COMPREHENSIVE PLAN

SUDLERSVILLE, MARYLAND

March 2014

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INTRODUCTION

The general purpose of the Sudlersville Comprehensive Plan is to guide and achieve coordinated and harmonious development in the Town and its planning area. Also, the plan promotes health, safety, order, convenience, prosperity, and the general welfare, as well as efficiency and economy in the development process. Plan goals include adequate provisions for traffic, adequate provisions for light and air, conservation of natural resources, the prevention of environmental pollution, the promotion of the healthful and convenient distribution of population, the promotion of good civic design and arrangement, wise and efficient expenditure of public funds, and the adequate provision of public utilities and other public requirements.

After adoption, the Plan will serve as:

- A unified statement of desirable development policies.
- A framework within which specific development issues can be evaluated and public policy effectuated consistent with the long-range growth and development goals and objectives of the Town.
- An information document for local elected officials, citizens, developers, and special interest groups concerning critical development issues as well as Town development policies.
- A decision-making tool when reviewing subdivision and site plan proposals.
- A tool to help establish capital needs and budgets.

The goals, objectives, and recommendations of this Plan are intended to manage and direct growth and development and address related impacts on the delivery of public services and facilities. Upon adoption it becomes the basis for the preparation of specific policies, programs and legislation such as zoning and subdivision regulations and capital improvement programs to implement the policies set forth in the Plan. As a policy document, it is general in nature, providing “big picture” guidance.

The Plan encompasses the corporate limits of the Town as well as potential annexation areas. It addresses all of the functional elements that bear upon the Town’s physical development such as transportation, land use, and community facilities. While the Plan’s perspectives on growth policies are those of the Town, it is recognized that there are aspects of growth that will need to be coordinated within a regional context.

The Plan provides the basic framework and direction for all components of what may be considered the Town’s planning program. The Plan is not a “stand-alone” document but is supported and, in turn, supports related planning program documents such as the following:

- Sudlersville Zoning Ordinance;

- Sudlersville Subdivision Regulations;
- Capital Improvement Plans and Budgets;
- Water and Sewer Facilities Plans; and
- Other important applicable ordinances such as Sediment and Erosion Control, Floodplain Management, Stormwater Management, and Forest Conservation.

CONTEXT FOR PLANNING - MARYLAND PLANNING LAWS AND POLICIES

For the most part, the Plan's format is in response to planning laws and policies promulgated at the State level. These laws and policies define not only the basic topics the Plan must address, but also influence the policies framework for planning. The following provides a brief discussion of the key State planning related laws and policies.

The Land Use Article (Formerly Article 66B – Planning & Zoning Enabling Act)

The Land Use Article of the Annotated Code of Maryland sets forth the minimum requirements for a comprehensive plan, which include among other things:

- A statement of goals and objectives, principles, policies, and standards;
- A land use plan element;
- A transportation plan element;
- A community facilities plan element;
- A mineral resources plan element, if current geological information is available;
- An element that contains recommendations for land development regulations to implement the plan.
- An element, which shall contain the planning commission's recommendations for land development regulations to implement the plan; and
- Other elements, such as a community renewal section, housing, conservation, natural resources, etc. at the discretion of the commission.

The context for planning in Sudlersville also addresses "Visions" contained in the Maryland Growth Management, Resource Protection and Economic Development Act, namely:

1. A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.

2. Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals.

3. Growth is concentrated in existing population and business centers, growth areas are adjacent to these centers, or strategically selected new centers.

4. Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources.

5. Growth Areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner.

6. A well-maintained, multi-modal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.

7. A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes.

8. Economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged.

9. Land and water resources, including the Chesapeake and Coastal Bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources.

10. Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved.

11. Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection.

12. Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the local, regional, state, and interstate levels to achieve these visions.

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

- Streams and stream buffers;
- 100-year floodplains;
- Endangered species habitats;
- Nontidal wetland;
- Steep slopes; and
- Other sensitive areas a jurisdiction wants to protect from the adverse impacts of development.

Neighborhood Conservation & Smart Growth Areas Act of 1997

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" (PFAs), which represent local growth areas where State funding will be targeted. PFAs include municipalities, rural villages, communities, industrial areas, and planned growth areas to be served by public water and sewerage.

Plans must show designated "Growth Areas" including areas planned for annexation by municipalities. Land 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 PFAs, such as planned water and sewerage service areas, residential development areas, industrial development areas, economic development areas, and parks.

Maryland State Finance and Procurement Article

Maryland has procedures to ensure that public infrastructure improvements are consistent with growth policies, as defined in the law. The Land Use Article 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."

The *Maryland State Finance and Procurement Article* links the concept of Priority Funding Areas to State financial assistance funding for infrastructure and other related projects. The Finance and Procurement Article states that funding for growth-related projects will be provided by the State "…if an existing community receives a public or community sewer system, an area beyond the periphery of the developed portion of the existing community may be designated as a priority funding area, if the development has a permitted average density of at least 3.5 units per acre and is served by a public or community sewer system."[1]

2006 Maryland House Bill 1141

In 2006, the Maryland State Legislature passed House Bill 1141 (HB 1141), which provides for Amendments to the Land Use Article and Article 23A: "Municipal Annexation Act" of the Annotated Code of Maryland. Amendments include the requirement for a "Water Resources Element" and "Municipal Growth Element" in local comprehensive plans.

1 Maryland Code, State Finance and Procurement 5-7B-03

HB 1141 establishes additional substantive and procedural requirements for municipalities preparing comprehensive plans. This includes inter-governmental coordination for land use and growth management planning.

Information developed under the provisions of HB 1141 is reviewed and evaluated by State agencies including the Maryland Departments of the Environment, Natural Resources, and Planning. Substantive procedural requirements include the following:

- The Town must include in its Comprehensive Plan a "Municipal Growth Element" that specifies where Sudlersville intends to grow, if at all, outside its existing corporate limits. It also must discuss how the Town intends to address services, infrastructure, and environmental protection needs for any growth area.

- The Town must develop the "Municipal Growth Element" in coordination with the adjoining county or counties. Prior to approving a Growth Element, the Town must provide a copy to the adjoining county, accept comments from the county, meet and confer with the county, and, on request from either entity, engage in mediation to facilitate the agreement concerning the Growth Element.

- The Town and county must include in their respective comprehensive plans a "Water Resource Plan Element" that identifies drinking water and other water resources to meet current and future demands. It also must identify suitable water and land areas to receive stormwater and wastewater generated by the Town.

- In order for land annexed after September 2006 to qualify for State assistance as a Priority Funding Area, the Town must complete an analysis of land capacity available for development. This includes infill and redevelopment. It also includes an analysis of land as needed to satisfy demand for development.

- The Town must develop and share with other planning agencies an "Annexation Plan" that is consistent with its Growth Element in the Comprehensive Plan.

HB 1141 requires the Maryland Department of the Environment (MDE) to provide technical assistance to local governments regarding the development of a Water Resources Element. The Maryland Department of Planning (MDP) also is required to provide technical assistance to a municipality regarding the "Municipal Growth Element."

HB 1141 changes the former "5-Year Rule." In the past, the "5-Year Rule" would allow a county to delay municipal zoning on a newly annexed area. The new standard under HB 1141 will be to determine whether a substantial difference exists between the land uses and densities permitted under proposed municipal zoning and the land uses and permitted densities under county zoning.

Annexed property cannot be zoned for development with a density that is greater than 50 percent more than the County zoning allows for a period of 10 years without the express approval of the Board of County Commissioners.

Smart and Sustainable Growth Act of 2009

The Smart and Sustainable Growth Act of 2009 establishes annual reporting criteria for local governments to the Maryland Department of Planning in coordination with the national Center for Smart Growth. The objective is to collect data to measure growth trends and impacts statewide over time. Measures and indicators for reporting include the following textual and mapped information:

- The amount and share of growth being located inside and outside PFA's;
- The net density of growth in these areas;
- The creation of new lots and the issuance of residential and commercial building permits in these areas;
- The development capacity analysis (updated every 3 years or when significant change occurs in land use/zoning);
- The number of acres preserved with local agricultural land preservation funding (if applicable); and
- Other information on achieving statewide goals under revised state laws.

County and municipal corporations that issue less than 50 building permits per year for new residential units are exempt from the stipulated measures and indicators. However all jurisdictions are required to submit an annual report by July 1, 2010.

The Smart and Sustainable Growth Act of 2009 also sought to clarify the role of the comprehensive plan and the adoption of ordinances and regulations in relation to comprehensive planning. Declaring the intent of the Maryland General Assembly, the purpose is to create consistency with comprehensive plans, which "…should be followed as closely as possible while not being elevated to the status of an ordinance and that deviations from the plan should be rare." Legislative intent also seeks to encourage the development of ordinances and regulations that apply to locally designated PFAs, promoting mixed uses, sustainable design and development, and incentive based processes consistent with the new State "Visions".

The Smart and Sustainable Growth Act of 2009 requires all local jurisdictions to enact a land use plan and educate planning commission and board of zoning appeals members regarding the planning process. An education course has been developed by MDP. The Act also highlights the important role played by citizens that assist in the comprehensive planning process for their respective communities. According to the amendment, "citizens invest countless hours in determining the future direction of their jurisdiction through local comprehensive

plans…and…the people of Maryland are best served if land use decisions are consistent with locally adopted comprehensive plans."

Sustainable Growth and Agricultural Preservation Act of 2012

The Maryland General Assembly approved the Sustainable Growth & Agricultural Preservation Act of 2012 (Senate Bill 236), also known as the septic bill, during the 2012 General Assembly session. "The goal of the law is to limit the disproportionate impacts of large subdivisions on septic systems on…farm and forest land, streams, rivers and Chesapeake and Coastal Bays. The Act provides a moderate and reasonable approach for planned development using on-site sewage disposal systems."[2] Although not directly affecting the Town, the Sustainable Growth & Agricultural Preservation Act of 2012 will constrain development outside of designated growth areas thus creating additional incentive for development in area served by public water and sewer.

[2] Implementation Guidance for The Sustainable Growth and Agricultural Preservation Act of 2012 Senate Bill 236, Maryland Department of Planning, August 1, 2012, pg. 1

SECTION 1 - COMMUNITY PROFILE

Population

Trends in the County and Town's population over time show whether the jurisdictions are growing, both in absolute terms and with respect to one another. From 2000 to 2010 Queen Anne's County's population grew by 7,109 people, an 18 percent increase. Sudlersville's population grew by 106 during the same period, an increase of 27 percent. If recent estimates for Queen Anne's County are an indication, population growth between 2000 and 2011 was largely the result of in-migration (80 percent) as opposed to natural increase (births versus deaths).[3]

Table 1-1 shows the absolute population numbers for Sudlersville and Queen Anne's County and the Town's population as a share of the County's population. These figures indicate that the County's population has been growing much faster than that of the Town over the last 40 years.

Table 1-1: Historic Population Counts

	Population		Town as a Percentage
Year	Sudlersville	Queen Anne's County	of the County Population
1970	417	18,422	2.26%
1980	443	25,508	1.74%
1990	428	33,953	1.26%
2000	391	40,563	0.96%
2010	497	47,798	1.04%

Source: Source: U.S. Department of Commerce, Census Bureau

Relative to the State, Sudlersville and Queen Anne's County have experienced substantially different population growth (See Table 1-2) dynamics. Queen Anne's County's population growth rate regularly exceeded that of the State and Town throughout over most of the last forty years. While the State and County experienced positive growth rates, Sudlersville lost population in the 1980s and 1990s. More recently, (2000-2010) Sudlersville's annual growth rate exceeded that of the State and County.

Table 1-2: Growth Rates

Year	Sudlersville	Queen Anne's County	Maryland
1970-1980	0.61%	3.31%	0.72%
1980-1990	-0.34%	2.90%	1.26%
1990-2000	-0.90%	1.79%	1.03%
2000-2010	2.43%	1.65%	0.87%

Source: Maryland Department of Planning, Peter Johnston & Associates, LLC

[3] Data Sources: U.S. Department of Commerce, 2012. Census Bureau, Population Division, Washington, D.C.

Age

Age groups are useful for estimating the size of the primary workforce (25 to 64) and may be an indicator of the need for education services for residents less than 25 years old and/or services for older residents (65 and older). Table 1-3 compares age distribution of the Town's population as reported in the 2010 Census as compared to that of the County, State and Nation. Sudlersville's population included a higher percentage of the population 65 years of age and older and less than 25 years in the comparison.

Table 1-3: Age Distribution 2010

Age	Sudlersville	Queen Anne's County	Maryland	U.S.
Less than 25	37.00%	30.84%	26.30%	35.30%
25 to 64	41.20%	54.22%	61.50%	52.20%
65 and older	21.80%	14.94%	12.30%	12.40%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

In 2010 the median age of Town residents was 40.8 years, which was less than the County's median age of 42.6 years and higher than that of the Maryland (38.0 years) and the U.S. (35.3 years).

Gender

Women outnumber men in the Town accounting for over half of the Town's population in 2010. This was a greater percentage of the population than that of the County, State and U.S (see Table 1-4).

Table 1-4: Gender Distribution, 2010

Jurisdiction	Male	Female
Sudlersville	46.68%	53.32%
Queen Anne's County	49.67%	50.33%
Maryland	48.35%	51.65%
U.S.	49.16%	50.84%

Source: : U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Race

In 2010 the majority of the Town's population was classified as "one race. As shown in Table 1-5, Whites make up the largest majority race in Sudlersville followed by Blacks.

Table 1-5: Racial Makeup 2010

Race	Sudlersville	Queen Anne's County	Maryland	U.S.
One Race	95.0%	98.3%	97.1%	97.1 %
White	82.9%	88.7%	58.2%	72.4 %
Black or African American	6.8%	6.9%	29.4%	12.6 %
American Indian and Alaska Native	0.2%	0.3%	0.4%	0.9%
Asian	0.2%	1.0%	5.5%	4.8%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%	0.1%	0.2%
Some Other Race	4.8%	1.4%	3.6%	6.2%
Two or More Races	5.0%	1.7%	3.6%	6.2%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Hispanic or Latino

Slightly more than seven percent of the Town's population was classified as Hispanic or Latino in 2010 (see Table 1-6). This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South American countries. It also includes general origin responses such as "Latino" or "Hispanic."

