a number of Federal and State programs exist to provide support for achieving Bay water quality goals and assurance that goals can be reasonably met, including:

## Bay Restoration Fund Enhanced Nutrient Reduction (ENR)

The Bay Restoration Fund (BRF) ENR program uses funding from public sewer taxes to provide up to 100 percent state grant funds to local governments to retrofit or upgrade sewage treatment plants to reduce the nutrient levels in plant discharge to 3 mg/l total nitrogen (TN) and .3 mg/l total phosphorus (TP). Upon completion of an ENR upgrade, the permitting authority (MDE) requires the permittee to make a best effort to meet the load goals, providing reasonable assurance of implementation. At present funding is targeted only for major wastewater treatment plants treating 500,000 GPD or greater volumes of wastewater.

## The Maryland Water Quality Improvement Act

The Maryland Water Quality Improvement Act "requires that comprehensive and enforceable nutrient management plans be developed, approved and implemented for all agricultural lands throughout Maryland." This act specifically requires that nutrient management plans for nitrogen be developed and implemented by 2002, and plans for phosphorus to be done by 2005. To date Dozens of Caroline County farmers are enrolled in cost-share programs to implement agricultural BMPs. These programs are managed by the Maryland Agricultural Water Quality Cost-Share Program (MACS), Maryland Department of Agriculture's NRCS, and FSA, and University of Maryland Cooperative Extension Service. At the end of 2008, over 80 percent of Caroline County farms were implementing nutrient management plans; nearly one-fifth of all farms utilized some form of conservation tillage.

The cumulative result of the buffers, wetlands and cover crops was a total reduction of nutrients (466,155 lbs. of nitrogen and 99,012 lbs. of phosphorus) in the Choptank River Basin, where the farms enrolled in these programs were located. However, the total reduction of nutrients fell far short of the Choptank Basin Tributary Goals.

### Tributary Strategies

Tributary Strategies are river-specific cleanup strategies that detail the "on-the-ground" actions needed to reduce the amount of nutrients and sediment flowing into the Chesapeake Bay. When all 36 strategies are added together, cleanup plans will be in place in every part of the Chesapeake Bay's 64,000 square-mile watershed. The strategies outline how the Bay states and the District will develop and implement a series of "best management practices" to minimize pollution. This includes planting new riparian forest buffers, upgrading sewage treatment plants, implementing nutrient management on farms, wisely managing storm water runoff, and other innovative programs to accelerate the restoration of the Bay and its rivers.

Each strategy is tailored to that specific part of the Bay watershed - there is no "one-size-fits-all" strategy for the entire Bay watershed. Pollution reduction actions needed in rural watersheds, like the Choptank River Basin, vary greatly from those needed in more urban areas. The strategy prepared for the Upper Choptank in 2003 recommended a number of strategies to address water quality issues. As noted earlier, a plan update is currently scheduled for the coming year.

## Water System

## Water supply

Currently, the Town of Templeville is not on a central water system, and residents draw their water from private wells. Templeville lies within the proposed North County Water and Sewer Service Area as delineated by the Maryland Environmental Service (MES). The MES Service Area encompasses the entire corporate limits of Goldsboro (not including the East Star property), Marydel (not including Marydel, Delaware), Henderson, and Templeville (including the Queen Anne's County portion) as well land in Caroline County located adjacent to the municipalities.

Currently, Caroline County in cooperation with the Maryland Environmental Service and a consultant are evaluating the feasibility of serving the four town area including Templeville with public wastewater treatment and collection facilities. If determined feasible, the Town anticipates that upon the project's completion, construction of wastewater facilities will ensue and all existing residences of Templeville will be connected to the central sewer facilities but water supply will continue to be provided by private wells. The County created a Sewer and Water Authority in 2008 to serve the Town and region but there are no immediate plans to provide public water system services presently.

## **Projected Water Demand**

The North County Water and Sewer Service Area Build-out Study for Caroline County estimated potential demand for public water based on an estimate of the maximum build-out potential of properties under alternative policy scenarios. The most aggressive growth scenario in the report, Policy 4, assumed that all properties with development potential would be developed in some way to the maximum extent possible. Policy 4 estimated a total demand of water consumption to be 583,750 gallons per day for the entire study area. It was estimated that Templeville and surrounding County areas including the Harman Development would contribute 32,250 gpd towards this demand.

This Plan also calculates future water demand in Templeville. A per-household water usage multiplier of 250 gpd (MDE estimate of single-family household daily water usage) was applied to projected dwelling unit increases forecast for the Town. Water demand is based on existing dwellings as well as potential units, which may be built through infill development of vacant and underutilized lots within the current municipal boundary and/or in Town designated municipal expansion areas. Water demand is projected in Table 8. Figures shown do not include demand for water supplies in surrounding County Areas.

The Town estimates that development will create demand for 20,750 gpd of water to support existing and projected development. This estimate is generally consistent with the most aggressive estimates projected in the North County Study when County located residential units are not included. As noted, this demand for water will probably be met by individual private wells during the 20 year planning period. However, this figure also serves as starting point for design of a future water system, which would require a confined aquifer source of supply, and water distribution and storage facilities. Such facilities would prove beneficial in providing adequate flows to enhance firefighting in future years.

Table 8: Templeville Projected Water Demand based on projected population growth within the Corporate limits (infill) and in designated municipal growth areas.						
Year 2007		2010	2020	2030	Increase 2010-2030	
Population*	82	82	132	207	125	
Household Units**	33	33	53	83	50	
Water (GPD)	8,250	8,250	13,250	20,750	12,500	

Notes:

## Wastewater Treatment System

The North County Water and Sewer Service Area Build-out Study for Caroline County estimated potential demand for wastewater treatment based on an estimate of the maximum build-out potential of properties under alternative policy scenarios. The most aggressive growth scenario in the report, Policy 4, assumed that all properties with development potential would

<sup>\*</sup> Projections based on incremental 10-year projections established by methodology defined in Chapter # (Municipal Growth Element). Projection includes existing population plus increased population based on assumption that 50 units will be built on and occupied by 2030 as a result of infill, redevelopment and/or growth in the designated Expansion Areas.

<sup>\*\*</sup> Household units projection assuming a sustained average of 2.5 persons per household as evident in 2000.

be developed in some way to the maximum extent possible. Policy 4 estimated a total demand of wastewater treatment to be 583,750 gallons per day for the entire study area. It was estimated that Templeville would contribute 32,250 gpd towards this demand.

This Plan also calculates future wastewater treatment demand in Templeville. A per-household wastewater flow multiplier of 250 gpd (MDE estimate of single-family household daily flow) was applied to projected dwelling unit increases forecast for the Town. Wastewater treatment demand is based on existing dwellings as well as potential units, which may be built through infill development of vacant and underutilized lots within the current municipal boundary and/or in Town designated municipal expansion areas.

Table 9: Templeville Projected Wastewater Demand based on projected population growth within the Corporate limits (infill) and in designated municipal growth areas.						
Year	2007	2010	2020	2030	Increase 2010-2030	
Population*	82	82	132	207	125	
Household Units**	33	33	53	83	50	
Water (GPD)	8,250	8,250	13,250	20,750	12,500	

Notes:

\*\* Household units projection assuming a sustained average of 2.5 persons per household as evident in 2000.

The Town calculates that development will by the year 2030 will create demand for treatment of 20,750 gpd, which is generally consistent with the most aggressive estimates projected in the North County Study, when County residential units are not included. The design wastewater treatment system capacity of any proposed facility should provide adequate wastewater collection and facilities necessary to treat these wastewater flows to the year 2030 and satisfy any demands imposed by wastewater treatment facilities that serve County areas that are not located in the short term municipal growth area..

#### **Point Source Pollution Considerations**

Point sources are measurable inputs of pollutants that are discharged into streams, rivers and lakes via pipes or drains, primarily from industrial facilities, and municipal treatment plants. Since Caroline County does not currently operate any wastewater treatment facilities, that serve Templeville, issues related to managing or reducing point source nutrient loads delivered from municipal wastewater treatment plants are not addressed in this Plan.

The Town of Templeville does share the Choptank River Basin with numerous municipalities that operate public wastewater facilities (Denton, Preston, Cambridge, Easton, St. Michaels, Trappe, East New Market, Secretary, and Hurlock). As shown in Table 5, Point Source discharges in the Upper Choptank portion of the Choptank River basin represent 8.3% of Nitrogen loadings to the watershed and 11.7% of Phosphorus loadings.

<sup>\*</sup> Projections based on incremental 10-year projections established by methodology defined in Chapter # (Municipal Growth Element). Projection includes existing population plus increased population based on assumption that 50 units will be built on and occupied by 2030 as a result of infill, redevelopment and/or growth in the designated Expansion Areas.

Table 10: Upper Choptank River Watershed Sources of Impairment						
Watershed	Nitrogen	Phosphorous	Sediment			
Point Source	8.3%	11.7%	0.0%			
Non-Point Source						
Agricultural Land	72.7%	66.6%	86.9%			
<ul> <li>Mixed Open Land</li> </ul>	6.5%	12.2%	4.4%			
• Urban Land	5.6%	7.7%	3.4%			
Forest Land	5.4%	0.8%	5.2%			
• Atm. Dep.	1.6%	1.0%	0.0%			

Source: Maryland Tributary Strategy Choptank Basin Summary Report for 1985-2003 and Caroline County Dept. of Planning, Codes and Engineering, 2008.