Table 1-6: Hispanic or Latino, 2010

	Number	Percent
Hispanic or Latino (of any race)	37	100.0%
Mexican	8	21.6%
Puerto Rican	2	5.4%
Cuban	0	0.0%
Other Hispanic or Latino	27	73.0%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Households

From 2000 to 2010 new household formation slightly out-paced population growth in the Town. Average household size in 2010 for Sudlersville remained at 2.31 persons per household (see Table 1-7). This statistic is consistent with national trends. According to the Pew Research Center, "the average size of U.S. households has been declining for decades, but may have grown in recent years, at least in part because of an increase in multi-generational households. Average household size in Maryland, which had declined in the 1970s, 1980s and 1990s, grew by a tiny amount from 2000 to 2010, according to numbers analyzed by the Maryland State Data

Center. In 1970, average household size was 3.25 in Maryland; in 1980, it was 2.82; in 1990, 2.67; in 2000, 2.61. In 2010, it was again 2.61 (the 2000 and 2010 numbers look the same, but the data center analysis shows there actually was an increase of .01 before rounding).[4]

Table 1-7: Households, 2000 and 2010

Households	**2000**	**2010**	**Annual growth**
Sudlersville	167	211	2.37%
Queen Anne's County	**30,642**	**37,604**	2.07%
Average Household Size			
Sudlersville	2.31	2.31	
Queen Anne's County	2.62	2.63	
Average Family Size			
Sudlersville	2.89	2.97	
Queen Anne's County	2.99	3.04	

Source: U.S. Department of Commerce, Census Bureau, 2000 and 2010 Census of Population

As shown below 119 households or about 56 percent of all households were family-households composed of persons related to the householder by birth, marriage, or adoption in 2010. Children were found to be a part of 52 households or about 46 percent of all households (see Table 1-8). The remainder of households was considered to be "non-family households".

Table 1-8: Households 2010

	Children in Household			
Households	**Yes**	**No**	**Total**	**Percent of Total Households**
Family Households	52	67	119	56%
Married Couple Families	33	49	82	39%
Male Householder, no wife	9	5	14	7%
Female Householder, no husband	10	13	23	11%
Non-Family Households	--	77	92	44%
Total households			211	100%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Income and Poverty

Estimated income characteristics for Queen Anne's County were the same as reported for Sudlersville in the source cited in Table 1-9. The Census Bureau estimates that the County's median, mean and per capita incomes were substantially lower than that of the State and more closely approximate the U.S. average over the period 2007 to 2011.

[4] Pew Research Center, http://www.pewsocialtrends.org/2011/04/22/census-2010-household-size-trends/

Table 1-9: Income and Benefits (In 2011 Inflation-Adjusted Dollars)

	Queen Anne's County	Maryland	U.S.
Median household income (dollars)	$48,750	$72,419	$52,762
Mean household income (dollars)	$62,226	$94,020	$72,555
Per capita income (dollars)	$27,857	$35,751	$27,915

Source: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, American Community Survey, Selected Economic Characteristics, 2007-2011Estimates.

Also, according to estimates from the U.S. Census Bureau made for the period 2007 through 2011, the percentage of families and people whose income was below the poverty level in the Town was higher than that of the County, but lower than that of the State or Nation (see Table1-10). Among families people whose income was below the poverty level the incidents of poverty among female householder, no husband present, were the highest of all categories in the Town but well below the average for the other jurisdictions presented.

Table 1-10: Percentage of Families and People Whose Income in the Past 12 Months was Below the Poverty Level

	Sudlersville	Queen Anne's County	Maryland	U.S.
All families	5.10%	4.40%	6.10%	10.50%
Married couple families	0.00%	1.50%	2.30%	5.10%
Families with female householder, no husband present	12.50%	17.20%	17.90%	29.40%
All people	5.10%	6.30%	9.00%	14.30%
Under 18 years	0.00%	8.90%	11.50%	20.00%
18 years and over	6.70%	5.40%	8.20%	12.50%
People in families	4.70%	5.10%	6.60%	11.80%
Unrelated individuals 15 years and over	6.80%	13.90%	19.70%	25.30%

Source: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, American Community Survey, Selected Economic Characteristics, 2007-2011Estimates.

Employment

Of the total population 16 years and over, 172 (74%) were in labor the force (see Table 1-11). Most people of working age commuted by automobile (95%). Mean commuting time was 31 minutes (see Table 1-12).

Table 1-11: Labor Force and Employment Status

Employment Status	Number	Percent
Population 16 Years and Over in Labor Force	234	100%
In Labor Force	172	74%
Not in Labor Force	62	26%
Civilian Labor Force	172	74%
Armed Forces	0	0%
Employed	157	67%
Unemployed	15	6%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Table 1-12: Journey to Work

Commuting to Work	Number	Percent
Workers 16 Years and over	137	100%
Travel Mode		
Automobile (Alone)	116	85%
Automobile (Carpool)	14	10%
Public Transportation	0	0%
Walked	3	2%
Worked at Home	4	3%
Other	0	0%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Occupation and Trades

In Sudlersville, manufacturing, construction, educational/health care/social services and public administration were the leading industry employment sectors in 2010 accounting for 64 percent of all employment (see Table 1-13). Occupations were fairly evenly distributed over all categories with the possible exception of services (see Table 1-14). The vast majority of workers (71 percent) were private wage or salary earners in 2010 (see Table 1-15).

Table 1-13: Industry of Employment

	Number	Percent
Civilian Employed Pop. 16 Years and Over	157	100%
Industry		
Agriculture/Forestry/Fishing/Hunting/Mining	4	3%
Construction	29	18%
Manufacturing	34	22%
Wholesale Trade	3	2%
Retail Trade	13	8%
Transportation/Warehousing/Utilities	12	8%
Information	0	0%

Finance/Insurance/Real Estate/Rental	1	1%
Professional/Scientific/Management/Admin.	2	1%
Educational/Health Care/Social Services	19	12%
Arts/Entertainment/Recreation/Food/Accommodation	11	7%
Public Administration	21	13%
Other Except Public Administration	8	5%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Table 1-14: Occupation

	Number	Percent
Civilian Employed Pop. 16 years and Over	157	100%
Occupation		
Management/Business/Science/Arts	37	23%
Services	23	15%
Sales and Office	30	19%
Natural Resources/Construction/Maintenance	31	20%
Production/Transportation/Material Moving	36	23%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Table 1-15: Class of Worker

	Number	Percent
Civilian Employed Pop. 16 Years and Older	157	100%
Class of Worker		
Private Wage/Salary	112	71%
Government	27	17%
Self-Employed	18	12%
Unpaid Family Workers	0	0%

Source: U.S. Department of Commerce, Census Bureau, 2010 Census of Population

Industry Employment Growth in Jobs

Employment data as reported by the U.S. Bureau of Economic Analysis is not available at the municipal level. The closest approximation is data reported for the surrounding zip code (see Map 1-1).

The U.S. Bureau of Economic Analysis's data indicates that construction establishments were the dominant component of the local economy in the 21668 zip code area in 2011 accounting for nearly a third of all establishments (see Table 1-16). Construction, retail trade, whole trade, and accommodation and food services were three quarters of all establishments in 2011.There were an estimated 216 paid employees for the pay period including March 12, 2011 with a first quarter payroll of $1,693 million.

Table 1-16: Employment by Establishment Types

Industry Sector	Establishments	Percent of Total

Construction	9	32%
Manufacturing	1	4%
Wholesale trade	3	11%
Retail trade	5	18%
Finance and insurance	2	7%
Educational services	1	4%
Health care and social assistance	1	4%
Accommodation and food services	4	14%
Other services (except public administration)	2	7%
Total	**28**	**100%**

Source: U.S. Bureau of Economic Analysis, U.S. Census 2010 Zip Code Business Patterns Analysis

Unemployment

Unemployment rates in Queen Anne's County have historically been lower than that of the State or Nation (see Table 1-17)[5]. The March 2013 unemployment rate indicates that this trend continues, with the County rate at 6.4 percent as compared to that of the State and Nation's 7.6 percent.[6] Since 2005 the unemployment rate in Sudlersville has ranged from 2.7 percent in September 2007 to 9 percent in February 2010. The current unemployment rate for Sudlersville is 6.4 percent in March 2013.[7]

Table 1-17: Historic Unemployment Rates

Year	Queen Anne's County	Maryland	U.S.
1990	3.33%	4.54%	8.30%
2000	3.02%	3.55%	8.00%
2010	7.01%	7.41%	12.83%

Source: U.S. Department of Labor, Bureau of Labor Statistics

[5] Source: U.S. Department of Labor, Bureau of Labor Statistics

6 http://www.bls.gov/ro3/mdlaus.htm, http://www.bls.gov/eag/eag.us.htm

[7] http://www.homefacts.com/unemployment/Maryland/Queen-Annes-County/Sudlersville.html

SECTION 2 - VISION, GOALS AND OBJECTIVES

Vision

Articulating any individual's vision for Sudlersville may be influenced by many factors, including age, education, employment, finances, experiences in other places, etc. Consequently from a collective community perspective, it would be presumptuous to attempt to capture in words the myriad future aspirations of the entire Town population. Instead, the following broad statements are an attempt to capture the basic pragmatic and emotional consensus of townsfolk concerning a vision for Sudlersville. Most all positive envisioning would see Sudlersville as a vibrant community center that:

- provides safe and pleasant neighborhoods meeting the day-to-day needs of its residents;
- enables a strong local economy serving the needs of residents and the surrounding market while also providing employment opportunities for residents;
- provides the basic services and facilities its residents require to protect their health, safety and welfare;
- sensitively fits itself within the surrounding natural environment; and
- never losses site of its heritage.

The following goals and objectives provide broad statements of the Town's policy framework for achieving its vision of the future. Goals and vision express where the Town wants to be in the future. Objectives are targeted actions to move the Town in the desired direction.

Goals and Objectives

The following are the goals and objectives of this Comprehensive Plan. Also included are suggested policies designed to help achieve these goals and objectives. Succeeding sections of this Plan are built upon these premises.

General Goals

1. Concentrate development in suitable areas. Further, we will coordinate our planning activities with the County.
2. Protect sensitive areas from the adverse effects of development and the improper management of resource lands. Development will avoid sensitive areas, or protect them as public open space or with innovative and flexible development regulations.

3. Work cooperatively with the County to encourage it to protect rural resources which affect the environment, setting, character and economies of the Town.

4. Promote stewardship of the Chesapeake Bay and the land and encourage a universal stewardship ethic that guides actions of both the public and private sectors. Stewardship principles will also guide preparation of land use regulations and capital programs, and be promoted through incentives and community volunteerism.

5. Conserve its land, water and other valuable resources through programs and policies that will reduce resource consumption by both the public and private sectors. The Town will promote efficient and pedestrian-oriented patterns of land use, energy saving measures for residences and businesses, and recycling.

6. Encourage economic growth through the policies and recommendations of the Plan and regulatory innovation, flexibility and streamlining.

7. Address funding mechanisms to achieve the preceding Visions. The Town budget, capital improvement program, tax structure and fees will be reviewed and revised where needed to ensure implementation for the Plan and to promote the community's Vision for the future. The Town will pursue appropriate State and Federal grants, forge grant partnerships with the County in areas of mutual interest, review Town capital projects to ensure consistency with the Plan, and encourage State and County capital projects that support the Plan.

Land Use

GOAL: Manage land use so as to maintain and improve the community character and quality of life for all residents.

- Objective #1: Encourage compatible growth and reinvestment in properties by facilitating infill and redevelopment within the Town to accommodate future population.

- Objective #2: Protect existing residential neighborhoods from incompatible uses.

Land Use Policies

- The Comprehensive Land Use Plan represents Sudlersville's official policy for land use, development, and growth; shall be the basis for the Town's Comprehensive Zoning Map and other implementation tools; and shall guide inter-jurisdictional coordination activities with the County.

- Development shall avoid designated sensitive areas and employ best management practices to minimize adverse impacts on water quality. Use of resource lands including agriculture,

forestry and mining shall employ best management practices to minimize adverse impacts to water quality and habitat.

- Approvals of subdivision of land, rezoning, special exceptions, variances and capital expenditures shall be consistent with the Land Use Plan.

- Water and sewer service, transportation and other community facilities will support the land use pattern indicated on the Land Use Plan.

- The timing and pace of new development will be managed to be compatible with the Town's ability to provide adequate public services and to ensure that the character of the Town is protected.

- Sudlersville shall encourage and support County policies that channel appropriate types, scales and mixtures of growth to the Town.

- The Town shall give priority to neighborhood, business and commercial projects that have a reasonable expectation of being a catalyst for revitalization in designated areas of the Town.

- The Town shall establish agreements with the County regarding the phasing and funding of growth and infrastructure investments in the vicinity of the Town.

- The Town shall discourage inefficient use of land planned for development and shall encourage the County to prevent sprawl residential development and resource-consuming patterns of growth immediately outside of Town.

- The Town shall coordinate with and encourage the County to locate schools, other community facilities and community services within the Town.

Municipal Growth and Community Facilities and Services

GOAL: Ensure development is consistent with the overall growth goals, objectives and policies of the Comprehensive Plan.

GOAL: Provide adequate public facilities and services to ensure the health, safety and welfare of Town residents.

Objectives

- Objective #1: Grow the Town in accordance with the adopted Comprehensive Plan, particularly with regards to plans for municipal annexation and implementation.

- Objective #2: Promote controlled and compact development patterns that reflect good design practices, make efficient use of available land, and locate development where public facilities, services, and amenities can be provided in the most efficient manner.

- Objective #3: Analyze the impacts of new growth and development on Town services, facilities, and infrastructure and insure a positive return on any public investment.

- Objective #4: Maintain good inter-jurisdictional coordination and cooperation with Queen Anne's County.

- Objective #5: Update the Town's development regulations as required to implement recommendations of this Plan.

- Objective #6: Adopt standards and guidelines that reflect the Town's expectations concerning for development.

- Objective #7: Ensure that all current and future residences and businesses have adequate public services and facilities necessary to protect the public health, safety, and welfare to promote an attractive environment in which to live and work.

- Objective #8: Plan for the appropriate expansion of the Town's water and wastewater systems.

Policies

- The Town will encourage and facilitate development in existing water and sewer service areas and on vacant and underutilized parcels through regulatory innovation, flexibility and streamlining.

- Redevelopment and re-use of vacant buildings will be encouraged and facilitated.

- New development and economic growth will be directed to lands served by or programmed for water and sewer service and away from sensitive areas.

- New development shall be compatible with the character of the Town. New development abutting existing neighborhoods shall provide continuity for vehicular and pedestrian movement by maximizing connectivity to the extent consistent with good site planning.

- Larger developments, if approved, will be phased in sections that make economic sense yet do not strain the capacity of existing infrastructure. Sewer capacity must be maintained at levels sufficient to meet the potential requirements of existing lots of record and to support infill and redevelopment.

- Very large developments may require the upgrade and expansion of sewer capacity or the creation of public water services. If required, these infrastructure improvements will be bonded and constructed to the Town's specifications at the developer's expense.

- Development of appropriately scaled and compatible mixed uses shall be encouraged to reduce dependence on automobile travel and the need for road expansion and new parking lots.

- The Town will encourage the County to protect sensitive areas and rural resources. Of primary importance for protection are farm and forestland along entrance corridors of the Town, the stream floodplain and adjacent steep hillsides.

- The Town will encourage the County to protect rural character, support agriculture and minimize forest loss.

- The Town shall establish a maximum lot size in certain zoning districts to prevent inefficient use of land and public infrastructure investment, consistent with the Town's physical character.

- To the maximum extent practical, new community facilities such as schools, parks and libraries will be located within or immediately adjacent to residential areas of the Town so that citizens may easily walk to facilities.

- Through coordination and attendance at public workshops and proceedings, the Town shall participate in land use and transportation planning and decision making of the County in order to further the policies of the Comprehensive Plan. Participation shall include review of proposed plans and ordinances; development projects which are adjacent to or near Town borders.

Annexation Policies

- The Land Use Plan shall guide the location and general land uses for annexed properties.

- Land considered for annexation shall be adjacent to existing developed areas.

- Land to be annexed by the Town shall be developed at a density, scale, and character compatible with the existing Town and this Comprehensive Plan.

- Soil suitability for development will be considered when annexation is proposed. Additional soil studies or other technical evaluations may be required by the Planning Commission or the Town Commissioners to properly evaluate annexation proposals for their development suitability and appropriate proposed zoning.

- The Town shall encourage the County's Comprehensive Plan to designate areas identified in the Town's annexation plan as suitable for municipal land uses and densities so as to avoid the need for County waivers under the State annexation statute.

Infrastructure Policies

- The location, timing and pace of new development shall be compatible with the Town's ability to secure and program capital funds to maintain and provide sewer, water, transportation and community services.

- The Town will review its Comprehensive Plan map, relevant portions of the County's Water and Sewerage Plan and existing Town infrastructure to identify areas where community facilities need upgrading, added capacity or extension. Priorities will be established according to need and recommendations of the Plan and provided for as feasible in the Town's Capital Improvement Program.

- Subdivision applications and other development requests will be reviewed for adequacy of sewer and water infrastructure. Approvals may be deferred, phased in, or conditioned upon the availability if adequate infrastructure and treatment capacity.

- Development proposals for projects to be built within our identified growth area that require a community water system, should plan and size such systems such that they can ultimately be expanded to tie in with a Town-wide water system at minimal public expense.

- Subdivision applications and other development approvals will be reviewed for adequacy of streets and roadways. Approvals may be deferred, phased in, or conditioned upon the availability of adequate capacity.

- Vehicular, biking, and hiking linkages to community facilities within the Town and to major activity centers beyond the Town shall be encouraged in the review of development proposals.

- Developer-constructed infrastructure shall meet Town standards and be inspected and approved by the Town prior to final acceptance.

- An adequate "buffer" capacity shall be maintained in the Town's sewer system to accommodate wet weather flows and the needs of existing Town residents, especially those who have paid for but not yet utilized capacity.

- Developers of large scale projects that will exceed the "buffer capacity" established by the Town Commissioners may be required to replace the capacity they consume. If the required capacity expansion is relatively small and/or the cost for replacing capacity is not economically feasible, then the Commissioners may require the developer to pay a capacity fee proportional to the actual cost of replacing capacity based on technologies and estimated costs suggested through the technical assistance of the State of Maryland or other professional sources.

Water Resources

GOAL: Provide an adequate and safe potable water supply to serve current and future residents of Sudlersville and to protect water quality in the watershed.

Objectives

- Objective #1: Protect an adequate and safe potable water supply to serve the residents of Sudlersville.

- Objective #2: Take steps to restore and protect water quality and contribute toward meeting water quality regulatory requirements in rivers and streams in the Chester River Watershed. This will require addressing current water quality impacts as well as future impacts from land development and population growth. This will also require coordination among all jurisdictions in the watershed.

- Objective #3: Protect sensitive habitats in the watershed.

- Objective #4: Work with Queen Anne's County and State agencies to develop watershed planning and management guidelines that relate land use and development to their impacts on water resources.

- Objective #5: Develop town-wide water conservation methods and policies and encourage innovative technologies for stormwater management.

Transportation

GOAL: Ensure the safe and efficient movement of people and goods.

Objective

- Objective #1: The safe and efficient movement of people and goods throughout Town shall be maintained and enhanced, and particular emphasis shall be given to facilitating pedestrian travel and other alternatives to the automobile.

- Objective #2: Integrate land use and the street and highway networks to provide for the logical continuation and improvement of existing streets and highways.

- Objective #3: Minimize the adverse effects of vehicular traffic on local residential streets.

- Objective #5: Maximize the capacity, safety, and efficiency of the existing street and highway system.

- Objective #6: Improve pedestrian safety by providing safe routes for pedestrians and non-motorized transport.

Policies

- The transportation system plan shall address all applicable modes and shall consider the land use and transportation plans for adjacent areas outside of Town.

- New streets and sidewalks shall be designed to fit in with existing neighborhoods and shall facilitate circulation within the community.

- Street patterns, as described in the Transportation Element, will be used to define access to land and are recognized as important public spaces whose layout and character are of major importance in achieving the land use goals, objectives, and policies of this Plan.

- To the maximum extent possible, the transportation system should provide options to help separate through traffic from local traffic and maintain the paramount importance of pedestrian safety.

- Where lacking, existing streets shall be improved with walkways to better accommodate pedestrian and bicycle movement.

- Where feasible, new development shall include sidewalks or trails that provide linkages to existing path systems in Town and conduits to nearby public buildings, commercial neighborhoods and open space.

- Both public and private development shall incorporate accessibility and safety for pedestrians and the disabled, and shall include, whenever possible, benches and other pedestrian amenities at strategic locations.

- Where feasible, transit services shall be encouraged to minimize dependency on the automobile and to serve those who cannot drive or do not own automobiles. The Town shall participate in County and region-wide transit service programs.

Housing and Community Design

GOAL: Safe, decent, and affordable housing for Town residents.

GOAL: Community design based on sound place-making principles.

Housing Objectives

- Objective #1: The Town will encourage and provide opportunity for development of safe and affordable housing for its residents.

- Objective #2: Encourage investment in existing housing where needed to improve quality.

- Objective #3: Encourage and facilitate replacement of substandard dwelling units with units meeting current building and housing code standards.

- Objective #4: Enforce building and housing code standards.

- Objective #5: Articulate community design aspirations through design guidelines.

- Objective #6: Find a balance in community design, environmental protection and resource conservation which results in a superior outcome.

- Objective #7: Encourage a community wide rehabilitation effort to upgrade the structural condition of all buildings and to remove derelict structures.

Community Design Objectives

- Objective #1: Protect and enhance the Town's physical, natural, and socio-economic characteristics that contribute to the quality of life valued by residents.

Housing Policies

- At a minimum, the Town will strive to provide its "fair share" of affordable housing opportunities in the region.

- Housing affordability will be promoted by flexible zoning, such as mixed use zoning and planned unit development options; zoning incentives, such as density bonuses for providing housing in a certain price range; and by facilitating the creating of accessory housing in certain neighborhoods.

Community Design Policies

- The Town shall retain and shall encourage the County to retain a clear and well-defined edge where growth and development in and around the Town ends and rural areas begin.

- Transportation projects shall be evaluated for impacts on local street traffic and on existing and planned land uses. Transportation projects shall not physically divide or otherwise adversely affect established residential and commercial neighborhoods.

- The Town will encourage high quality and context sensitive commercial development.

- Large residential and commercial lots shall be discouraged.

- Yard setbacks, bulk standards and height restrictions that retain or promote a desirable community character shall be established.

- Site designs that retain or create a pedestrian-friendly community shall be encouraged and facilitated.

- Where possible, all redevelopment and new development shall retain the pattern, scale and character of the surrounding neighborhood.

- Cul-de-sacs will be avoided, except where they are the only feasible means to prevent disturbance of sensitive areas.

- Street trees and trees in public open spaces shall be retained. Landowners shall be encouraged to plant additional trees on their property.

- The scale, character, number and location of signs shall not be detrimental to the Town's character.

- The review of development proposals will place priority on protection of historic and culturally significant buildings, monuments and spaces, which contribute to the character of the Town.

- The Town shall retain and acquire adequate public open space to enhance the Town's character and quality of life.

- Town boundaries and gateways, as identified on the Plan Map, will be enhanced.

- Connections to the rural landscape will be maintained by encouraging protection of farm and forestland outside the County-Town boundary.

- New construction shall be architecturally compatible with existing structures so that the character of Sudlersville can be maintained.

Economic Development

Objective

- Objective #1: The Town will encourage retention of existing businesses, promote location of certain new businesses in Town, provide for traditional neighborhood businesses, and encourage business and commercial revitalization.

Policies

- Regulations will be streamlined and flexible to encourage economic growth projects in Town.

- Large scale regional "big box" or highway oriented retail commercial developments are not in keeping with the goals and objectives of this Plan and are discouraged.

- Convenience franchise stores may be permitted, but their design shall be so modified as to blend in with the Town's existing character. Parking will be in the rear of buildings and well landscaped, including shade trees.

- Businesses that support the Town's resource-dependent economies, such as the sale of agricultural goods, nursery products, and lumber, shall be encouraged to remain or move to the Town through regulatory flexibility, incentives, and promotional efforts.

- Traditional business activities that support residential areas shall be encouraged as part of the Town's redevelopment efforts. Low impact businesses, such as catalog sales, telecommuting, and other forms of home-based businesses shall be encouraged through revisions to the Town's Zoning Ordinance.

Resource Conservation

GOAL: Preserve and protect the natural resources and features of Sudlersville and its surrounding environs to ensure a balance between development and the need to protect indigenous resources and/or features.

Objective

- Objective #1: To protect and enhance the Town's air and water quality, important habitats and other natural features that contributes to the Town's quality of life.

- Objective #2: Require development design be done in a manner that minimizes adverse impacts on significant natural features and other resources.

- Objective #3: Encourage energy conservation, "green building" design, and low-impact development.

- Objective #4: Work with Queen Anne's County and the State of Maryland to develop appropriate strategies for the enhancement and protection of green infrastructure.

- Objective #5: Minimize adverse impacts on water quality.

- Objective #6: Conserve fish, wildlife, and plant habitats.

Policies

- The Comprehensive Plan designates land with any of the following features as sensitive areas:
    - Steep slopes (land having more than 15 percent grade).
    - Perennial streams including banks and a 100-foot buffer.
    - Intermittent streams and their banks and a 50-foot buffer.
    - The Town's wells and a 100-foot buffer around each well.
    - Areas within the 100-year floodplain extending beyond stream buffers.
    - Habitat of threatened and endangered species listed by the State's Natural Heritage Program.
    - Non-tidal wetlands.

- Development will avoid sensitive areas. Development regulations including yard setbacks, lot coverage and height will be revised to provide flexibility for avoiding development in sensitive areas.

- Flexibility in lot size standards will be used so that developers can protect sensitive areas.

- Review of site plans for proposed development will ensure that all reasonable measures are taken to protect sensitive areas both during and after development.

- The Town will maintain maps of streams and buffers, well fields, floodplains, habitat areas and wetlands for reference by landowners and developers.

- When it is not possible for development to avoid sensitive areas, such as roads crossing over floodplains or stream corridors, developers will use development techniques that minimize impacts and shall otherwise mitigate adverse impacts.

- In redevelopment areas, buffers will be re-established in natural vegetation to the extent practical.

Inter-jurisdictional Coordination

Objective

- Objective #1: To ensure that the County and State governments are aware and supportive of the Town's Comprehensive Plan, particularly with regard to County and State plans, capital projects, funds, permits and technical assistance.

Policies

- When the Town's Comprehensive Plan is revised in the future, the process shall include meetings with relevant County and State officials.

- The Town shall continue to work with the County to accomplish strategic planning with regard to annexation potential.

- The Town shall provide notices to the County of proposed actions within the Town which may be of interest to the County. The Town shall work with the County to arrange reciprocal notification of nearby proposals that may be of interest to the Town.

- The Town will cooperate with the County and State in the implementation of the Phase II Watershed Implementation Plan.

SECTION 3 - LAND USE

Introduction

Under the provisions of the Maryland's Economic Growth, Resource Protection, and Planning Act of 1992 (Planning Act of 1992), all regulations (e.g., zoning) that are used to implement comprehensive plans must be consistent with the recommendations and policies of the plan. In addition, State and local funding decisions must be consistent with the local plan and the twelve State visions.