The Caroline County proposed water resources element of the County's recent plan update (in preparation) identified possible point source loading caps recommended by Caroline County for the County portion of the Choptank River Watershed assuming that Caroline would be allocated 40 percent of the total recommended caps that are yet to be established (a percentage equivalent to the County's proportionate land area in the basin). Point Source load limits established in these prospective TMDLs were 70,076 lbs. per year for Nitrogen (TN) and 6,510 lbs. per year for Phosphorus (TP).

Review of available data indicates that the combined flows from wastewater treatment facilities in the Caroline County portions of the Choptank River Watershed are within TMDL limits that may be established in the next few years. Table 6 identifies estimated 2007 point source loads generated from municipal plants located in Caroline County. Total nitrogen loadings from municipal treatment facilities discharging into the Caroline portion of the Choptank River basin are 34,155 lbs/yr. This figure includes all nitrogen loadings shown in Table 11 excepting loadings from the Federalsburg WTP. These totals represent roughly ½ the total prospective point source TMDL, indicating current loadings are sustainable. This also indicates that additional point source loads that may be brought about by possible future North County Wastewater facilities serving Templeville and other Towns can be absorbed within the prospective TMDL limit. This conclusion assumes that the future TMDLs assigned to the Upper Choptank will remain consistent with those currently recommended, and that load allocations are based on land area rather than the number of point sources throughout the entire Choptank Watershed.

Table 11: Caroline County Municipal Wastewater Treatment Facilities Effluent Nitrogen and Phosphorus concentrations and loadings						
			2007 CONCENTRATION		2007 AVG FLOW LOAD	
Wastewater System	2007 Avg Daily Flow (mgd)	Design Capacity (mgd)	TN mg/l	TP mg/l	TN lbs/yr	TP lbs/yr
Denton	0.349	0.800	8.10	1.18	8,605	1,254
Federalsburg	0.274	0.750	19.85	0.68	16,557	570
Greensboro	0.111	0.280	47.92	3.29	16,192	1,112
Preston	0.058	0.116	11.34	1.00	2,016	177
Ridgely	0.134	0.180	18.00	3.00	7,342	1,224
Totals					50,712	4,336

Source: Chesapeake Bay Program and Caroline County Dept. of Planning, Codes and Engineering, 2008. Note: Total Nitrogen (TN) is the sum of Organic Nitrogen, Ammonia, TKN or Total Kjeldahl Nitrogen, and Nitrate+Nitrite The same findings apply to Phosphorus loadings since Upper Choptank loadings in 2007 totaled 3,766 lbs/year; representing approximately 58% of total prospective loadings to be allocated. Since TMDL's have not yet been set for the Upper Choptank Creek Watershed no conclusion can be drawn regarding the ability of the Watershed to assimilate projected loads.

If more restrictive TMDL limits are established, the State will need to give consideration to BNR/ENR technology upgrades to "minor" wastewater treatment facilities, (facilities treating less than 500,000 GPD). Likewise, if the North County wastewater treatment system utilizes spray irrigation land application treatment technologies, watershed loading rates may be lower than if other treatment technologies are utilized.

The Chesapeake 2000 Agreement outlined a goal for Maryland towns and counties to work cooperatively to achieve a 40 percent reduction from 1985 Bay nutrient levels. This goal was applied to point and non-point sources of pollution. State and Federal funding to reduce point source loads has been concentrated on upgrades to the state's 66 major treatment plants because they are estimated to contribute 95 percent of wastewater flow into the Bay. The required reduction in major WWTP nutrient loads is made with plant upgrades to first BNR then ENR technology, which reduces total nitrogen (TN) load to 3mg/l and total phosphorus (TP) to .3mg/l.

Current MDE, funding policies indicate that ENR upgrades to smaller plants will begin only after all major plant upgrades are completed, and then only if funding is still available. Most minor plants are at secondary treatment levels and concentrations of Nitrogen are at 18 milligrams per liter or less.

EPA and MDE need to consider developing programs in conjunction with local governments to monitor projected growth and increases in flow allocations and resulting impacts from small plants that provide access to funding to support restoration efforts for Towns. This includes exploring the feasibility of continuing funding for the Bay Restoration Fund program to ensure ENR upgrade funding for all minor plants and providing funding support to facilitate wastewater treatment facilities in North Caroline County to attenuate the current impacts of failing and/or potentially failing septic systems.

## **Point Source Strategy**

- Encourage the Chesapeake Bay Program and MDE to support provision of wastewater treatment facilities to support identified needs for such services in Northern Caroline County Towns including Templeville.
- If construction of wastewater treatment facilities does not prove financially feasible or practical, seek funding assistance to remediate on-site septic systems to reduce nutrient loads within the watershed.
- Design Wastewater Treatment facilities to minimize nutrient concentrations and loadings to the upper Choptank River Basin.

• Encourage use of water conservation fixtures and design techniques in new development to reduce flows to the future proposed wastewater treatment facility.

## Non-Point Source Pollution and Stormwater Management Considerations

Non-point source pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground and gathers pollutants. Pollutants are then deposited into streams and rivers or introduced into ground water. Stormwater runoff is a significant contributor to non-point source pollutant loading. As of 2005, the largest non-point source of nitrogen in the Choptank River Basin was agriculture (70 percent). Agriculture was also the largest contributor of phosphorus (62 percent) and sediment loads (85 percent).

According to the Maryland Tributary Strategy Choptank Basin Summary Report for 1985-2003, the Town of Templeville, together with other Urban Uses in the Watershed contribute approximately 5.6% of non-point source nitrogen loadings, 7.7% of the non-point source phosphorus loadings and 3.4% of the sediment loadings to watershed tributaries.

Stormwater runoff is part of the natural hydrologic process. Human activities and landscape changes resulting from urbanization can alter natural drainage patterns and add pollutants to rivers. Urban runoff is often a significant source of water pollution, including flows discharged from urban land uses into stormwater conveyance systems and receiving waters.

In the past, efforts to control the discharge of stormwater focused on quantity (e.g. drainage, flood control etc.) and only to a limited extent on quality. More recently, awareness of the need to improve water quality has increased. With this awareness Federal, State and, Local programs have been established to reduce pollutants contained in stormwater discharges to our waterways. These programs promote the concept and practice of preventing pollution at the source, before it can cause environmental problems.

In a growing number of communities, a primary determinant of future growth is the assimilative capacity of receiving waters for stormwater runoff associated with land use change. Assimilative capacity is expressed in the TMDLs for the receiving waters.

## Templeville's Projected Non-Point Source Loading

To assist municipalities with preparing calculating nutrient loading loads, MDE developed nutrient loading rates for various land uses classifications. Land use acreage totals are applied to a formula developed by MDE that includes soil factors, average annual rainfall and impervious surface percentages (impervious surface percentages vary according to land use – generally, developed land has a higher percentage of impervious surface than undeveloped land). The result is a per-acre rate of loading for each land use. The "Developed Land" per acre rate of loading was applied to the Town of Templeville since it reflects primarily residential development with only two small commercial uses currently located in Town.

Table 12: Templeville estimated non-point source loading rates and loads (2009 and 2030)						
Estimated Acres of Developed Land*	Nitrogen Loading Rate (lbs/ac)	Phosphorus Loading Rate (lbs/ac)**	Estimated Nitrogen Load (lbs)**	Estimated Phosphorus Load (lbs)		
Year 2009 48 acres	8.77	1.14	421	55		
Year 2030† 73 acres			640	83		
Net Increase			219	28		

Notes: Loading rates are based on MDE/CBP land use load estimates.

Table 7 illustrates estimated nitrogen and phosphorous loadings from stormwater runoff based on projected growth in the Town through 2030.

Estimates shown in Table 12 indicate that approximately 219 additional pounds in Nitrogen loading and 28 additional pounds in phosphorus loading can be expected as a result of infill, redevelopment and/or growth in the short-term expansion area.

These estimates further assume that the loading rates per acre will remain the same through the period to 2030. Greater use of Best Management Practices (BMPs) for management of stormwater quality, which is expected in future Town development, could reduce the projected increases in nitrogen and phosphorus loadings.

Therefore, it would appear that Templeville's growth will represent a very small proportion of total TMDL's likely to be allocated for non-point sources, and can be readily accommodated in watershed-wide context.

This conclusion of course does not take into account the demands on the assimilative capacity of the watershed from other growth or activities within the watershed (e.g., County growth and Agricultural use) and underscores the importance of coordinated land use and growth management strategies based on sound watershed planning principles. It also underscores the importance of inter-jurisdictional coordination and cooperation between Caroline County, Queen Anne's County, Templeville, and the needs of both Counties to support the Agricultural industry's efforts to reduce non-point loadings in the Watershed.