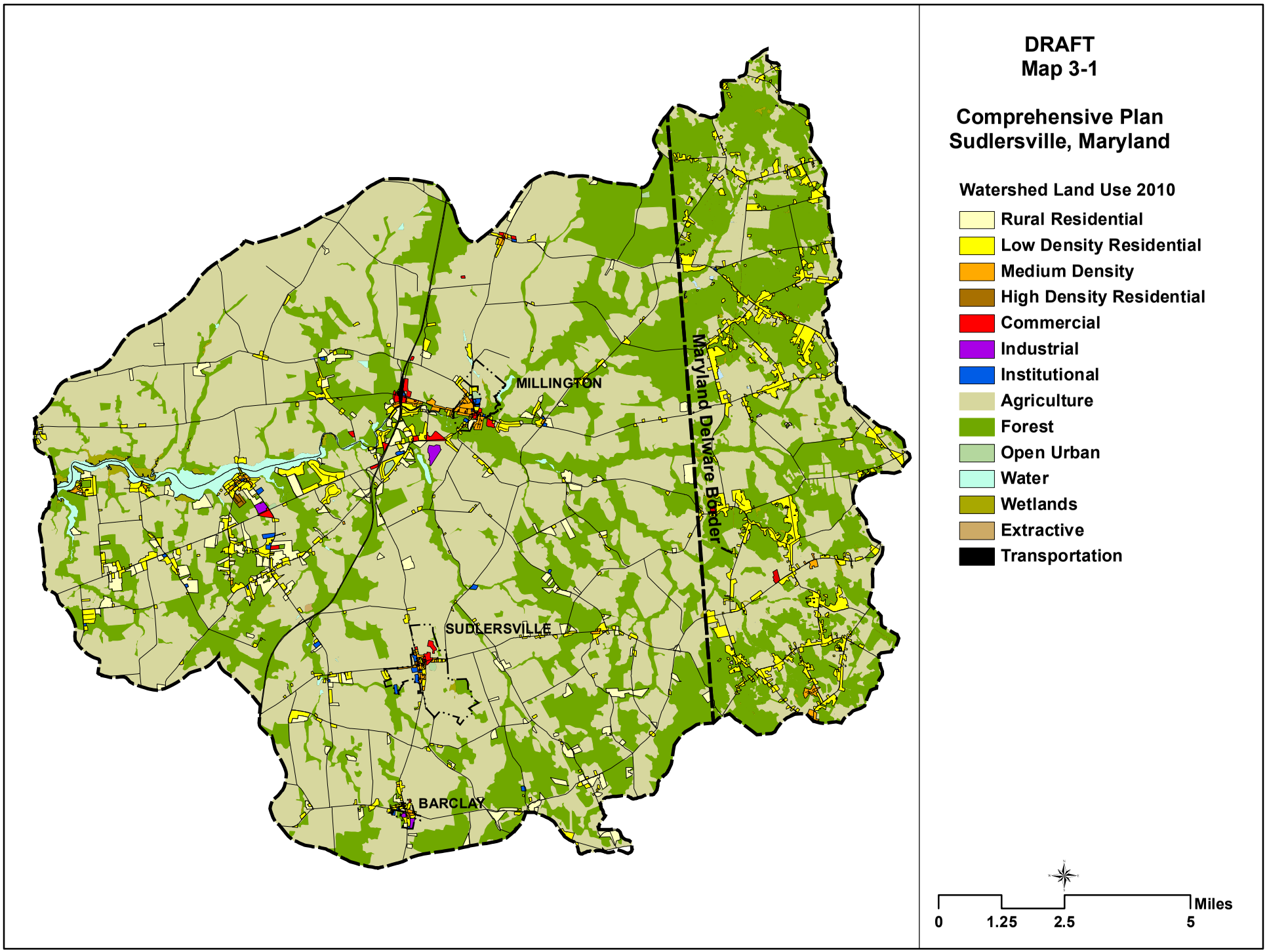
As stated in the old Article 66B, the plan should contain, among other minimum elements, a land use plan which "proposes the most appropriate and desirable patterns for the general location, character, extent, and interrelationship of the uses of public and private land, on a schedule that extends as far into the future as is reasonable."[8] Beyond these minimum requirements, the plan must be responsive to Maryland's growth management requirements as established Maryland's "Smart Growth" initiatives, including in the Planning Act of 1992, the Neighborhood Conservation and Smart Growth Areas Act of 1997, 2006 Maryland House Bill 1141, and the Smart and Sustainable Growth Act of 2009.

The Land Use Plan also must reflect careful consideration of factors that influence how land is used to insure minimal conflict. Public policy concerning municipal growth, community facilities and services, transportation infrastructure, resource conservation, housing and community design, and fiscal management must be balanced against such things as existing land use, expectations created by existing zoning, existing and future private investment and market forces. The Land Use Plan element defines "most appropriate and desirable" land use pattern for the Town and what the Town considers as "smart growth" within the guidance provided by the State and tempered by the other factors that influence land use.

Existing Land Use

Recent land use viewed from a watershed perspective establishes a basis for examining the potential implications of Sudlersville's existing and planned development on water quality and natural resources in the drainage area. Sudlersville is a little over one percent of the Maryland portion of the Upper Chester River Watershed (the Watershed). Its corporate area, approximately 964 acres, is about 0.85 percent of the Watershed (approximately 113,760 acres) which includes land in Kent and Queen Anne's Counties in Maryland and Kent County, in Delaware.

[8] Article 66B §3.05.(a)(4)(ii)



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In 2010 the dominant land use/land cover in the Maryland portion of the Watershed was agriculture and forest (see Map 3-1). Together these two land use/land cover categories encompassed over 91 percent of the land area in the Watershed. Delaware land use/land cover data for 2007 showed a similar dominance of agriculture and forest (over 90 percent). Development including residential, commercial, industrial and institutional land uses was slightly over six percent of the Watershed (see Table 3-1).

Table 3-1: Watershed Land Use

Land Use/Land Cover	Acres	Percent of Total
Development	5,457	6.2%
Agriculture	54,335	61.8%
Forest	26,349	30.0%
Wetlands	414	0.5%
Water	1,386	1.6%
Total	**87,940**	**100.0%**

Source: 2010 LU/LC for Maryland, http://planning.maryland.gov/OurWork/landuse.shtml
Source: 2007 LU/LC for Delaware, http://stateplanning.delaware.gov/info/lulcdata/2002_lulc.shtml

Focusing on the most recent existing land use in the corporate area provides a perspective on how the Town has developed over time and reveals opportunities for infill and redevelopment. Not surprisingly, agriculture was the dominant land use within the corporate area as well, followed by public and semi-public uses, i.e., State, County, municipal, religious institution, fire department and other non-profit organizations properties (see Map 3-2 and Table 3-2). The "agriculture" land use title is slightly misleading when considering land use within the corporate limits. Although the land may have been in agriculture in 2010 and may be continuing in agriculture use, in reality these properties are more appropriately considered infill development sites and represent a significant portion of the Town's potential growth capacity.

Table 3-2: Land Use 2010

Land Use	Acres	Percent
Low Density Residential	57.8	6.0%
Medium Density Residential	2.3	0.2%
Commercial	63.6	6.6%
Agriculture	558.9	58.0%
Public/Semi-public	253.4	26.3%
Vacant	10.9	1.1%
Right of Way	17.1	1.8%
Total	**964.1**	**100.0%**

Sources: Maryland Property View©, Queen Anne's County Department of Planning and

Zoning, Peter Johnston & Associates, LLC

Current Zoning

Consistency between the recommendations of the Comprehensive Plan and its implementation provisions is a requirement of the Land Use Article. For this reason consideration of existing zoning is a factor in planning for future land use. Zoning creates expectation for property owners, expectations that must be taken into account when setting the Comprehensive Plan's land use policies and recommendations.

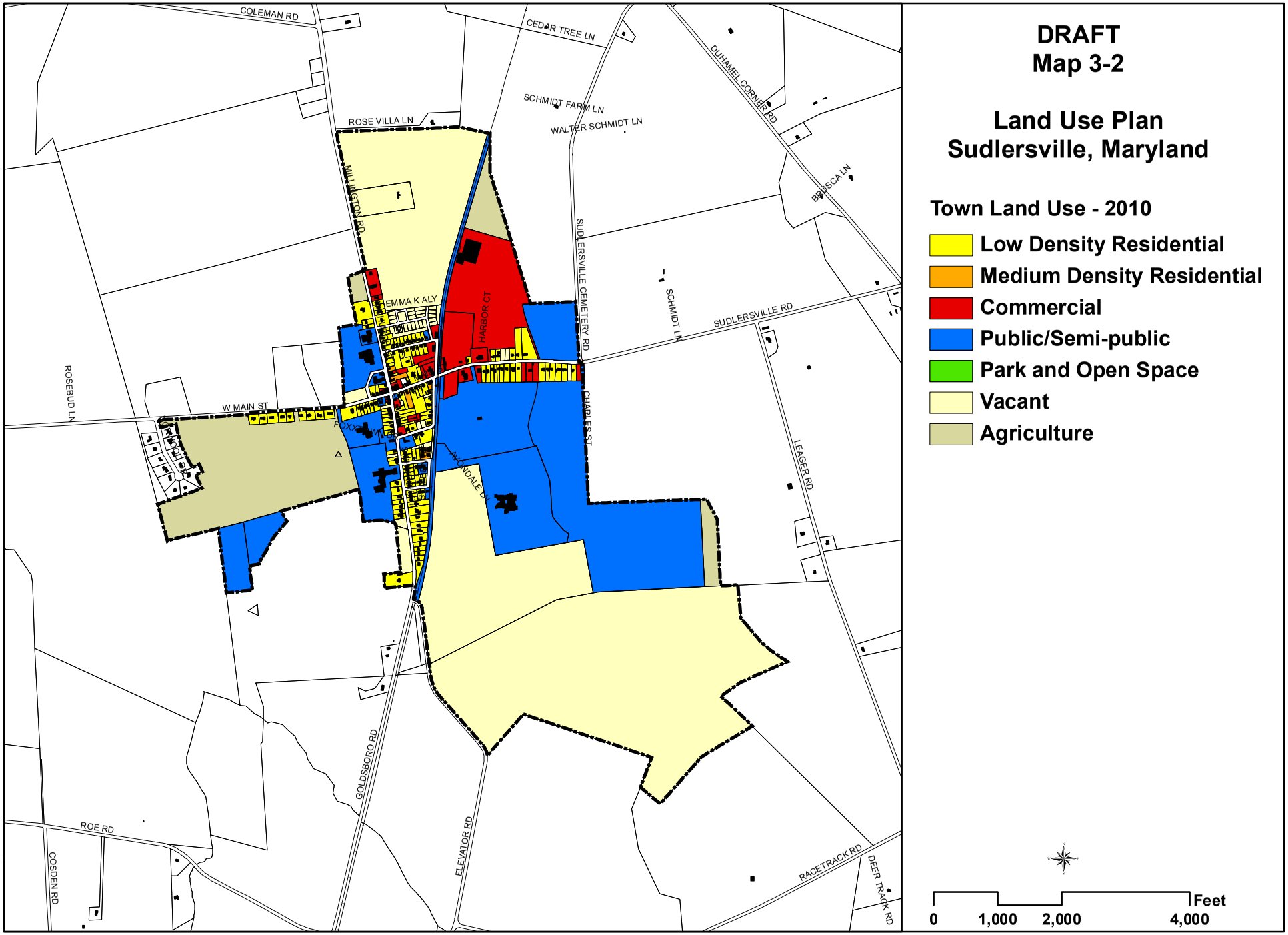
Sudlersville is currently divided into four base zoning districts, supplemented by a commercial floating zone district (see Map 3-3). Each of these districts has a stated purpose in the current land use scheme for the Town summarized as follows:

> TCC: Town Center Commercial - The TCC District is intended to preserve, protect, and enhance the area considered to be the historical core of Sudlersville. Land uses are a mixture of residential and commercial including a variety of intensities in site utilization. The intent of this district is also to legitimize existing structures and uses and to minimize instances in which existing development is classified as "nonconforming."
>
> MU: Mixed Use - The MU District is intended to provide for higher intensity non-residential uses in the existing light industrial and heavier commercial areas of Town and in some adjacent potential annexation areas. A limited amount of higher density residential uses are also appropriate. Mixed-uses are encouraged. It is the further intent of this district to legitimize existing structures and uses and to minimize instances in which existing development is classified as "nonconforming." Commercial uses existing as of the date of adoption of this Ordinance are expressly deemed consistent and compatible with the purpose of this Ordinance.
>
> TR: Town Residential - The TR District is intended to preserve and protect the Town's traditional primarily residential neighborhoods and allow certain non-residential uses that are compatible with residential character; and to encourage and facilitate redevelopment and infill that is compatible in use, scale, and impact with residential uses and the existing pattern of buildings, streets and blocks.
>
> SF: Single-Family Residential - The SF District is to promote harmonious living in single family residential dwellings with allowable low impact home occupation uses.
>
> CFZ: Commercial Floating Zone - The CFZ district is to preserve, protect and enhance the commercial land uses existing in Sudlersville on the date of adoption of the Zoning Ordinance. The CFZ district is intended to provide for small scale low intensity commercial development in scattered locations in the traditional predominantly single-family residential areas in town. The small scale of the commercial development makes it

compatible with the surrounding residential uses and legitimizes existing structures and uses.

The TCC, TR and CFZ zoning districts permit a broad range of residential unit types, including detached single family, two-family, attached and multi-family units. Minimum lot area requirement in these districts (5,000 square feet) although permitting densities well within the 3.5 dwelling units per acre minimum recommended in Priority Funding Areas (PFA) is well below the average for improved residential lots in the Town. Less than two percent of improved residential lots are 5,000 square feet or less. Over half of the improved residential lots are between 8,200 and 14,000 square feet. An average a density of 3.5 dwelling units per acre can be achieved with minimum lot sizes in the 7,000 to 8,000 square foot range and may be more consistent with the existing character of residential areas in the Town.

One potential area of conflict is with the SF district. This zoning classification limits development by-right to detached single family residential. Multi-family, townhouse and senior housing are permitted by special exception. Considering the large undeveloped tracts in this zoning classification planned for future growth along with the land use, municipal growth and community design objectives of the Comprehensive Plan, the Town should consider adopting zoning provisions that allow for master planned communities in these areas.