For both TMDLs, Maryland has several well established programs that will be drawn upon: the Water Quality Improvement Act of 1998 (WQIA), the Clean Water Action Plan (CWAP) framework, and the State's Chesapeake Bay Agreement's Tributary Strategies for Nutrient Reduction. Also, Maryland has adopted procedures to assure that future evaluations are conducted for all TMDLs that are established. The implementation of point source nutrient controls will be executed through the use of NPDES permits. The NPDES permit for the Templeville WWTP will have compliance provisions, which provide a reasonable assurance of implementation.

Finally, Templeville's Land Use and Municipal Growth Plans reflect "smart growth" strategies. They are designed to concentrate development adjacent to the existing developed areas within the corporate limits. Growth will be permitted on annexed lands at net densities ranging from 2 to 4 units per acre. The result is development concentrated in cluster form with annexation of

<sup>\* &</sup>quot;Developed" includes residential, commercial, industrial and institutional land uses.

<sup>\*\*</sup> Represents average load per acre of all acres.

<sup>†</sup> Year 2030 estimates based on assumption that 50 units will be built on and occupied by 2030 as a result of infill, redevelopment and/or growth in the designated Expansion Areas and encompass a total area of 25 acres.

additional lands limited over the next 20 years. This approach maximizes opportunities to minimize deterioration in the Upper Choptank River watershed.

## Water Resources Goals and Objectives

The Water Resources goal for Templeville is:

to maintain a safe and adequate water supply and secure County support to provide wastewater treatment facilities to serve projected growth; to take steps to protect and restore water quality; and to meet water quality regulatory requirements in the Upper Choptank River watershed.

#### Objectives to support this goal are:

- Assure that existing water supply sources and/or any future planned public water system satisfies projected demand.
- Assure that any future planned public wastewater collection and treatment system can satisfy projected demand without exceeding its permitted capacity.
- Assure that the Town's stormwater management policies reflect the most recent state requirements, and encourage Low Impact Development (LID) practices in both new development and by existing homeowners.
- Maintain land use patterns that limit adverse impacts on water quality.
- Focus growth to areas best suited to utilize the planned water and wastewater infrastructure efficiently.
- If Wastewater collection and treatment facilities cannot be cost-effectively provided to the Town, seek State financial assistance for upgrades of existing on-site septic systems to achieve best available technology for nitrogen removal
- Work with the County and/or the Town of Goldsboro to document allocation of sufficient future sewer capacity to support the objectives of this plan.
- Work with Caroline County and the State of Maryland to seek PFA certification of the proposed growth area as a PFA in the County Sewer and Water Plan and Comprehensive Plan to permit MDE approval of future wastewater treatment facilties to support growth within the designated growth area.
- Explore the feasibility of adopting a Wellhead Protection Program and ordinance to protect well water supplies.

### Water Resource Strategies and Recommendations

Beyond establishing a land use planning framework that is supportive of water quality protection efforts, the Town can also initiate measures that further support sound management of stormwater flows to improve water quality. These include:

- Use of "Environmental Site Design (ESD) Principles to manage Stormwater in new development. The Maryland Stormwater Management Act of 2007 is based upon Environmental Site Design (ESD) Principles, which attempt to mimic natural hydrology on developed sites. The Stormwater Management Act of 2007 is based upon 13 core principles, which are listed below:
  - 1. Increase onsite runoff reduction volumes
  - 2. Require a unified early ESD map
  - 3. Establish nutrient-based stormwater loading criteria
  - 4. Apply ESD techniques to redevelopment
  - 5. Integrate ESD and stormwater management together at construction sites
  - 6. Provide adequate financing to implement the Act and reward early adopters
  - 7. Develop an ESD ordinance that changes local codes and culture
  - 8. Strengthen design standards for ESD and stormwater practices
  - 9. Ensure all ESD practices can be adequately maintained
  - 10. Devise an enforceable design process for ESD
  - 11. Establish turbidity standards for construction sites
  - 12. Craft special criteria for sensitive and impaired waters of the state
  - 13. Implement ESD training, certification and enforcement

The Town should consider adopting Stormwater Management Regulations or seek support for County stormwater management assistance to incorporate these principles in standards for future development and site planning.

- Promoting bio-retention as a means of treating stormwater runoff. Bio-retention, such as a rain garden, provides stormwater treatment that enhances the quality of downstream water bodies by using soil and both woody and herbaceous plants to remove pollutants from stormwater runoff.
- Consider the implementation of a lot coverage limit on all new development.
- Encourage water quality improvements for existing development through stormwater management techniques such as rain barrels, rain gardens, and native planting plans.

Rain gardens (see figure 1) are vegetated surface depressions, often located at low points in landscapes, designed to receive stormwater runoff from roads, roofs, and parking areas. The gardens' sandy soils allow stormwater to infiltrate quickly to the native soils below and eventually contribute to groundwater recharge. Pollutants and nutrients in stormwater runoff are removed by rain garden vegetation and soils through biological and physical processes such as plant uptake and sorption to soil particles. In comparison with stormwater release to

receiving waters through conventional storm drain systems, infiltrating stormwater through rain gardens reduces peak flows and stressor loadings.

- Utilize Low Impact Development (LID) stormwater management techniques and devices in new developments to minimize flows and attenuate impacts near their source. These include:
  - Bioretention or vegetated depressions that collect runoff and facilitate its infiltration into the ground. These include rain gardens as discussed above. (See figure 1)

In-situ soils should have a high infiltration rate (at least 1 "/hr). Soil filter depth should be at least 2,5" soil filter action and continue of the soil soil filter unix soil.

Figure 2. Bioretention Area

Source: Prince Georges County DER

- Infiltration Trenches: Trenches filled with porous media such as bioretention material, sand, or aggregate that collect runoff and infiltrate it into the ground.
- Dry Wells: Gravel- or stone-filled pits that are located to catch water from roof downspouts or paved areas.

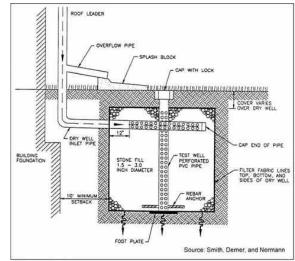
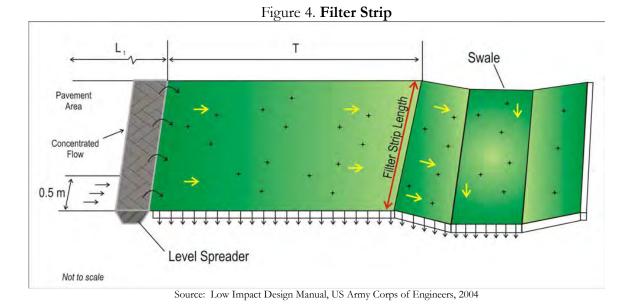


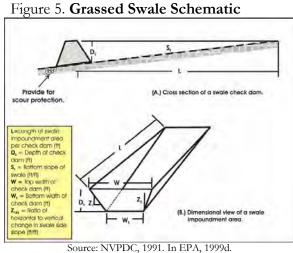
Figure 3. Dry Well Schematic

Source: Stormwater Management for Maine, 1995.

Filter Strips: Bands of dense vegetation planted immediately downstream of a runoff source designed to filter runoff before entering a receiving structure or water body.



- Inlet Pollution Removal Devices: Small stormwater treatment systems that are installed below grade at the edge of paved areas and trap or filter pollutants in runoff before it enters the storm drain.
- Grassed Swales: Shallow channels lined with grass and used to convey and store runoff.



- Permeable Pavement: Asphalt or concrete rendered porous by the aggregate structure.
- Permeable Pavers: Manufactured paving stones containing spaces where water can penetrate into the porous media placed underneath.
- Rain Barrels and Cisterns: Containers of various sizes that store the runoff delivered through building downspouts. Rain barrels are generally smaller structures, located above ground. Cisterns are larger, are often buried underground, and may be connected to the building's plumbing or irrigation system. Rain barrels and cisterns are low-cost water conservation devices that reduce runoff volume and, for very small storm events, delay and reduce the peak runoff flow rates. Both rain barrels and cisterns can provide a source of chemically untreated 'soft water' for gardens and compost, free of most sediment and dissolved salts.

screened input

flexible, transparent hose

barrel water level
visible through hose

drop hose below
barrel water level
to obtain water

Source: Maryland DNR Green Building Program.

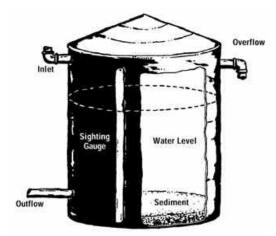
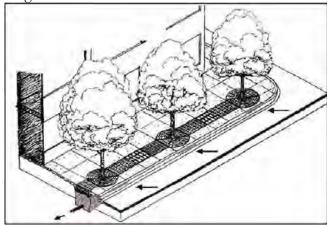


Figure 7. Cistern

Source: Texas Guide to Rainwater Harvesting.

- Soil amendments: Minerals and organic material added to soil to increase its capacity for absorbing moisture and sustaining vegetation.
- Tree Box Filters: Curbside containers placed below grade, covered with a grate, filled with filter media and planted with a tree in the center.