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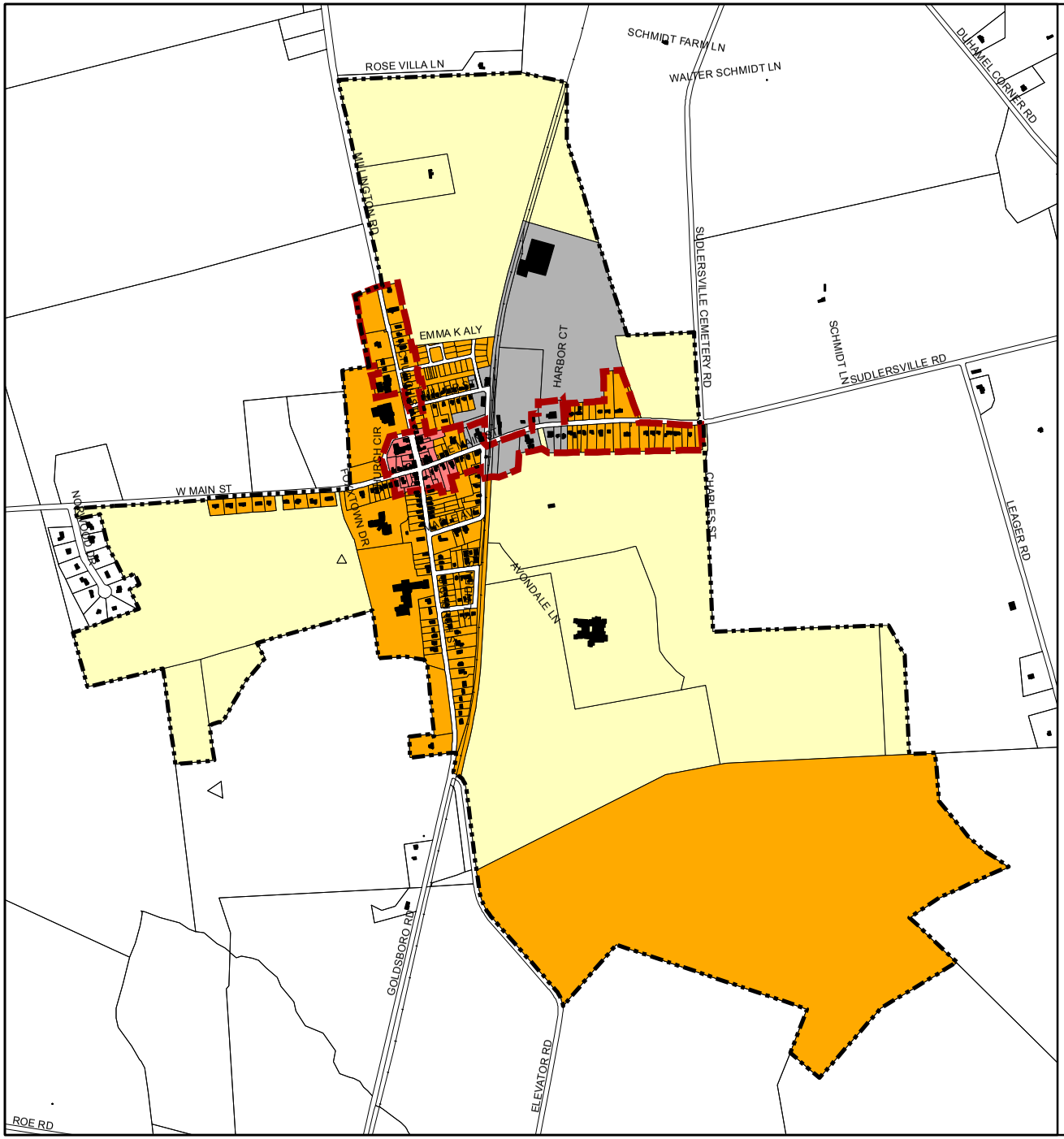

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Map 3-3

Comprehensive Plan
Sudlersville, Maryland

Existing Zoning

- SF - Single Family Residential
- MU - Mixed Use
- TR - Town Residential
- TCC - Town Center Commercial
- CFZ - Commercial Floating Zone
- Corporate Boundary

0 250 500 1,000 Feet

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Land Use Plan

The "Land Use Plan" is a primary component of the Sudlersville Comprehensive Plan. It describes the preferred land use characteristics for various areas of the Town that are deemed to be consistent with the Town's vision and support land use and municipal growth goals, objectives and policies. These land use planning areas provide the basis for decisions concerning such things as land use regulations and public facilities. Where already developed the land use is one factor that helps define the existing character of the Town.

The Town's Land Use Plan (Map 3-4) includes seven land use categories. Table 3-3 summarizes the acreage in each land use category. With the exception of the Planned Growth category the land use designations reflect the current developed character of each area. Strategies to encourage maintenance of existing properties and facilitate appropriate infill and redevelopment will apply in these areas. Strategies for the Planned Growth areas emphasize integrating the new with the existing.

Table 3-3: Land Use Plan Summary

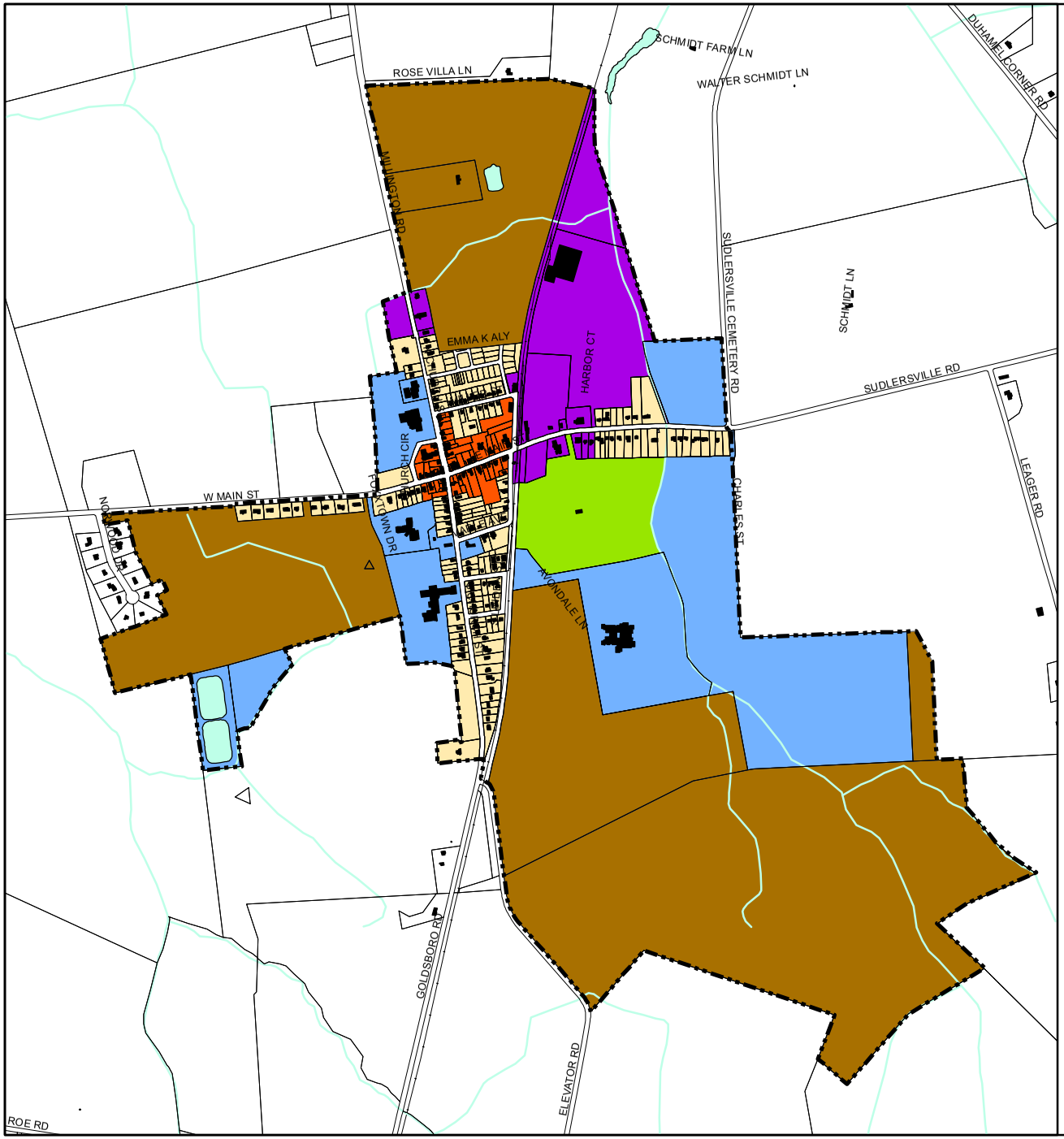
Land Use Category	Acres	Percent
Commercial	11	1%
Industrial	59	6%
Town Center	23	2%
Residential	60	6%
Institutional	203	21%
Park and Open Space	129	13%
Planned Growth	450	47%
Transportation	28	3%
Total	**964**	**100%**

Source: Peter Johnston & Associates

Neighborhood Conservation

The Neighborhood Conservation land use planning area encompasses established residential neighborhoods in the Town. These are areas primarily characterized by detached single family dwellings at low densities. Average lot size is 16,250 square feet or about 0.37 acres and the net residential density is slightly more than two dwelling units per acre.

There are 184 parcels in this planning area, including 34 of which are vacant. The planning area has capacity for approximately 42 additional units.



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Map 3-4

Land Use Plan
Sudlersville, Maryland

Planning Areas

- Neighborhood Conservation
- Town Center Mixed Use
- Mixed Use/Employment
- Public/Semi-public
- Park/Open Space
- Planned Growth
- Corporate Boundary

0 250 500 1,000 Feet

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A primary objective in Neighborhood Conservation areas is to maintain the existing stable residential neighborhoods and property values. Development regulations for these residential areas should reflect the existing development pattern in the neighborhoods, e. g., lot sizes, yards, parking arrangements, and architectural styles, and ensure that infill and redevelopment is consistent with the existing character. At the same time, development standards should be established to minimize non-conforming situations. Context sensitive infill and redevelopment on vacant and underutilized properties should be encouraged.

Approximately 146 units or about 60 percent of the units in this planning area are within a comfortable (five minute) walking distance of the Town Center (1/4 mile). Of course, whether or not residents actually walk to the Town center is a function of pedestrian qualities (sidewalks, safety, etc.), the land uses or activities that attract, and the quality of the walking experience (e.g., shade, interesting textures, opportunities for social interaction).

Another objective should be to encourage alternative modes of travel within the Town. Strategies for improving pedestrian and bike access to the Town Center, schools, municipal and recreation facilities and other places where residents may travel may include sidewalk improvements and street tree planting to enhance the pedestrian experience.

Town Center Mixed Use

The Town Center Mixed Use planning area encompasses 52 parcels and includes a mix of residential, commercial, public, and semi-public uses. Commercial uses as classified by the Department of Assessment and Taxation include five store, four warehouse, three office, two bank, and two restaurant establishments and one industrial establishment. There are 22 residential units and eight vacant parcels in the planning area. Average lot size is about 11,850 square feet or slightly more than a quarter acre.

This current mix of uses and the traditional scale and type of architecture reflects the essential existing character of the Town and is important to retain. In addition to maintaining the existing commercial uses that serve the surrounding neighborhoods, the Town Center Mixed Use is an area where the Town intends to permit additional, compatible town-scale, neighborhood commercial uses provided these uses are located, designed, and operated in a manner sensitive to nearby residential uses. Development regulations and ordinances should recognize the Town businesses are essential to the economic well-being of Sudlersville and should allow them every opportunity to grow and prosper.

Mixed Use/Employment

The Mixed Use/Employment land use planning area category includes a mixture of commercial and light industrial establishments. This planning area provides for higher intensity non-residential uses such as light industry and heavy commercial, some of which provide

employment opportunities for local residents. A primary objective for these areas is to insure regulations to protect health and safety of adjacent properties are applied, but are flexible enough to accommodate existing uses and encourage new uses, including establishments using emerging technologies.

Public/Semi Public

This planning area includes land owned by Sudlersville, Queen Anne's County or non-profit organizations. With one exception, these properties area expected to continue in the current use within the planning period.

Queen Anne's County owns a 94 acre parcel on the eastern edge of the Town with no planned future use. A portion of this property is noted as a "Municipal Comment" area under the Priority Funding Area classification scheme. This means the area is a locally designated Priority Funding Area (PFA) but does not meet State criteria because the area does not have existing public or community sewer systems and the average residential density of is less than 2.0 dwelling units per acre.

Park and Open Space

The planning area category includes a 36 acre park owned and operated by Queen Anne's County. The park includes over a mile of trail, tennis and basketball courts, 2 ball fields, a field sports area, horseshoe pits, a tot lot, rest rooms and a pavilion.

Included in open space is a 92 acre parcel that was required under the terms of the Queen Anne's County Zoning Ordinance at the time the Norwood Estate subdivision was approved. This parcel is deed restricted and can only be used for the following purposes:

- Passive recreational uses which involve the maintenance of only negligible impervious surface, such uses including arboretums, hiking, nature areas, wildlife sanctuaries, public and private parks, garden plots and beaches.

- Farming, dairying, pasturing, agriculture, horticulture, floriculture, viticulture, animal and poultry husbandry, but not any packing, treating or storing of produce or the business of garbage feeding of hogs or other animals, the raising of such animals as rats, mice, monkeys and the like for use in medical or other test or experiments.

- Forestry, including commercial logging operations, clearing or destruction of forested or woodland areas, selective cutting or clearing for commercial purposes, clearing for agricultural or other prospective land uses, clearing of vegetation.

- Nurseries which involve the sale of plants grown on the open space area, as well as accessory items (but not power equipment such as gas or electric lawnmowers and farm implements) directly related to the care and maintenance of such plants (including clay pots, potting soil, fertilizers, insecticides, hanging baskets, rakes and shovels).

None of the uses outlined above are currently permitted under the terms of the Sudlersville Zoning Ordinance. If the Town wants to see agriculture uses on this property, the Zoning Ordinance should be amended to include an agriculture district that allows some or all of the permitted uses enumerated in the deed.

Planned Growth

The Planned Growth area includes four parcels ranging in size from nine to 240 acres and is nearly half the corporate area. These properties are currently zoned SF, Single Family Residential. This zoning classification only permits detached single family dwellings by right and townhouse units and senior housing by special exception. Minimum lot size is 10,000 square feet. Of the total area (+/-542 acres) only about 188 acres are included in the Town's Municipal PFA. The balance, 354 acres are classified as a "PFA Comment" area. This means that the area is not served by the Town's sewer system and does not have an average density of a least 2.0 units per acre.

Future Development Principles

The following are the Sudlersville's guiding principles for future growth:

- Preserve and maintain our high quality of life.
- Protect the overall rural character
- Limit residential growth to no more than 15 percent of the existing population per year.
- Locate new growth within the Priority Funding Area (PFA).
- Encourage infill and redevelopment.
- Require high standards for all new development.
- Coordinate transportation infrastructure with new development.
- Integrate new development into the Town through a series of roadways, sidewalks, bike lanes, and other connections, create a sense of continuity from one area to the next.
- Protect the environment.

- Provide a mix of housing types that meets the needs of the people who work in the area while maintaining the appropriate architectural size, style, density and consistency with the historic style of the town.

- Improve the local and regional economy.

SECTION 4 – COMMUNITY FACILITIES AND SERVICES

This element of the Comprehensive Plan examines existing community facilities and services. Community facilities and services provided by the Town of Sudlersville and other government agencies help ensure the health, safety and welfare of existing and future populations. In the planning context, the objective is to anticipate demand in order to insure that adequate community facilities and services are available when needed.

Preparation of a Community Facilities element in the Comprehensive Plan is a preliminary step in addressing supply and demand for community facilities and services including education and recreation facilities, police and emergency services, and water and sewer services. Facilities related to transportation are discussed in Section * Transportation. Section 5, Municipal Growth addresses demand for facilities and services associated with potential growth scenarios in an attempt to identify when and how much addition facility and service capacity will be required to meet the Comprehensive Plan's growth objectives.

Town Government

Sudlersville is governed by a Commission consisting of five Town Commissioners, one of which acts as president. Commissioners elected for terms of three years or until the succeeding Commissioner is sworn in and assumed the duties. The Commission passes ordinances as allowed under the Constitution and laws of the State of Maryland or their charter necessary for the good government of the town; for the protection and preservation property, rights, and privileges; for the preservation of peace and good order; for securing persons and property from violence, danger, or destruction; and for the protection and promotion of the health, safety, comfort, convenience, welfare, and happiness of the residents of the town and visitors.[9] The Town Commissioners regularly meet on the 1st Wednesday of the month.

Water Supply

Starting in 2006 Sudlersville installed a community water system, aided in large part by the county's need for water for the two existing schools and for the Foxxtown Senior Housing project, which opened in the fall of 2008. Under a joint agreement providing for partial reimbursement from developers, two high capacity wells capable of pumping 300 gallons per minute (GPM) each and a water treatment facility plus a 12 inch water main under Church Street from the Town Hall to the Middle School were constructed. The water system which included treatment to reduce arsenic was placed on-line in 2007 with a 12-inch water main extending from the water treatment plant (located next to Town Hall), north along Church Street (Route 313) to

[9] Charter of The Town of Sudlersville, Queen Anne's County, Maryland, Section 24–10.

approximately Miller Street. The Town's two wells are about 200 feet deep and draw water from the Aquia aquifer.

A subsequent project that extended water service to all town residents was completed in 2011 This project looped the system of 8 to 12 inch mains and included two inch service connections, fire hydrants and radio read meters. It also included construction of a 500,000 gallon elevated storage tank with sufficient capacity to provide both domestic and fire supply for the entire town.

According to the Sudlersville's Ground Water Appropriations, permit number: Qa2005g025(03), the water withdrawal granted by the permit is limited to a daily average of 17,500 gallons on a yearly basis and a daily average of 26,000 gallons for the month of maximum use.

Sewer

According to the Queen Anne's County Comprehensive Water and Sewerage Plan, the Sudlersville sewage treatment system serves 168 building connections serving 425 people. The system is authorized an average flow of 90,000 GPD and peak flow of 160,000 GPD. Sewerage treatment consists of two stabilization lagoons followed by chlorination. Dechlorination is provided by gravity feeding a sodium metabisulfite solution into a walled-off section of the existing chlorine contact tank. Improvements noted include the installation of two baffles in each lagoon to alleviate short-circuiting of the treatment flow. Thirteen aerators have been installed in the two lagoons (7 in the north, 6 in the south) to add air into the process to increase dissolved oxygen levels and reduce biological oxygen demand.

According the Maryland Department of the Environment (MDE) NPDES Discharge Permit MD0020559 as modified in 2011, an average flow of 0.075MDG from May 1 through September 30 and 0.090 MDG from October 1 through April 30 were used in waste allocation calculations. The Town system discharges its treated waste water into Tier 2 water, an un-named tributary of the Red Lion Branch, and thence into the Chester River and so is subject to all the evolving Chesapeake Bay TMDL standards.

A state-of-the-art waste water treatment plant to replace the existing lagoon based system which will not meet the new Total Maximum Daily Limits established for the Chester River is currently being designed. The system features 0.20 MGD modules, one of which will be installed in Phase I. A second module of 0.20 MGD can be added as required.

Funding and design has been completed for Phase I and construction will start as soon as permits are issued by MDE. The Town of Barclay has entered into a Memorandum of Understanding with the Town of Sudlersville to provide sewer service. Engineering and grant applications with USDA for this project have been approved. Construction is expected to commence in early 2015.

The system will be a vacuum collection system with a "denied access" main connecting it to the Sudlersville plant.

Solid Waste

Sudlersville contracts with a private hauler to collect and recycle trash for the Town. Recycling is encouraged for all residents and businesses. Currently recycling collection facilities are available to the general public behind Southern States.

Emergency Services

Law Enforcement

Police matters in the Town are currently handled by the County Sheriff's Department and the Maryland State Police.

Fire Protection

Sudlersville Volunteer Fire Company consists of approximately 60 men and women volunteers that respond to more than 400 emergency calls each year. In addition to firefighting the company provides medical aid to Town residents and the surrounding area. The Company is housed in the firehouse located at 203 North Church Street. Equipment includes engines, trucks, tankers, ambulances and utility vehicles.

Public Buildings

Sudlersville's Town Hall, located at 200 South Church Street, is a 3,296 square feet facility that includes offices for the Clerk, Town Manager, records storage, and an additional office. The Town Hall also provides two meeting rooms, one large and one small, for conferences and meetings of the Town Commissioners and other Town Boards and Commissions. Based on the 2010 Census population estimate of 497, the current ratio of floor area to population in the Town Hall is slightly more than 6.6 square feet per person.

Public Schools

Sudlersville is home to two schools. Sudlersville Elementary School is located at 300 South Church Street and the recently constructed Sudlersville Middle School located at 600 Charles Street. Both facilities are the Town's Priority Funding Area (PFA).

Sudlersville Elementary School is a 55,110 square foot structure providing classroom and support facilities for students in pre-kindergarten through the 5th grade. The school has a full day kindergarten beginning with the 2000-2001 school year. The facility has a State Rated Capacity of

454 students. Its physical condition is rated as "good"[10]. Student enrollment in 2011 was 379. In 2013 the school employed 28 full time, certified teachers and had a student-to-teacher-ratio of 14 to one.[11]

Sudlersville Middle School is a new 110,000 square foot facility with capacity for 800 students in grades 5 through 8. The facility includes a state-of-the-art media center, special education, music, art, and science rooms, new administrative offices, two recreational gymnasiums, and athletic fields. Sustainable features include solar panels and geothermal heating and cooling systems to make the school energy efficient while off-setting energy costs. In addition, the building features 80% day-lighted spaces and has projected a 40% reduction in water use. Enrollment in 2013 was 338. There are 25 full time, certified teachers and student-to-teacher ratio of 14 to one.[12]

Parks and Open Space

Sudlersville Park is a 36.5-acre County-owned park located off Maple Avenue and South Linden Avenue. Queen Anne's County classifies this facility as a Community Park. The park, acquired by the County in 1986, contains football and soccer fields, a volleyball court, horseshoe pits, picnic areas (including tables, grills, and a pavilion, trails, and a tot lot). Automobile parking via the main entrance off of East Main Street is provided, and there is a pedestrian access off of Maple Avenue.

Recreational opportunities are also provided at the Elementary School which has ball fields, playground equipment, and a basketball court.

Other Facilities

The post office is located at 117 South Church Street. This is a convenient location for residents of our Town and supports the role of the Town Center at the focal point for community interaction.

Sudlersville has a small Town library located at 105 West Main Street. This is an independent facility (i.e. it is not affiliated with either Queen Anne's County or the State of Maryland). It currently houses approximately 10,000 volumes and is computerized.

There are two churches in Sudlersville that provide for the spiritual needs of their respective congregations. These are Calvary-Asbury United Methodist Church, located at 103 North Church Street, and St. Andrew's Chapel Episcopal Church, located at 104 Maple Street.

[10] Educational Facilities Master Plan, Board of Education, Queen Anne's County, Maryland, June 2012
[11] http://www.teachersalaryinfo.com/maryland/teacher-salary-in-queen-anne-s-county-public-schools/
[12] Ibid

Finally, there is a small museum housed in the old Train Station and located at 101 Linden Street. This facility, purchased in 1987 by the Sudlersville Community Betterment Club, houses Jimmy Foxx memorabilia and exhibits highlighting Sudlersville's history.

SECTION 5 – MUNICIPAL GROWTH

Introduction

The Land Use Article of the Annotated Code of Maryland requires all municipalities to:

- Include a Municipal Growth Element (MGE) in their Comprehensive Plans that specifies where the municipality intends to grow, including areas outside its existing corporate limits;

- 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 land use plan; and

- Share with other planning agencies an annexation plan that is consistent with any proposed growth element in the comprehensive plan.

Sudlersville's Municipal Growth Element (MGE) examines the interrelationships among land use, population and housing growth and the related impacts on public facilities and services. The intent of preparing this element of the Comprehensive Plan is to give Sudlersville officials a sound basis for setting land use and growth management policies through a better understanding of the multi-dimensional implications of anticipated growth.

The MGE is based on projections and assumptions concerning population and housing growth which may or may not occur at the rate and in the exact year predicted. The Town recognizes this possibility. When new or significant trends or events are counter to basic assumptions underlying the conclusions of the MGE, e.g., accelerated population growth, the Town will revise the Comprehensive Plan as necessary and appropriate. With this caveat in mind, the overall objectives of the MGE are to:

- Evaluate potential growth in Sudlersville;

- Assess the impacts of this growth on Town services, facilities, and infrastructure;

- Identify strategies to address projected facility and/or service needs;

- Improve inter-jurisdictional coordination with Queen Anne's County; and

- Recommend policies, processes, and regulations to encourage appropriate infill and redevelopment.

Population Projections

Sudlersville's population and dwelling unit projections are the basis for assessing the Town's land development capacity as well as evaluating the potential impacts of growth on community facilities and services. While developable land capacity may not be an issue in the Town considering the extent of recent annexations, estimating future population levels will be more of challenge in light of the recent and dramatic slowdown in the nation's economy and its impact on development.

For purposes of this municipal growth element, two population and households scenarios were analyzed. Scenario 1 is influenced by annexation and development activity and represents extraordinary growth of the Town. Scenario 2 is more conservative, influenced in large part by the slowing of growth on the Eastern Shore in general and in Queen Anne's County specifically. At the same time Scenario 2 is somewhat influenced by the potential for spill over as a result of continued and substantial growth occurring in neighboring Kent County, Delaware.

Scenario 1 maintains the population and household projects from the 2010 amendments to the Sudlersville Comprehensive Plan that added municipal growth and water resource elements to the document (see Table 5-1). The authors of the 2010 amendments projected a population of 1,760 by 2030, an average annual population growth of 60 persons. These estimates and projections were made at a time when substantial development seemed imminent in Queen Anne's County and in the Town. They assumed developable properties located within the corporate boundary would develop in the 22 year period between 2008 and 2030. In order to achieve this level of growth, the Town would be issuing an average of 26 building permits per year through 2030. 26 building permits is equal to over 15 percent of the average number of permits Queen Anne's County issued in the period 2008 to 2012 (average 168 building permits per year).[13] Scenario 1 represents an annualized growth rate in excess of six percent and in all likelihood exceeds the upper limits of growth the Town can expect by 2030.

Table 5-1: Prior Population Estimates and Projections (Scenario 1)

	Estimated 2008	2010	2020	2030
Sudlersville	432	460*	1,110	1,760
Queen Anne's County	47,700	49,200**	55,810	61,900

*Actual Census 2010 count was 497

**Actual Census 2010 county was 47,798

Source: 2010 Amendments, Sudlersville Comprehensive Plan, Municipal Growth and Water Resources, September 2010.

[13] U. S. Department of Commerce, Bureau of the Census, MD Department of Planning, Planning Data Services.

More recent population projections for Queen Anne's County reflect less growth than formerly projected, no doubt in part a due to current economic conditions (see Table 5-2). As it turns out, Queen Anne's County's population in 2010 was 1,402 less than projected in the 2010 Municipal Growth Element or about three percent less than expected. On the other hand, Sudlersville's population in 2010 was 497, exceeding the prior projections by about eight percent (see Table 1-1). Most of this increase is attributable to the FoxxTown Senior Apartments a 40 unit senior housing project completed and fully occupied by 2010.

Table 5-2: Population Projections, Queen Anne's County

	2010 (Census)	2015	2020	2025	2030
Queen Anne's County	47,798	50,250	53,600	57,350	60,350

Source: Maryland Department of Planning

Scenario 2 is a more conservative projection of population and households for Sudlersville than Scenario 1. It is based on a 2006 housing study prepared for the Queen Anne's County Department of Housing and Community Services and summarized in Table 5-3. Sudlersville's population in 2010 was slightly less than 20 percent of Census Tract 8102. Scenario 2 assumes that Census Tract 8102's households will reach the numbers projected and that Sudlersville will capture an average of about 20 percent of the household growth projected in the County housing study. For purposes of estimating population, Scenario 2 assumes a smaller average household size than that projected for the County but one that follows the anticipated downward trend (see Table 5-4).

Table 5-3: Household Estimates and Projection by Census Tract 8102 – Scenario 1

	2010	2015	2020	2025	2030
Census Tract 8102, Households	958	967	1,080	1,351	1,586

Source: Final Report Queen Anne's County Housing Study, The Louis Berger Group, Inc., March 2006, pg. 5-4.

Table 5-4: Average Household Size

	2010	2012	2015	2020	2025	2030
Queen Anne's County	2.63	2.626	2.61	2.57	2.56	2.55
Sudlersville	2.31	2.31	2.29	2.26	2.25	2.24

Source: Maryland Department of Planning, Peter Johnston & Associates

Projections underlying scenario 2 are summarized in Table 5-5. Even this projected growth seems a reach when considering that the projected annualized growth rate for Queen Anne's County between 2010 and 2030 is only slightly more than one percent. However conclusions about the efficacy of these projections should be tempered by considering the following:

- Since 2000, the Town has annexed 550 acres of land intended as development properties;
- Municipal sewer system capacity has been upgraded to 0.250 MGD;
- Municipal water system storage capacity has been upgraded to 0.5 MGD;
- This level of growth only represents an average of about eight new dwellings per year; and
- Recent State legislation (e.g., Sustainable Growth and Agricultural Preservation Act of 2012) should slow residential growth in rural areas and make municipalities with infrastructure capacity more appealing growth areas.

Table 5-5: Population and Household Projections – Scenario 2

	2010	2012	2015	2020	2025	2030	Change	Annualized Rate
Population	497	509	510	561	698	817	308	2.44%
Households	215	221	222	248	311	365	150	2.67%

Source: Peter Johnston & Associates

The following development capacity analysis is based on the population and household projections for the two scenarios summarized in Table 5-6.

Table 5-6: Population and Household Projections – Growth Scenarios Summary

	2010	2015	2020	2025	2030	Change	Annualized Rate
Scenario 1							
Population	497	804	1,110	1,435	1,760	1,263	6.5%
Households	211	351	492	638	786	575	6.8%
Scenario 2							
Population	497	510	561	698	817	320	2.5%
Households	211	222	248	311	365	154	2.8%

Source: Peter Johnston & Associates

Development Capacity

Infill development capacity measures the Town's ability to accommodate future growth without the need for annexing additional land. This exercise allows Town officials to quantify land development capacity within the existing corporate limits to determine if there is adequate land, appropriately zoned, to accommodate projected growth.

Residential development capacity analyzes vacant and underutilized land, applying assumptions about how this land could be developed in the future in order to derive an estimate of infill development capacity. Infill includes undeveloped and underdeveloped parcels and lots with suitable acreage for development. Development capacity also considers the demand for nonresidential land uses as these facilities create demand for some public facilities and services.