Figure 8. Manufactured Tree Box Filter



Source: Virginia DCR Stormwater Management Program.

 Vegetated Buffers: Natural or man-made vegetated areas adjacent to a water body, providing erosion control, filtering capability, and habitat.

#### Sources:

- Draft Caroline County Comprehensive Plan, Water Resources element, Caroline County Planning Department, April, 2009
- "North County Water and Sewer Service Area Build-out Study Caroline County, Maryland", December 22, 2008; prepared by Peter Johnston and Associates
- The Water Resources Element: Planning for Water Supply and Wastervater and Stormwater Management; publication #26 from the Maryland Department of Planning "Models and Guidelines" series.
- Sustainability of the Groundwater Resources in the Atlantic Coastal Plain of Maryland, USGS Fact Sheet FS 2006-3009.
- Vokes, Harold E., and Jonathan Edwards, Jr.1974, Geography and Geology of Maryland. Maryland Geological Survey. Bulletin 19.
- A Science Plan for a Comprehensive Regional Assessment of the Atlantic Coastal Plain Aquifer System in Maryland. (Open-File Report 2007–1205), by Robert J. Shedlock, David W. Bolton, Emery T. Cleaves, James M. Gerhart, and Mark
- R. Nardi, U.S. Department of the Interior and U.S. Geological Survey, prepared in cooperation with the Maryland
- · Geological Survey, the Maryland Department of Natural Resources and the Maryland Department of the Environment.
- US Geological Survey Estimated Use of Water in the United States County-Level Data for 2000.
- Maryland's 2006 TMDL Implementation Guidance for Local Governments, Maryland Department of Environment, May
- 24, 2006.
- Water Quality in the Delmarva Peninsula, Delaware, Maryland, and Virginia, 1999–2001, U.S. Geological Survey
- Circular 1228, Judith M. Denver, Scott W. Ator, Linda M. Debrewer, Matthew J. Ferrari, Jeffery R. Barbaro, Tracy C. Hancock, Michael J. Brayton, and Mark R. Nardi, 2004.
- Maryland Tributary Strategy Choptank River Basin Summary Report for 1985-2005 Data, Maryland Department of Natural Resources Tidewater Ecosystem Assessment, August 2007.
- Moving Water, Report to the Chesapeake Bay Cabinet by the Public Drainage Task Force Dr. Wayne H. Bell, Chair, Center for the Environment and Society, Washington College, October 2000.
- Moving Water, A Report to the Chesapeake Bay Cabinet by the Public Drainage Task Force, Washington College and the Institute for Governmental Service at University of Maryland College Park, October 2000.
- Statewide Tributary Strategy Implementation Plan, Choptank Trib Team/Public Comment Tracking Matrix, 6-23-06

## 10 HISTORIC PRESERVATION

The Town was originally a stagecoach stop known as Bullock Town. The Town name was changed to Templeville, for the Temple family, in 1847. One of several historic cemeteries located near the town dates back to the 1700s and is the resting place of members of the Temple family. Templeville was originally incorporated in 1865; the charter was renewed in 1947.

Early businesses included the Whitely Hotel, which also served as a station in the Underground Railroad during the Civil War. Templeville was a safe haven for Underground Railroad escapees, because of its many free black households and sympathetic Irish immigrants. By reaching Templeville and moving northeast along present-day Delaware Route 11, escapees avoided the numerous slave catchers between Dover and Smyrna, Delaware. The hotel was razed when Maryland Route 454 was widened.

There are a few remaining historic sites in Templeville:

**Robinson House (1840-1850):** The Robinson House, located outside the town, is a two-story five-bay frame dwelling with brick chimneys on the inside of the house. The house forms an L-shape with a rear kitchen wing. The Robinson House is an example of mid-19<sup>th</sup> Century Federal architecture. At present, the house has been covered with aluminum siding.

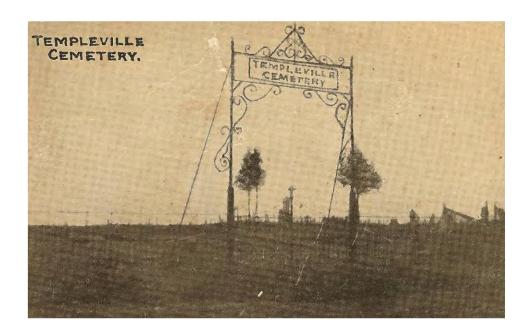
Templeville School (1900-1920): The Templeville School, located outside the town, is a small one-room frame building with a gable roof. The structure still has its original shingles and temple-fronted porch, typical of the revival in classical architectural styles for public buildings in the late 19th an early 20th Centuries. The Templeville School is a very simple structure, however, the windows add interest to the design. Each of the building's side facades have a set of elongated 9 by 9 windows, which are side by side. The resulting effect allows light to penetrate the interior and the east to west orientation keeps the inside cool.



In addition to the original historic sites, Templeville acquired an African American School Building that was moved from Delaware to the town in 1950. It is currently used as the Grange meeting hall.



Outside of the Town boundaries, is the Templeville Cemetery. The land for the cemetery was purchased at the beginning of the 20<sup>th</sup> century by William Perkins who bought it from the Richard Family. The Mayor of Templeville, Helen Knotts is the current caretaker.



## 11 NATURAL RESOURCES & SENSITIVE AREAS

The Maryland Economic Growth, Resource Protection and Planning Act of 1992 added the requirement to Article 66B that comprehensive plans contain a Sensitive Areas Element, which describes how the jurisdiction will protect the following sensitive areas:

- o Streams and stream buffers,
- o 100 year floodplain,
- o Endangered species habitats,
- o Steep slopes, and
- Other sensitive areas a jurisdiction wants to protect from the adverse impacts of development.

In addition, in its 2006 session, the Maryland Legislature passed House Bill 1141, which included expanding sensitive areas elements of comprehensive plans to include wetlands and agricultural and forest resource protection or conservation areas.

The Town of Templeville is relatively flat with no major watercourses within the current town boundaries. There are no known habitats of threatened and endangered species or steep slopes of 15 degrees or greater within or near the Town. There are also no 100 or 500 year floodplains as mapped per the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA). The incorporated town and the proposed Expansion Areas are also outside of the Chesapeake Bay Critical Area.

Sensitive areas include small, scattered areas of non-tidal wetlands. Non-tidal wetlands include important environmental conditions that support plant and animal habitats important to our rural landscape. These wetland areas also support important groundwater recharge functions. As a step toward achieving sensitive areas protection, non-tidal wetlands should be protected from development impacts. The State also has a Non-tidal Wetlands Program administered by the Maryland Department of the Environment.

Beyond current town boundaries are two small drainage ditches, which could effect future development in the Expansion Areas. As displayed in the Land Use Plan, conservation corridor/ buffers are proposed around these streams, which will also serve for stormwater management.

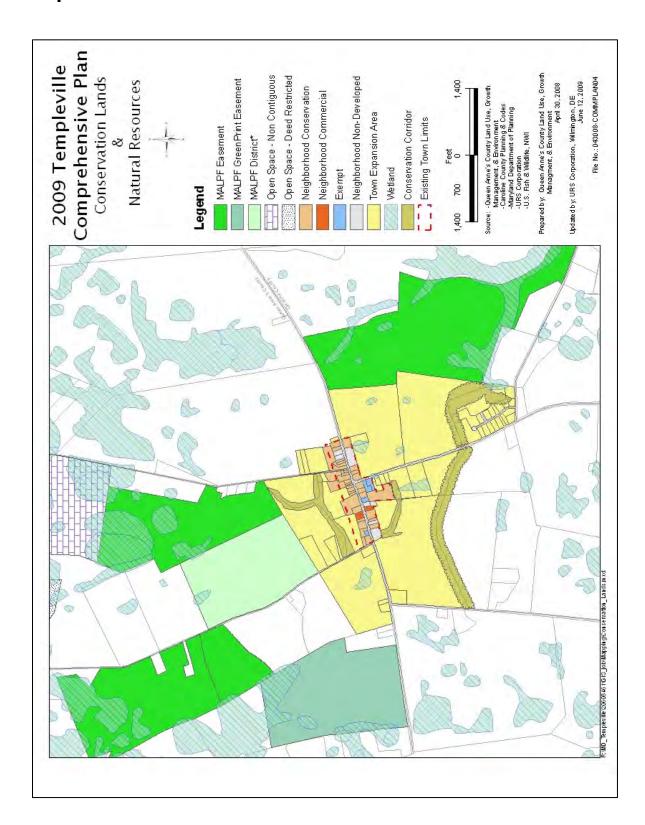
Managing growth and development in Templeville must be balanced with consideration for the natural resources that are essential to the Town's quality of life. The conservation and protection of natural resources and sensitive areas will be crucial to preserving the character of Templeville.

Future development in and around Templeville should be directed away from sensitive environmental areas and guided towards areas where environmental impacts would be less severe. Regardless of location, all future development should be subject to minimum performance standards for environmental protection and natural resource conservation.

This Plan sets forth the following objectives and recommendations:

- a. The Town should adopt environmental protection programs and ordinances in compliance with State law.
- b. As new development occurs within the Templeville growth area, every effort should be made to ensure that it is designed and built to avoid and/or minimize adverse impacts to environmentally sensitive areas.
- c. Perennial and intermittent streams and adjoining natural buffers should be protected from the adverse effects of development. The Town should adopt stream buffer protection regulations. A 50 to a 100 foot no disturbance buffer should be adopted for the intermittent streams/ drainage ditches.
- d. Non-tidal wetlands should be protected from the adverse effects of development as prescribed by State and Federal Regulations.
- e. Forested areas should be protected from the adverse effects of development as mandated by the State Forest Conservation Act.

Map 5. Conservation Lands & Natural Resources



### **IMPLEMENTATION**

This Comprehensive Plan for the Town of Templeville is the first step in allowing the Town to have its own planning authority. The planning process should capture the Templeville's vision of how it wants to shape and integrate residential neighborhoods and commercial uses into the future development scheme, and the desired type, design, quantity, and location for development. The Town will adopt land development ordinances, project review procedures, and legislation to insure that future growth is consistent with this plan. This section presents specific policies, ordinances and tools that could be adopted to manage development.

#### **11.1 Growth Management**

This Comprehensive Plan is Templeville's first step in its comprehensive planning process. It is not intended to be a stand-alone document but will support and, in turn, be supported by related planning programs which the town will undertake in its implementation process, which may include, but is not limited to the following:

- Zoning Ordinance
- Subdivision Ordinance
- Capital Improvement Budget

This Comprehensive Plan along with the proposed documents, when used concurrently, will be the basis for directing and managing growth in Templeville.

### **11.2 Land Development Ordinances**

#### 11.2.1 Zoning Code, Subdivision Regulations and Zoning Map

The primary and most urgent recommendation of this plan is that the Town of Templeville develop and approve land use ordinances in the form of a zoning ordinance, zoning map, and subdivision ordinance. The fact that the Town of Templeville does not have a zoning code or zoning map in place means that translating the future land use map from this plan into a zoning map will involve the actual crafting of a new zoning code. A zoning ordinance, zoning map, and a subdivision ordinance maybe created in the form of separately adopted ordinances or in the form of a unified land-development ordinance. This step should be completed before the town contemplates any annexation.

Ordinances should be crafted with the aim of maintaining Templeville's rural village character atmosphere, encouraging a healthy mix of retail and residential uses, ensuring adequate service levels to properties within the town, and preserving environmentally sensitive areas. The zoning ordinance should be structured to support the future land use portion of this comprehensive plan (see Map 2 – Land Use Plan) with new zoning districts. Regulations also should ensure that growth and development is properly channeled into appropriate areas. Issues that should be addressed in the new code include creating a town center with commercial uses, promoting a grid street network and pedestrian orientation, creating parkland, and planning for stormwater management with the existing drainage ditches.

The specific zoning regulations that deal with lot size and setbacks should be examined to ensure encouragement of the type of village development appropriate to Templeville. This also will ensure that property owners of existing buildings, rebuilding on small lots commonly found in the older sections of Town, are given the flexibility needed to accomplish infill and redevelopment. In consideration of the need to provide affordable housing, the zoning regulations should permit accessory dwellings.

The new subdivision ordinance should address how land is subdivided and developed. Subdivision regulations primarily ensure that new roadways and utilities will be laid out in an efficient and safe manner, whether as a town road or a private way. These regulations can also enhance the "livability" of neighborhoods by providing for walking paths, retention of existing vegetation, generous plantings of street trees, common spaces within a subdivision, and appropriately-sized roadways that are pedestrian-friendly and well integrated with existing topography. The ordinance should include a clear process for subdivision application that demonstrates coordination with the appropriate agencies charged with providing sewer service and highway access.

In light of possible new development in the future, as well as infill and redevelopment, it is important to ensure that development codes and regulations guide development in a manner that is consistent with the recommendations of this Plan. This includes promoting place-making principles through good design practices. At a minimum, the zoning ordinance should accomplish the following:

- o Promote, in accordance with present and future needs, the safety, morals, order,
- o convenience, prosperity, and general welfare of the citizens of Templeville, Maryland and its environs;
- o Provide for efficiency and economy in the process of development;
- Require appropriate and best use of land, for convenience of traffic and circulation of people and goods, for the use and occupancy of buildings, for healthful and convenient distribution of population;
- o Foster good civic design and arrangement; and
- o Ensure adequate public utilities and facilities by regulating the location and use of buildings, structures, and land for trade, industry, and residence and regulating and limiting or determining the height and bulk of buildings and structures, the area of yards and other spaces, and the density of use.

The zoning map must be consistent with the zoning ordinance to reflect the policy direction of this Comprehensive Plan. The zoning map will reflect Templeville's current corporate boundaries and the by-right zoning applied to these areas. The zoning map also should be prepared concurrent with the zoning ordinance.

Land Use Districts of this Comprehensive Plan include the following: 1) Neighborhood Conservation; 2) Neighborhood Commercial; 3) Neighborhood Exempt; 4) Neighborhood Exempt; and 5) Conservation Corridor. It is the purpose and the intent of comprehensive planning to translate these planning areas into zoning districts. In this regard, details regarding each planning area are provided in the Land Use Element.

#### 11.2.2 Town Center/ Neighborhood Commercial

The Templeville Land Use Plan places focus on establishing an identifiable town center on Barclay Road in the area of the existing commercial uses and the Grange Meeting Hall. The town center can be described as a future central community district containing residential, commercial, institutional, and recreational uses. It is envisioned that this area will serve as a focal point for the community by providing central access to residential, neighborhood commercial and recreational uses.

The town plans to maintain its rural village scale by keeping it existing features of the community intact while creating a vibrant mixed-use town center with contiguous residential development in the short-term growth area. As development occurs outside the current boundaries of Templeville, it will become increasingly important for the town to be vigilant in keeping the focus on the town center, so as not to draw important services and community features away from the center of town.

To create a town center, it is recommended that Templeville adopt a Neighborhood Commercial District with flexible zoning provisions, such as an overlay or floating zone, that allow for varied uses in this area of the town. Zoning standards for this planning area should provide for the expansion of existing non-residential uses, and where appropriate, creation of new compatible uses, including local government uses, recreational uses, and apartments over commercial establishments. The town envisions use of the Grange Meeting Hall as a community center with pedestrian walkways to the existing park, as well as public parking in this area.

In addition, Templeville should develop design standards and guidelines for all commercial development. These should include the design of the building, landscaping, parking requirements, lighting, and signage. All such new buildings should be compatible with the scale and character of the Town. Great care should be exercised to ensure that the entrances into Templeville do not deteriorate into an unattractive strip of commercial uses and/or storage facilities. These "gateways" provide the first impressions of the Town to outsiders.

#### 11.2.3 Neighborhood Conservation

The Comprehensive Plan proposes a Neighborhood Conservation District to protect the Templeville's rural village character. The primary objectives for these areas involve maintaining the existing residential scale of the neighborhoods and allowing compatible infill and redevelopment. Historic properties located in these districts may be appropriate for adaptive reuse strategies. Zoning for these areas should allow for setback variances and other exceptions to retain the historic nature of the community. Design guidelines for appropriate infill and reconstruction projects would be applicable.

Particular concerns that should be addressed through appropriate zoning standards and guidelines include:

o Connectivity – appropriate vehicular and pedestrian connections between on site and offsite transportation systems.

- O Circulation consistency with the area wide vehicular and pedestrian circulation concepts of the Comprehensive Plan.
- Parking flexible parking requirements.
- O Compatibility essential elements of compatible project design, e.g., design, pattern, alignment, size, and shape.

#### 11.2.4 Planned Development (PD)

Planned Developments are an extremely flexible development type characterized by mixed land uses and variations within uses, such as single-family homes alongside townhouses and retail. Often parks, trails, and common spaces are integrated into the site plan. Unique approaches to roadways, circulation and parking can also be proposed. In general, when considering a PD application the reviewing board works with the applicant to achieve a superior design outside the normal constraints of existing zoning. PDs are frequently provided by special permit in conjunction with an overlay or floating zone.

This zoning district should be applied to apply to large vacant tracts and annexed lands. The zoning and subdivision ordinances should include standards for a new residential zoning district that would permit a variety of housing types at an effective net density of about 3.5 dwelling units per acre. To accomplish this end the Town will include provisions for planned, mixed-residential communities in the revised zoning ordinance. The PD ordinance will permit "smart neighborhoods," exhibiting the following characteristics:

- o Integrated mix of residential and open space uses,
- o Range of housing types and densities,
- o Compact design,
- Interconnected grid street network designed to balance the needs of all users, with sidewalks and on-street parking,
- o Open spaces integral to the community,
- o Location adjacent to and extending the fabric of existing development, and
- o Incorporate neo-traditional design, such as grid street patterns, use of alleys, shallow front yards, traditional architecture and a pedestrian orientation.