According to the 2010 amendments to the Sudlersville Comprehensive Plan the residential development capacity of land currently within the corporate limits well exceeds the population and household projections in either growth scenario (see Table 5-7). The development capacity estimates from the 2010 amendments were modified as follows:

- The average household size was reduced from 2.5 to 2.31 persons per household, reflecting past trends in the Town; and

- Scattered potential infill and redevelopment sites were added.

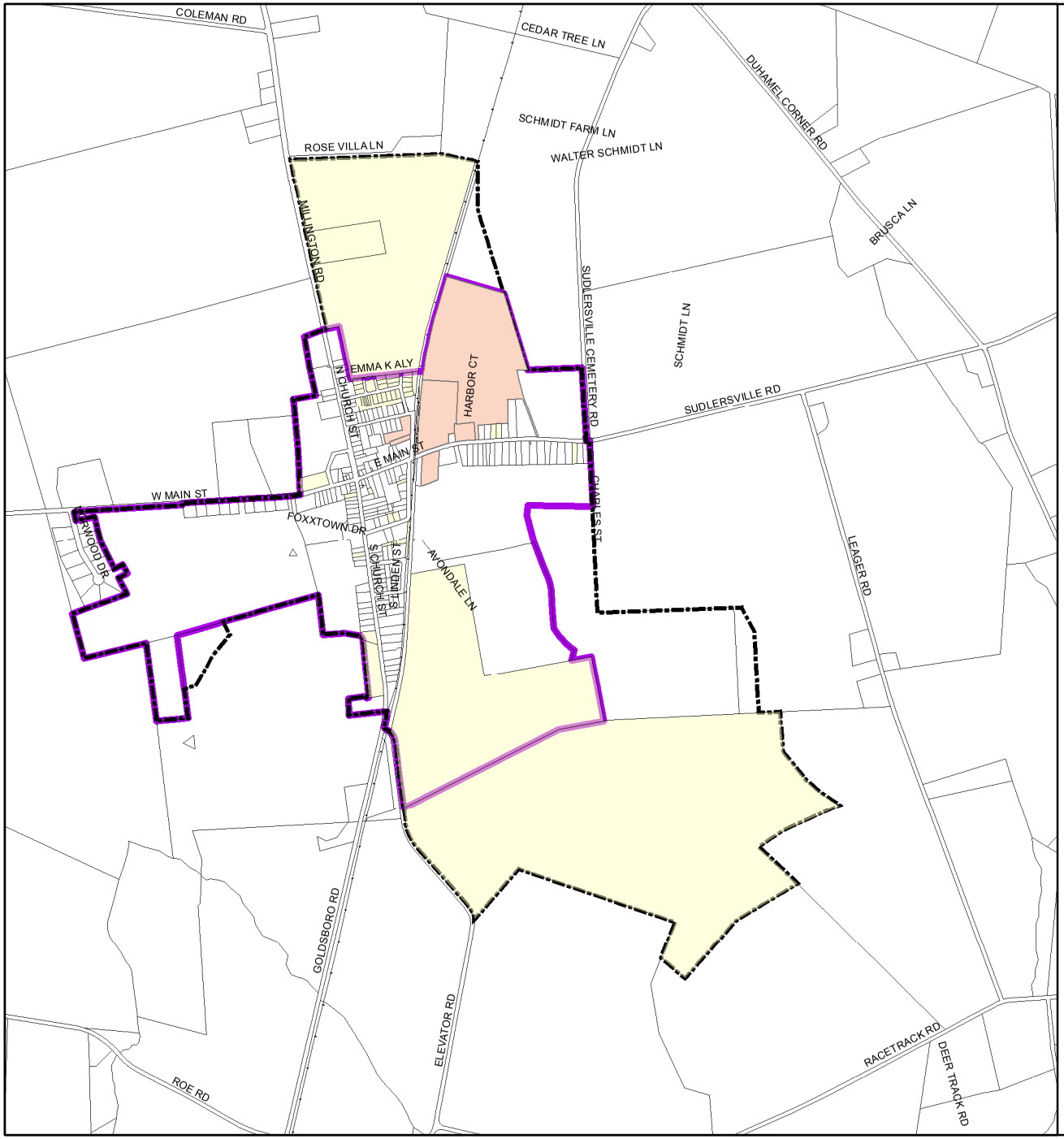
As can be seen the capacity of land that the Town has zoned for residential use exceeds demand in the most ambitious growth scenario by over 1,700 persons and 763 dwelling units.

Table 5-7: Development Capacity

Property	Gross Acres	Net Developable Acres	Dwelling Units @ 3.5/acre	Estimated Residents @ 2.31 persons per household
Gray (p 29)	96	72	252	582
Friel (p122)	96	72	252	693
BDC Partners	7	5	18	58
BDC (p 26)	115	86	302	462
Elevator Rd. LLC (P. 2)	241	181	633	1,617
Scattered Sites	14	11	37	111
Development Capacity	569	427	1,494	3,523

Source: 2010 Amendments, Sudlersville Comprehensive Plan, Municipal Growth and Water Resources, September 2010

The BDC Partners and Elevator Road, LLC sites listed in Table 5-7 are located outside Sudlersville's Priority Funding area. Without these sites the Town's development capacity drops considerably (348 households and 804 persons) and is not adequate for any of the projected growth scenarios (see Map 5-1).



DRAFT
Map 5-1

Sudlersville, Maryland
Comprehensive Plan

Vacant and Underutilized Land

- Residential
- Commercial/Industrial
- Municipal Priority Funding Area

0 1,000 2,000 4,000 Feet

PJA Peter Johnston & Associates, LLC
Easton, Maryland

Version 7-17-13

In addition to residential land use, the development capacity analysis examines potential demand for nonresidential uses, specifically commercial and industrial uses. The Town has land capacity for approximately 360,000 square feet of additional commercial and/or industrial development on vacant and underutilized properties. Successfully attracting and locating commercial uses requires more than just acres of land, consequently location considerations for commercial uses may eliminate some of this capacity.

Development Impacts

Growth of the Town will impact public services and facilities provided by Sudlersville and Queen Anne's County. Impacts include increased demand for municipal water and sewer service and other public facilities and services such as schools, libraries, police, and parks as well emergency services provided by the volunteer fire department. Impact estimates are derived using multipliers (service measures) that represent assumptions about the level of service that will be provided in the future. New households or new population are the "service units" used to determine demand. Households and occupied dwelling units are used interchangeably in the analysis. Service measures representing an anticipated level of service are summarized in Table 5-8.

In calculating impacts associated with Sudlersville's growth during the planning period the Town utilized the following sources and assumptions:

- Future population and dwelling unit projections to 2030 in the two growth scenarios as described in this section of the Plan;
- A build out population and housing estimate based on the development capacity previously described;
- Queen Anne's County multipliers for water and wastewater demand used in the Comprehensive Water and Sewer Plan (75 gallons per capita per day);
- Generic multipliers for school enrollment estimates as described in the *Smart Growth, Community Planning and Public School Construction Models and Guidelines* (multipliers for St. Mary's County, Maryland).
- Maryland Department of Planning multipliers for recreation land demand (30 acres per 1,000 persons);
- Multipliers for Municipal Administrative Space demand based on current space provided;
- Multipliers for Library facilities demand based on the current space provided;
- Multipliers for Police personnel needs based published level of service measures;
- International City Council Management Association multiplier for demand for fire personnel; and
- National Planning Standard square footage multiplier for need for firehouse facilities.

Nonresidential floor area and land demand (commercial and industrial) were calculated based on the following assumptions:

- The current ratio of floor area to population, 296 square feet per capita, was used to determine demand for water and sewer based on 200 gallons per 1,000 square feet of gross floor area (GFA); and

- A floor area ratio of 0.2 was used to estimate the demand for commercial and industrial land needed to accommodate additional commercial and industrial land uses in order to maintain the current land to population ratio.

Table 5-8: Service Measures, Service Units and Output Units

Facility/Service	Multiplier	Service Unit	Output Units
ELEMENTARY SCHOOL			
- Students	0.22	Per Household	New Students
- Teacher	1:14	Student Teacher Ratio	Additional Teachers
MIDDLE SCHOOL			
- Students	0.11	Per Household	New Students
- Teacher	1:14	Student Teacher Ratio	Additional Teachers
HIGH SCHOOL			
- Students	0.15	Per Household	New Students
- Teacher	1:15	Student Teacher Ratio	Additional Teachers
TOWN ADMIN./MEETING			
- Personnel	1.00	Per 1000 population	Personnel
- Facilities (GFA)	5.00	Per Capita	Building Space
PUBLIC WORKS			
- Personnel	1.00	Per 1000 population	Personnel
- Facilities (GFA)	14.81	Per Capita	Building Space
LIBRARY (GFA)			
- Personnel	1.50	Per 1000 population	Personnel
- Facilities (GFA)	4.70	Per Capita	Building Space
POLICE	2.30	Per 1000 population	Sworn Officers
RECREATION LAND (acres)	30.00	Acres per 1000 pop.	Acres
FIRE & RESCUE			
- Firemen	1.59	Per 1000 population	Personnel
- Facilities (GFA)	16	Per 1000 population	Building Space
RESIDENTIAL			
- Sewer	250	GPD per day per dwelling unit	GPD
- Water	250	GPD per day per dwelling unit	GPD
COMMERCIAL/INDUSTRIAL			
- Sewer	0.05	GPD per sq. ft.	GPD
- Water	0.05	GPD per sq. ft.	GPD

NON RESIDENTIAL LAND USE			
- Commercial and Industrial Acres	0.2	Per Acre	Acres
- Commercial and Industrial Floor Area	296	Per Capita	Floor Area

Source: Peter Johnston & Associates

Estimated impacts on community facilities and services for Scenarios 1 and 2 through 2030 and the build out of the current corporate limits are summarized in a table located in Appendix A. The following discusses the potential impacts for each facility or service examined.

Schools

Consideration of school capacity must be caveated by noting that the student and teacher impacts assessed are only for Sudlersville and do not take into account other growth in the school districts that may result in additional students and teacher demand. As concerns potential impacts related to growth in Sudlersville, the elementary and high school will be most impacted by the growth scenarios and build out of the Town (see Table 5-9) while the newly constructed middle school has adequate capacity for all growth scenarios and build out. All scenarios will generate demand for additional teaching staff if current student to teacher ratios are to be maintained with Scenario 1 and the build out scenario having the greatest impact (see Table 5-10).

Table 5-9: School Impacts – Classrooms

School	Capacity	Estimated Enrollment	Excess Capacity	Percent of Excess Capacity Sc. 1	Sc. 2	Build Out
Sudlersville Elementary	454	370	84	147%	39%	326%
Sudlersville Middle	800	338	462	13%	4%	29%
Queen Anne's County High	1263	1200	63	141%	38%	311%

Source: Peter Johnston & Associates

Table 5-10: School Impacts - Teachers

	Scenario 1	Scenario 2	Build Out
Elementary School	9	2	20
Middle School	4	1	10
High School	6	1	12

Source: Peter Johnston & Associates

Town Administration

Either growth scenario will have minimal effect on Town administrative staffing. Under scenario 2 no additional staff is required to meet current service levels. Staffing impacts range from 1 to three under Scenario 1 and the build out of the Town.

Because the Town administration is housed in a relatively new facility, utilizing the current ratio of Town office space to population as a service level measure probably overstates expectations. However, if this level of service is to be maintained, all growth scenarios will generate demand for additional building space, ranging from about 1,600 square feet for Scenario 2 to as much as 14,700 square feet at build out (see Table 5-11).

Table 5-11: Town Administration Impacts

Town Administration	Scenario 1	Scenario 2	Build Out
- Personnel	1	0	3
- Facilities (GFA)	6,315	1,599	14,702

Source: Peter Johnston & Associates

Public Works

Like Town Administration, utilizing the current service measures may overstate future need for building space. Nevertheless, if the current personnel and building space levels of service are to be maintained all scenarios will have a substantial impact of space requirements (see Table 5-12).

Table 5-12: Public Works Space and Personnel Impacts

Public Works	Scenario 1	Scenario 2	Build Out
- Personnel	1	0	3
- Facilities (GFA)	18,710	4,737	43,560

Source: Peter Johnston & Associates

Library

Sudlersville's library is an independent facility not affiliated with either Queen Anne's County or the State of Maryland. It is difficult to imagine that this facility could maintain the current level of service needed to keep pace with the projected growth in scenario 1 and the build out scenario (see Table 5-13). A more likely outcome is that the County library system would have to take on the responsibility of providing library services to Town residents, possibly locating a branch library in the Town or working with the Sudlersville Memorial Library to expand service.

Table 5-13: Library Impacts

Library	Scenario 1	Scenario 2	Build Out
- Personnel	2	0	4
- Facilities (GFA)	5,936	1,503	13,820

Source: Peter Johnston & Associates

Police

Police matters in the Town are currently handled by the County Sheriff's Department and the Maryland State Police. This arrangement could be continued under Scenario 2 which generates demand for one additional sworn officer. Scenario 1 and the build scenario which generates demand for three and seven additional officers respectively may provide the tipping point for consideration of a Town police force.

Park and Recreation Facilities

Using the accepted ratio of 30 acres per 1,000 population, the Town is currently well served by the 36 acre community park provided by Queen Anne's County. Under scenario 2 an additional eight acres would be needed to maintain this level of service. Scenario 1 and the build out scenario would require the addition of 38 and 88 acres respectively in order to meet State standards. Some of this requirement may be addressed through land and facilities offered at the elementary and middle schools. In addition, in the future these land requirements may be addressed through dedications required by the Town at the time of development of large tracts currently located in the Town.

Emergency Services

All scenarios appear to have minimal effect on the local volunteer fire department's personnel and facility status. However if the number of emergency service calls in the service district reach a critical level under the build out scenario, coupled with other growth in the district, some full time paid employees may be required.

Water Supply and Sewer Treatment

For purposes of assessing water supply and wastewater treatment capacity it is assumed that currently planned or under construction improvement to both systems will be operational and the Town will have a daily water and sewer capacity of 0.2 million gallons per day (MGD). It also assumes that current demand for water averages 26,000 gallons per day and waste water treatment averages 75,000 gallons per day. Finally, it assumes that commercial and industrial development will remain proportionate as is currently the case to residential development in the Town and will require water and sewer services as well.

Given these assumptions and not including the wastewater treatment demand from Barclay, Scenario 1 will exceed the capacity of the wastewater treatment plant (WWTP). Scenario 2 can be accommodated with the planned systems upgrades to the WWTP. All scenarios exceed the limits of the current groundwater appropriations.