#### 11.2.5 Performance Standards and Environmental Protection

The Eight Visions for Maryland, as expressed in Article 66B of the Annotated Code, encourage stewardship of the land as a universal ethic. In addition, the Planning Act of 1992 requires the Town to adopt policies for the protection of sensitive environmental areas.

The zoning ordinance should set forth standards that meet expectations for stream buffers, non-tidal wetlands and other environmental features consistent with State law. In addition, the Town should encourage development design that maintains or enhances green infrastructure, and incorporates low impact design through best stormwater management practices for water quality and quantity management.

All future development should be subject to minimum performance standards for environmental protection and natural resource conservation. Performance standards protect natural processes such as flooding, stormwater runoff and groundwater recharge, and prevent development on sensitive lands and in sensitive resource areas. An example of a performance standard is a 50 to a 100 foot no disturbance buffer for the existing intermittent streams/drainage ditches. The purpose is to prevent environmental degradation, and promote public health, safety and welfare.

#### 11.2.6 Buffering, Screening, and Landscaping Standards

Buffering, screening, and landscaping are techniques for minimizing the impacts between incompatible land uses using either natural or human-made features that address visual, light, and sound impacts. Buffers and screens serve to reduce conflicts between incompatible land uses, minimize soil erosion, reduce storm water runoff, and enhance community appearance. In addition, buffers can provide pedestrians with a sense of security from automobile traffic. Screens are generally used to reduce visual impact using fences, walls, trees, or shrubs. Buffers are used to reduce light and sound impacts, using water, hills, berms, groupings of trees, or other landscaped features. Buffers require undisturbed or vegetated areas between designated uses.

Buffering, screening, and landscaping requirements should be included in the zoning ordinance and applied where different land uses abut, to all large-scale and nonresidential developments, and to residential and nonresidential developments along transportation corridors. The Plan should provide policies for uses which require buffering, as well as modification or elimination of buffer requirements where needed to promote mixed-use or workable neighborhoods. Requirements should be administered during the site plan review process.

#### 11.2.7 Administrative/ Site Plan Review

The zoning and subdivision ordinance should include provisions regarding non-conforming uses, special exceptions, conditional uses and board of appeals. It should also include site plan requirements, including submission requirements for plans and permit applications. Site plan submissions should include a detailed plan showing existing and proposed site features in accordance with a set of requirements and review criteria. Site Plan Review assures that, in addition to health and safety issues, proposed structures and site work are well integrated into the context of the neighborhood and the unique characteristics of the site itself.

#### 11.3 Annexation

The Town should adopt annexation criteria, policies and procedures. The Town will follow the procedural requirements for annexation established in State law (Articles 66B and 23A), including those of Maryland House Bill 1141. This will ensure that the proposed annexation is consistent with the goals and objectives of this comprehensive plan, that appropriate consideration have been given to the adequacy of public facilities and services, and that County and State agencies are afforded an opportunity to comment on the proceedings.

Conditions of annexation approval will be based on maintaining or improving the level of community service, preserving open space, ensuring connected contiguous development, and providing methods by which public facilities and services would be extended and funded. Annexation policies to apply to future annexations are set forth in the Municipal Growth Element.

### 11.4 Building Codes

Templeville should adopt the 2000 International Building Code. As part of the enforcement of building codes, the Town's building inspector views the exterior of each property and develops a list of those properties that require remediation. Those that have obvious and major defects are noted and their property owners are given a written listing of deficiencies.

Property owners are given an appropriate time limit within which to make the necessary repairs. If a property is too deteriorated that it causes a danger to the health and safety of the community and a hazard of residents, the Town can initiate condemnation proceedings against the property owner as provided in the building codes and by Maryland law and civil procedure.

#### 11.5 Transportation Infrastructure

Planning for infrastructure improvements is a key component of managing development. Streetscape planning should address both vehicular and pedestrian connectivity and safety, as well as aesthetic issues such as lighting and signage, and traffic calming. Because expanded infrastructure is necessary to support growth in population, improved efforts are needed to coordinate the timing of new development with provisions for infrastructure, and how such improvements are going to be financed. Providing for transportation infrastructure involves a comprehensive look at community land use, economic development, and capital improvement financing. It is important to create these plans in conjunction with environmental and community development issues relevant to the community.

There are many tools available for providing transportation infrastructure:

- O Use a Capital Improvements Plan.
- o Create official maps to reflect proposed right's of way and require their dedication as part of the development approval process.
- o Finance infrastructure improvements through special assessment districts.
- o Require construction and dedication of streets by the Developer.

# Comprehensive Plan, Town of Templeville, MD Appendix A



## Review Comments from the Maryland Department of Planning Draft Comprehensive Plan 2009 Update Town of Templeville

### Overview

The Maryland Department of Planning (MDP) reviewed the draft Comprehensive Plan Update for the Town of Templeville dated July 2009. The draft plan was submitted for 60-day review in accordance with Article 66B of the Code of Maryland Regulations and was received by MDP on Jul 9, 2009. The 60-day review period ended on September 8, 2009. The Town has scheduled a public hearing on the draft plan for September 21, 2009 in accordance with §3.07(b)(1) of Article 66B.

MDP also reviewed the draft Plan for adequacy of the Water Resources Element (WRE) and Municipal Growth Element (MGE) in accordance with the requirements of House Bill (HB) 1141. The following are review comments from the Maryland Department of Planning.

#### **General Comments on the Draft Comprehensive Plan**

- The Town is to be commended for the significant work and quality effort that resulted in this Comprehensive Plan.
- The Town of Templeville has new or additional water and sewer service areas that were recently established through the 2008 amendment to the North Caroline County Comprehensive Plan mainly to address public health concerns due to failing septic systems. The boundaries of these service areas incorporate the Town's municipal areas and surrounding County lands. The service areas outside of the Town limits include the Town's future growth areas, however the county lands that these new service areas include are not State certified Priority Funding Areas (PFA) but do include existing community sewerage systems and known areas of failing septic systems. There is additional County land that is vacant and not certified PFA. These areas are not eligible for water or sewer service from State funded infrastructure projects that increased capacities as of January 1, 1997. This funding restriction should be made clear to the Towns and the County as reimbursement issues may affect local budgets. It has been discussed, with the County, that the County land inside of the service area limits will be designated as "receiving areas" within the County's TDR program.

#### **Comments on the Municipal Growth Element**

MDP has reviewed the Town's Municipal Growth Element and determined that, although some of the requirements of HB 1141 have been sufficiently addressed, the draft Plan in its current state does not meet all of the requirements of this legislation. The following comments

identify revisions that should be considered for the final Plan in order to comply with this legislation.

- The Department appreciates the Town's acknowledgment that a primary goal of the
  plan is to develop a zoning ordinance. This information is necessary because it helps
  drive policy decisions as to whether the City could accommodate future growth by
  changing an areas zoning thus allowing additional density or if it is necessary to annex
  lands.
- How does the Town intend on preserving its Greenbelt? How would expansions occur?
- Please review the Existing Land Use Map on page 13, as there appears to be a table superimposed on the map.
- The Maryland Department of Planning appreciates the attempt at including population projections and a capacity analysis identifying the build-out potential in the Town.
- According to the plan, Templeville's 2000 population is 80. The Town's 2030 population is 207 or an increase of 127 people over the thirty year period. The amount of infill development is not clear. According to the plan, Templeville has 52 acres of infill development (according to the plan's 3.5 dwelling unit per acre figure) which will provide 15 units or 37 people (based on the average household size of 2.5). However, Figure 1 on page 20 identifies 43 acres of infill development. Please clarify what land is included in each figure and decide on one figure to use throughout the analysis.
- It is recommended that Table #3 on page 22 differentiate between developable acreage vs. total acreage. The net growth area of 97 acres multiplied by 3.5 dwelling units per acre results in 340, not 329 as stated in the table. The population changes from 823 to 850.
- The Comprehensive plan includes a long and short term Town Expansion Area where future growth is to be concentrated. Templeville is comprised of 48 acres, and the 2 Expansion Areas combined total 97 acres (roughly 3 times the size of the town). This amount of growth area appears aggressive in light of the Town's limited water and sewer availability. In the context of planning for development, it is important to strive for a balance between land supply and demand for future growth. If you provide too little land for development (be it on greenfields, redevelopment or infill) and the cost of land will become too high or redevelopment may spill over to adjacent jurisdictions. On the other hand, if you provide too much land for development, it will tend to be used inefficiently. In addition, plans and growth controls will be marginalized because there are an abundance of locational options for each new development.
- It was not apparent within the text of the plan if the 2.5 persons per housing unit size projection is based on 2000 Census Data or a 2030 projection. MDP recommends that a 2030 population projection also be included as the number of persons per housing

unit will change by the horizon year. This projection would then be compared to the capacity analysis. It could also help in the identification of:

- Public services and infrastructure that will need to be upgraded and outlining future visions of land use, development and preservation.
- Associated finance mechanisms to pay for infrastructure-related improvements.
- The Town should provide information on more detailed finance mechanisms to pay for these upgrades. If it is the Town's intent that developer(s) absorb infrastructure expenses associated with major development, what portion of the costs should developer(s) absorb? Should the developer(s) donate land for a school site, pay for the update of a treatment plant, or increase capacity for public water? Under what conditions should the developers provide such assistance?

#### **Comments on the Water Resources Element**

The Town of Templeville does an excellent job meeting the majority of the WRE requirements of HB1141. By addressing the following comments, the WRE will conform to the requirements of HB1141. The most important comments to include are in **bold**. The WRE does not yet effectively address the following purposes of the law and/or State guidance, as follows:

- Identify suitable receiving waters and land areas to meet the stormwater management and wastewater treatment and disposal needs of existing and future development proposed in the land use element of the plan, considering available data provided by MDE (Section 1.03(iii), Article 66B).
- The WRE should identify strategies to protect current and future water sources from pollution (MDP Models and Guidelines (M&G) 26, page 27).
- The WRE should estimate the future demand for water by reviewing population projections and associated commercial, industrial and agricultural water demand (MDP M&G 26, page 27).
- The WRE should estimate the approximate number or range of additional households and associated commercial and industrial wastewater demand that could potentially be supported in the planning area (MDP M&G 26, page 33).

#### General Comments on the WRE

- Under the "Water Resources Goals and Objectives" section (page 47), please remove the word "existing" from the fifth objective bullet as there is neither community nor public water or sewer service in the Town at the present time.
- In addition, under the "Water Resources Goals and Objectives" section (page 47), it would be helpful to add a bullet to discuss the creation of an allocation process for the management of the Town's sewer capacity agreement with the

# Town of Goldsboro if and when that agreement for wastewater service is reached and amended into the County Water and Sewer Plan.

- The plan discusses its growth area and the issues regarding Issues and Development Limitations on page 19. The extension of sewer service from the Town of Goldsboro is the resolution to the failing septic systems in and around Templeville. The plan should discuss that the service will be allocated for that purpose only and that service to other development or users will require the new service area to be a certified Priority Funding Area or receive a special exception from the Maryland Smart Growth Coordinating Committee. The identified sewer service area must be approved by MDE once it is amended into the Caroline County Water and Sewer Plan. This amendment process has not yet taken place.
- The Infill and Redevelopment Analysis discussion (page 20, Section 6.3.2) should conclude with the same restrictions noted above. This discussion should indicate that infill and redevelopment within the current PFA will be the first priority for any sewer capacity allocated to the Town from Goldsboro.
- The Growth Area Capacity Analysis discussion (Page 21, Section 6.3.3) is helpful to the two comments made above however; the two growth areas triple the size of the current Town. It would be helpful to discuss the "developable" acreage vs. the total acreage as this will highlight the double asterisk (\*\*) footnote and define the net growth area of 97 acres versus 133 acres. Also, if one multiplies 97 acres times 3.5 housing units per acre, the result is 339.5 units in the growth area, not 329 as stated in Table 3. The population total figure would also be larger, approximately 849 people versus 823 new residents.
- Page 47, Water Resources Goals and Objectives:
  - o 5<sup>th</sup> Objective bullet, remove the word "existing" as there is neither, community or public, water or sewer service at the time of this discussion.
  - Add a bullet to discuss the creation of an allocation process for the management of the Town's sewer capacity agreement with the Town of Goldsboro if and when that agreement for wastewater service is reached and amended into the County Water and Sewer Plan.
- The Town should institute a water and sewerage education program to inform the current residents and new residents on the conditions, challenges, and best management of the Towns water resources and septic system care and maintenance.

# Comments on the Water Demand Analysis

• Table 6 (page 27) details potential impacts of future growth on public facilities and services such as water. **The table does not appear to include non-residential** 

demand for water services. Although there are only 2 small commercial uses in the town (page 46), one of the land use goals (page 10) is to encourage commercial growth in the Town. Please ensure that this non-residential water demand data is included in the table.

 It would be helpful if the plan included more information on the wells that provide water to the Town's residents including such information as the average depth of wells.

# Comments on the Proposed Methods for Protecting Source Water

• There is no discussion of source water protection in the WRE. Please add this discussion to the plan.

# Comments on the Sewer Demand Analysis

- The final Plan should note that the Caroline County Water and Sewer Plan has not been amended appropriately to date. The County is preparing the needed service area timing categories and service policies for amendment to the County's WSP to address the limits and restrictions within the service areas.
- Table 6 (page 27) details potential impacts of future growth on public facilities and services such as sewer. The table does not appear to include non-residential demand for sewer services. Although there are only 2 small commercial uses in the town (page 46), one of the land use goals (page 10) is to encourage commercial growth in the Town. Please ensure that this non-residential sewer demand data is included in the table.

#### Comments on Identifying Suitable Receiving Waters

- The plan does not yet discuss the suitability of the receiving waters. Since TMDLs have not yet been established for the Upper Choptank Creek Watershed to date, the WRE should state that since TMDLs have not yet been set, it is not possible to discuss the suitability given the lack of information at this time. Please add this discussion to the plan.
- The plan estimates that the non-point source loading rates "will remain the same through the period to 2030. Greater use of Best Management Practices (BMPs) for management of stormwater quality, which is expected in future Town development, could reduce the projected increases in nitrogen and phosphorous loadings" (page 26). The plan should note, however, that even with BMPs, the projected growth within the town will have an impact due to the increase in impervious surfaces.

# **Comments on the Transportation Element**

- MDP strongly supports the Town to improve pedestrian safety by providing safe routes for pedestrians, including sidewalks and walkways or trails throughout the Town and in any future development areas.
- The plan mentions that all future roads should include either sidewalks or walking paths, visually bounded with street trees to safely allow for pedestrian and bicycle travel throughout the Town. MDP also recommends the Town to analyze existing pedestrian and bicycle paths to indicate its network connectivity and for any missing gaps. The Draft Plan should also discuss the improvement timeframes and funding sources for the proposed pedestrian and bicycle facilities.
- Please also see the comments from the State Highway Authority.

# Comprehensive Plan, Town of Templeville, MD Appendix B



# Memorandum

Date: September 20, 2009

To: Mayor and Town Commissioners, Town of Templeville, MD

From: Tony Redman, AICP, Principal Planner, URS Corporation

RE: Town of Templeville Comprehensive Plan

Response to Comments provided by Maryland Department of Planning on

the draft Plan document

The following response has been prepared to address comments on the Town Plan draft. I recommend the State comments and this response be incorporated as appendices to the Plan to document the plan adoption process. Each question or comment posed by the State that has prompted changes to the draft are documented and a proposed response to that comment noting changes made are provided.

#### Question or comment

How does the Town intend on preserving its Greenbelt? How would expansions occur?

## Response

See following text on page 18 of the plan.

"Through annexation these lands may someday represent a larger part of the Town. Agricultural and/or Agri-tourism land uses will be promoted to accommodate the Town's interest in promoting agriculture as a part of the community, and to accommodate growth while at the same time realizing objectives to sustain a greenbelt over time. Within these growth areas the Town proposes the future creation of a zoning district that will provide density incentives on near town portions of farms that may be annexed in exchange for conservation easements on remaining portions of those same farms that are further removed the Town Center. The zoning ordinance will implement the intent of this district and after consideration of an appropriate balance between density incentives that encourage appropriate development forms on annexed lands and the percentage of land on farms to be preserved through conservation easements. This concept or zoning treatment will be further explored at such time as the ordinance is established to include this district".

#### "Greenbelt District

The greenbelt concept is a transitional land use area located at the edge of the growth area boundaries of a municipality intended for low-density residential and agricultural uses. The greenbelt will help create a distinct rural edge for the designated growth areas characterized by open space, natural resources, and low density residential uses. Greenbelts are most effective when the lands within them have been placed into some type of a conservation program. Both the Caroline and Queen Anne's County Comprehensive Plans support this concept. Both Counties treat agriculture as a preferred use adjacent to Templeville and accordingly maintain very low densities for any residential development. Currently approximately 50% of the lands designated as the Greenbelt District surrounding Templeville are designated as a Maryland Agricultural Land Preservation Foundation (MALPF) easement or district lands. Future annexations within the long term expansion area would allow opportunities place up to 50% of the long term expansion area in the Greenbelt district over time to reinforce the adjacent County greenbelts dedicated to agricultural use. This could be accomplished through mandatory clustering, transferred development rights and/or in conjunction with County and State conservation and preservation programs.

Properties currently participating in a agricultural district program or easement restricted from future development are identified on Map 2 – Land Use Plan".

#### Question or comment

Please review the Existing Land Use Map on page 13, as there appears to be a table superimposed on the map.

#### Response

Map reviewed and table removed.

#### Question or Comment

• According to the plan, Templeville's 2000 population is 80. The Town's 2030 population is 207 or an increase of 127 people over the thirty year period. The amount of infill development is not clear. According to the plan, Templeville has 52 acres of infill development (according to the plan's 3.5 dwelling unit per acre figure) which will provide 15 units or 37 people (based on the average household size of 2.5). However, Figure 1 on page 20 identifies 43 acres of infill development. Please clarify what land is included in each figure and decide on one figure to use throughout the analysis.

#### Response:

Infill development represents only that future potential development that can occur within Templeville's current corporate limits. The total land area of the town is approximately 45 acres and most is fully developed. The estimate that 15 new households is all that can be

accomodated in the current corporate limits. Any additional development would virtually require annexation. As noted on page 22 of the plan; "It can be expected that there is sufficient capacity within the existing town limits for the Town of Templeville to absorb a portion of projected growth by the year 2030. Given a projection of 15 new households in areas shown for infill and redevelopment on figure 1, there is a capacity for approximately 37 new residents in those areas assuming a sustained average household size of 2.50 persons per household for the town as existed in 2000 within the current town limits."

#### **Question or Comment:**

It is recommended that Table #3 on page 22 differentiate between developable acreage vs. total acreage. The net growth area of 97 acres multiplied by 3.5 dwelling units per acre results in 340, not 329 as stated in the table. The population changes from 823 to 850.

### Response:

Figures shown in Table #3 resulted from a math error. The table has now been corrected as recommended and is attached.

Table 3. Build-out Analysis of Town Expansion Area

Town Expansion Area	Acres*	Net Density (Dwelling Units/Acre)	Estimated New Dwelling Units	Population Increase
Short-Term	42	3.5	147	368
Long-Term	55 (30% of 182 acre area)**	3.5	192	481
Total	97	3.5	340	850

#### Question or Comment:

It was not apparent within the text of the plan if the 2.5 persons per housing unit size projection is based on 2000 Census Data or a 2030 projection. MDP recommends that a 2030 population projection also be included as the number of persons per housing unit will change by the horizon year. This projection would then be compared to the capacity analysis. It could also help in the identification of:

- Public services and infrastructure that will need to be upgraded and outlining future visions of land use, development and preservation.
- $\circ\;$  Associated finance mechanisms to pay for infrastructure-related improvements.

# Response:

Although a reduction in average household size would typically be expected consistent with national trends, Templeville has a unique population largely influenced by a high

percentage of Spanish speaking households that are larger in size. For this reason, the average household size of 2.5 persons per household was retained for projections to the year 2030.

#### Question or Comment:

The Town should provide information on more detailed finance mechanisms to pay for these upgrades. If it is the Town's intent that developer(s) absorb infrastructure expenses associated with major development, what portion of the costs should developer(s) absorb? Should the developer(s) donate land for a school site, pay for the update of a treatment plant, or increase capacity for public water? Under what conditions should the developers provide such assistance?

# Response:

The developer will be expected to provide assistance to the Town a number of ways. This may include participation in construction of a treatment plan or water system or parkland. No school site is currently anticipated in this area.

All significant development will require annexation. Annexation policies enumerated in the Plan indicate the developer will be expected to bear much of the costs of services associated with growth. See page 25 as follows:

" the following annexation policies will apply to future annexations:

- Proposed annexation areas will be economically self-sufficient and will not result in larger municipal expenditures than anticipated revenues, which would indirectly burden existing town residents with the costs of services or facilities to support the area annexed.
- The costs of providing roads, utilities, parks, other community services will be borne by those gaining value from such facilities through either income, profits, or participation.
- Specific conditions of annexation will be made legally binding in an executed annexation agreement. Such agreements will address, among other things, consistency with the goals, objectives and recommendations contained in the Templeville Comprehensive Plan, zoning and development expectations, responsibility for appropriate studies, and preliminary agreements concerning responsibilities for the cost of facilities and services provided by the town. These preliminary agreements may be further revised in a Developers Rights and Responsibility Agreement (DRRA).
- For annexations involving larger parcels of land, the town may require appropriate impact studies, including a fiscal impact study and an environmental impact assessment that addresses the potential impact of the proposed annexation and planned development on the environment of the site and surrounding area.

• If considered necessary or appropriate, applicants for annexation shall pay the cost of completing all studies related to expanding capacity of existing public facilities and/or services".

#### Question or Comment:

Under the "Water Resources Goals and Objectives" section (page 47), please remove the word "existing" from the fifth objective bullet as there is neither community nor public water or sewer service in the Town at the present time.

## Response:

This objective has been revised and now reads as follows:

■ Focus growth to areas best suited to utilize the planned water and wastewater infrastructure efficiently.

#### Question or Comment:

In addition, under the "Water Resources Goals and Objectives" section (page 47), it would be helpful to add a bullet to discuss the creation of an allocation process for the management of the Town's sewer capacity agreement with the Town of Goldsboro if and when that agreement for wastewater service is reached and amended into the County Water and Sewer Plan.

#### Response:

The following objective has been added on page 50 in response to this comment

■ Work with the County and/or the Town of Goldsboro to document allocation of sufficient future sewer capacity to support the objectives of this plan.

#### Question or Comment:

The plan discusses its growth area and the issues regarding Issues and Development Limitations on page 19. The extension of sewer service from the Town of Goldsboro is the resolution to the failing septic systems in and around Templeville. The plan should discuss that the service will be allocated for that purpose only and that service to other development or users will require the new service area to be a certified Priority Funding Area or receive a special exception from the Maryland Smart Growth Coordinating Committee. The identified sewer service area must be approved by MDE once it is amended into the Caroline County Water and Sewer Plan. This amendment process has not yet taken place.

# Response:

The following objective has been added on page 50 of the plan in response to this comment.

■ Work with Caroline County and the State of Maryland to seek PFA certification of the proposed growth area as a PFA in the County Sewer and Water Plan and Comprehensive Plan to permit MDE approval of future wastewater treatment facilities to support growth within the designated growth area.

# **Question or Comment:**

The Infill and Redevelopment Analysis discussion (page 20, Section 6.3.2) should conclude with the same restrictions noted above. This discussion should indicate that infill and redevelopment within the current PFA will be the first priority for any sewer capacity allocated to the Town from Goldsboro.

#### Response:

The following language has been added on page 22 of the plan in response to this comment.

"Infill and re-development within the Town will the first priority of any sewer capacity allocated to the Town". (See insert just before figure 1)

# **Question or Comment:**

The Growth Area Capacity Analysis discussion (Page 21, Section 6.3.3) is helpful to the two comments made above however; the two growth areas triple the size of the current Town. It would be helpful to discuss the "developable" acreage vs. the total acreage as this will highlight the double asterisk (\*\*) footnote and define the net growth area of 97 acres versus 133 acres. Also, if one multiplies 97 acres times 3.5 housing units per acre, the result is 339.5 units in the growth area, not 329 as stated in Table 3. The population total figure would also be larger, approximately 849 people versus 823 new residents.

#### Response:

Adjustments made to Table 3 (see earlier comment) now address this issue and show 340 residential units and a population of 849 residents at build-out, now expected to occur in the next 50 years.

# **Question or Comment:**

The Town should institute a water and sewerage education program to inform the current residents and new residents on the conditions, challenges, and best management of the Towns water resources and septic system care and maintenance.

# Response:

The Town currently has no resources to institute such an educational program.

## Question or Comment:

Table 6 (page 27) details potential impacts of future growth on public facilities and services such as water. The table does not appear to include non-residential demand for water services. Although there are only 2 small commercial uses in the town (page 46), one of the land use goals (page 10) is to encourage commercial growth in the Town. Please ensure that this non-residential water demand data is included in the table.

### Response:

Table 6 has been amended to include potential demand for 1,000 gallons per day by 2030 to support an projected 10,000 square feet of non-residential use. Formula used to project demand is .1 gallon per day per square foot of non-residential use.

#### Question or Comment:

There is no discussion of source water protection in the WRE. Please add this discussion to the plan.

# Response:

There is documentation of failing septic systems and concern about impacts to current private water supply sources. That concern is the basis for ongoing study of the feasibility of connecting septic systems to a wastewater treatment facility. The Plan has been amended to encourage Town exploration of the feasibility of a Wellhead Protection Program and ordinance. Such ordinances are typically used to protect a public potable water supply source or series of wells, not individual wells scattered throughout the Town. Thus feasibility needs to be considered as well as Town capacity to administer such protection measures before such an ordinance can be determined to be appropriate.

# Question or Comment:

Table 6 (page 27) details potential impacts of future growth on public facilities and services such as sewer. The table does not appear to include non-residential demand for sewer services. Although there are only 2 small commercial uses in the town (page 46), one of the land use goals (page 10) is to encourage commercial growth in the Town. Please ensure that this non-residential sewer demand data is included in the table.

# Response:

Table 6 has been amended to include potential demand for 1,000 gallons per day wastewater treatment capacity by 2030 to support an projected 10,000 square feet of non-residential use. Formula used to project demand is .1 gallon per day per square foot of non-residential use.

# Question or Comment:

The plan does not yet discuss the suitability of the receiving waters. Since TMDLs have not yet been established for the Upper Choptank Creek Watershed to date, the WRE should state that since TMDLs have not yet been set, it is not possible to discuss the suitability given the lack of information at this time. Please add this discussion to the plan.

# Response:

The following language has been added on 47 of the plan following Table 11.

Since TMDL's have not yet been set for the Upper Choptank Creek Watershed no conclusion can be drawn regarding the ability of the Watershed to assimilate projected loads.