Commercial and Industrial Development

Consideration should be given to the demand for nonresidential land uses associated with the growth scenarios if the Town wants to maintain the current ratio of commercial and industrial land and uses to residential population. This consideration has implications not only for the amount of land set aside for these uses, but especially in the case of commercial uses the location. These considerations need to be reflected in the Land Use Plan as well as the official zoning maps. The Town currently has approximately 48 acres of underutilized land zoned for mixed use, including commercial and industrial uses with capacity for about 360,000 square feet of floor area. As can be seen from Table 5-14 the Town appears to have adequate land area for commercial and/or industrial development under scenarios 1 and 2 but not nearly enough to support the build out scenario.

Some of the demand for future small scale commercial, business and office uses can be addressed though infill in the town center and in planned developments on larger tracts that include a neighborhood center area. The challenge is to have land zoned for these uses in a location acceptable to commercial and business uses serving markets that include the entire community and surrounding areas. Consideration should be given to setting aside portions of larger parcels with good highway access for commercial development.

Table 5-14: Commercial and Industrial Land Demand

Nonresidential Land Use	Scenario 1	Scenario 2	Build Out
- Commercial and Industrial Acres	43	11	100
- Commercial and Industrial Floor Area	373,848	94,644	870,368

Source: Peter Johnston & Associates

Annexation

The Town has adequate land capacity within its corporate limits to accommodate expected growth over the next few decades. Providing water supply and wastewater treatment for the growth that could occur within the existing corporate limits, even under modest growth projections, will present challenges. For this reason, the Town does not anticipate annexing any additional land into the Town in the foreseeable future.

Funding Strategies

Growth will require the Town and County fund the public facilities and services necessary to serve new residents and businesses. Current sources of revenue alone, e.g., property tax, user fees, will not likely be sufficient to meet expenditures. In some instances, State and/or Federal grants and loans may be available to assist local governments. Other forms of revenue to address growth impacts also may need to be considered (see Table 5-15 for examples). Funding mechanisms the Town may want to consider include:

Adequate Public Facilities Ordinance (APFO) – The Town could adopt an APFO. An APFO ties development approvals to the existing and planned capacity of infrastructure based on quantifiable levels of service for public facilities and services. APFO level of service standards also can be used when negotiating a developer responsibilities in an annexation agreement or a Developers Rights and Responsibility Agreement (DRRA) as well.

Fiscal Impacts/Impact Fees - Major development projects should be required to identify and address fiscal impacts to the Town. These impacts could be addressed in a DRRA executed prior to development approval. As an alternative the Town can adopt an impact fee ordinance. Impact fees, also known as exactions, extractions, contributions, and proffers, are the financial responsibilities which a municipality places upon a developer to provide some or all of the physical improvements (from sewers and streets to parks and schools) necessitated by the development. Impact fees are levied as a condition for the approval of plat or building plans and subsequent permission to proceed with development. They are direct contributions by developers and may include dedication of land, construction of facilities, or payment of fees in lieu of these facilities. They can be levied through written provisions in ordinances or through negotiations.[14] For example, a fee could be levied to offset the cost of additional Town administration and meeting space, land can be dedicated for parks or schools and trails can be constructed to satisfy recreation land requirements.

Municipal Priority Funding Area - The Town should ensure that annexation areas are included within its municipal Priority Funding Area (PFA) so that these areas are eligible for State assistance for funding of infrastructure. In order to satisfy the requirements for "certification" annexed areas (for residential development) must be zoned to permit an average density of at least 3.5 dwelling units per acre and the area must be served or planned for service by public or community sewer. In addition, the Queen Anne's County Master Water and Sewer Plan must be amended to reflect any proposed new service areas.

The County is the appropriate level of government to adopt some of these funding mechanisms, e.g., school impact fees or excise tax.

[14] Miles, Mike E., Emil E. Malizia, Marc A. Weiss, Gayle L. Berens, and Ginger Travis. 1991. *Real Estate Development: Principles and Process.* Washington, D.C.: Urban Land Institute.

Table 5-15: Potential Funding Source to Address Municipal Growth Impacts

Facility/Service	Potential Funding Sources
School Facilities	Property tax, Excise Tax, Impact Fee, Federal/State School Construction Funds
Administration	
- Facilities	Property Tax, DRRA, Impact fee, grants and loans
- Personnel	Property tax, Service fees (e.g., zoning certificate fee, inspection fees), grants
Public Works	
- Facilities	DRRA, Impact fee, Connection fees, User fees, Public works agreement, grants, loans
- Personnel	Property tax, service fees (e.g., water and sewer charges)
Library Facilities	Property tax, excise tax, impact fee, Grants and loans
Police	
- Facilities	Property tax, DRRA, Impact fee
- Personnel	Property tax, fines and fees
Recreation Land	DRRA, Land dedication, State Program Open Space (POS)
Fire and Rescue - Nonprofit	
- Facilities	DRRA, grant, public and private contributions
County-Provided Fire and Rescue	
- Facilities	Property tax, excise tax, impact fee, special tax (e.g., fire districts tax), grants
- Personnel	Property tax, special tax (e.g., fire district tax)
Water and Sewer Facilities	DRRA, Public Works Agreements, connection fees, user charges

Rural Buffer

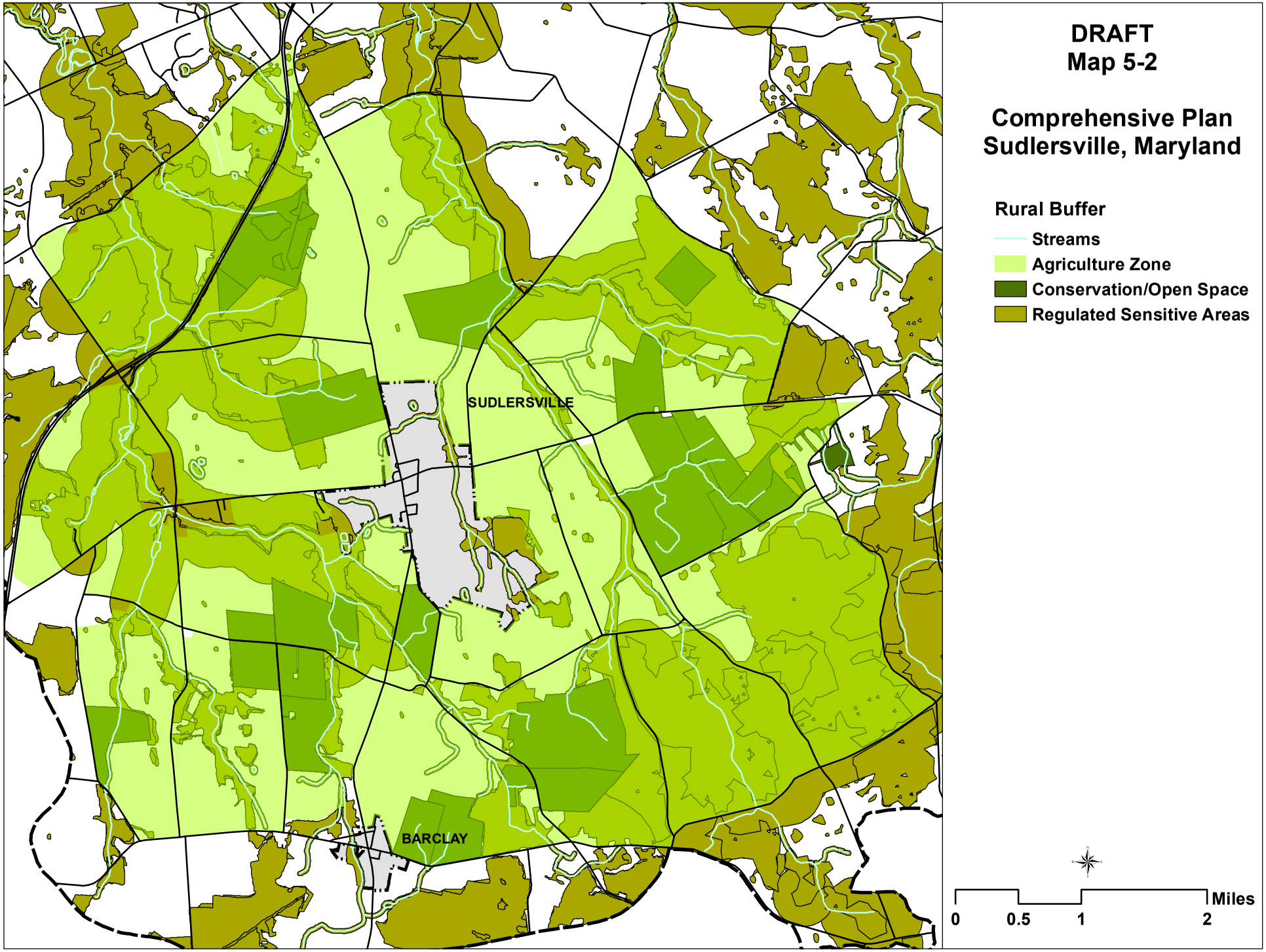
The Town believes that the Queen Anne's County Comprehensive Plan and zoning system adequately provides for rural buffer area around Sudlersville. The rural buffer in made up of approximately 18,700 acres of land currently zoned by Queen Anne's County for agriculture or only low density residential development permitted and requiring 85 percent of the site be held as open space in the case of a single family cluster subdivision or minimum 20 acres in the case of a large lot subdivision. About 3,000 acres or 16 percent of the rural buffer are currently in a conservation easement or are deed restricted open space. Another 10,000 acres or about half of the area are regulated sensitive areas.

In addition to limits on development density and significant open space requirements, Queen Anne's County zoning establishes resource protection standards for the floodplain, streams, wetlands, steep slopes, erosion hazard areas, and woodlands. Significantly, the County requires 100-foot buffer from all perennial streams and a 50-foot from all intermittent streams. Disturbance to woodlands is limited to 40 percent under the County Zoning Code. Under the Forest Conservation Ordinance the conservation threshold is 50 percent of existing forest. Sites with less than 20 percent forest must be afforested up to this level. In addition the Queen Anne's County Zoning Ordinance provides that no disturbance of the habitat of threatened and endangered species is allowed except as permitted by U.S. Fish and Wildlife Services or Maryland Department of the Environment or Maryland Department of Natural Resources (see Map 5-2).

Queen Anne's County's zoning performance standards help to insure that land use in the rural buffer is consistent with the objective of maintaining a distinct rural transect around the Town and sensitive features that help define the character of this area are regulated to require best management practices.

Interjurisdictional Coordination

The Economic Development, Planning and Resource Protection Act of 1992, as well as recent updates, directs local governments and the State to coordinate their planning and development efforts to achieve the State's "Visions." Under the Act, local governments must adopt comprehensive plans which include the twelve "Visions". Zoning and other planning implementation mechanisms must be consistent with these plans. Local comprehensive plans must include recommendations for improving planning and development processes to encourage economic expansion and to direct future growth to appropriate areas. Such development and economic growth often have inter-jurisdictional impacts, including impacts on transportation, infrastructure, environment, and other areas of concern. For this reason, it is necessary for planning, growth strategies, and policies to promote and encourage cooperation among adjacent jurisdictions.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Map 5-2
Comprehensive Plan
Sudlersville, Maryland
Rural Buffer
Streams
Agriculture Zone
Conservation/Open Space
Regulated Sensitive Areas
SUDLERSVILLE
BARCLAY
0
0.5
1
2
Miles

House Bill 1141 (Land Use – Local Government Planning) requires the Town to include in the comprehensive plan a municipal growth element that specifies where the municipality intends to grow outside its existing corporate limits. Currently, the Town has no plans to annex any land areas outside its current corporate boundaries. However, as discussed in the previous section the Town annexation policies outline how it intends to address service, infrastructure, and environmental protection needs for growth areas and surrounding environs at such time as it decides to annexation land.

The Town's Comprehensive Plan also includes a water resources element that identifies strategies for addressing drinking water and other water resources to meet current and future needs. Preparation of the municipal growth element included 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 the Town's Comprehensive Plan.

House Bill 1141 requires the Town consult with Queen Anne's County concerning its growth element. Prior to approving the Town's municipal 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. The bill encourages municipalities and counties to participate in joint planning processes and agreements. Coordination with County officials is important to ensure that newly annexed territory qualifies for state assistance as a priority funding area if annexed after September 30, 2006.

It is apparent that there is a critical need for the Town and County to work together. Future growth will depend on sound strategies to address such issues as water quality and quantity, school capacity, demand on emergency services, public infrastructure, and transportation facilities. Like public infrastructure, water quality and quantity issues cannot be addressed by the Town alone. Going forward, effective management of nonpoint source pollution must be based on watershed-wide land use strategies and coordinated administration and enforcement of sediment and erosion control and stormwater management regulations. Protection of vulnerable drinking water supplies requires the participation of all jurisdictions affected.

The planning requirements from HB 1141 require Town and County officials meet and discuss this Municipal Growth Element prior to adoption. At a minimum, an agenda for such a joint County/Town meeting should include how best to coordinate the following:

- Cooperative watershed planning initiatives including discussions of failing septic system areas in the County and the role of public water and wastewater;

- Coordinated policies concerning County land uses including growth areas, Priority Funding Area designations adjacent to the Town, and water and sewer service areas for

Sudlersville as shown in the Queen Anne's County Comprehensive Water and Sewerage Plan;

- Coordinated policies concerning conservation of green infrastructure; and

- Funding for public facilities and services, i.e., Adequate Public Facilities Ordinance, impact fees, tax differential and excise taxes, etc.

Effective mechanisms for County/Town dialogue, coordination, and agreement are needed. Acceptable coordinated strategies should be formalized in ways that bind each participant to a policy process. Forums for on-going coordination and cooperation include a Council of Governments (COG), joint committees (for example for watershed planning initiatives), and others. Examples of potential formal mechanisms for recording joint policies include Memorandums of Understanding (MOU) and/or an Inter-Governmental Agreement (IGA).

SECTION 6 - NATURAL RESOURCES

Background

Concern for the conservation and protection of sensitive natural features within the Town transcends arbitrary boundaries. Issues such as the loss of forest and trees, sedimentation of streams, and loss of wildlife habitat in the watershed and beyond should be of concern. In addition, managing growth and development in the Town must be balanced with consideration for the positive contributions that the natural setting makes to the quality of community life.

The limitations of natural systems to withstand the impacts of major disturbances, in or near some areas, should be addressed through public policy and implementation provisions as per the requirements of State law. Regardless of location, all future development should be subject to minimum performance standards for environmental protection and natural resource conservation.

Watershed

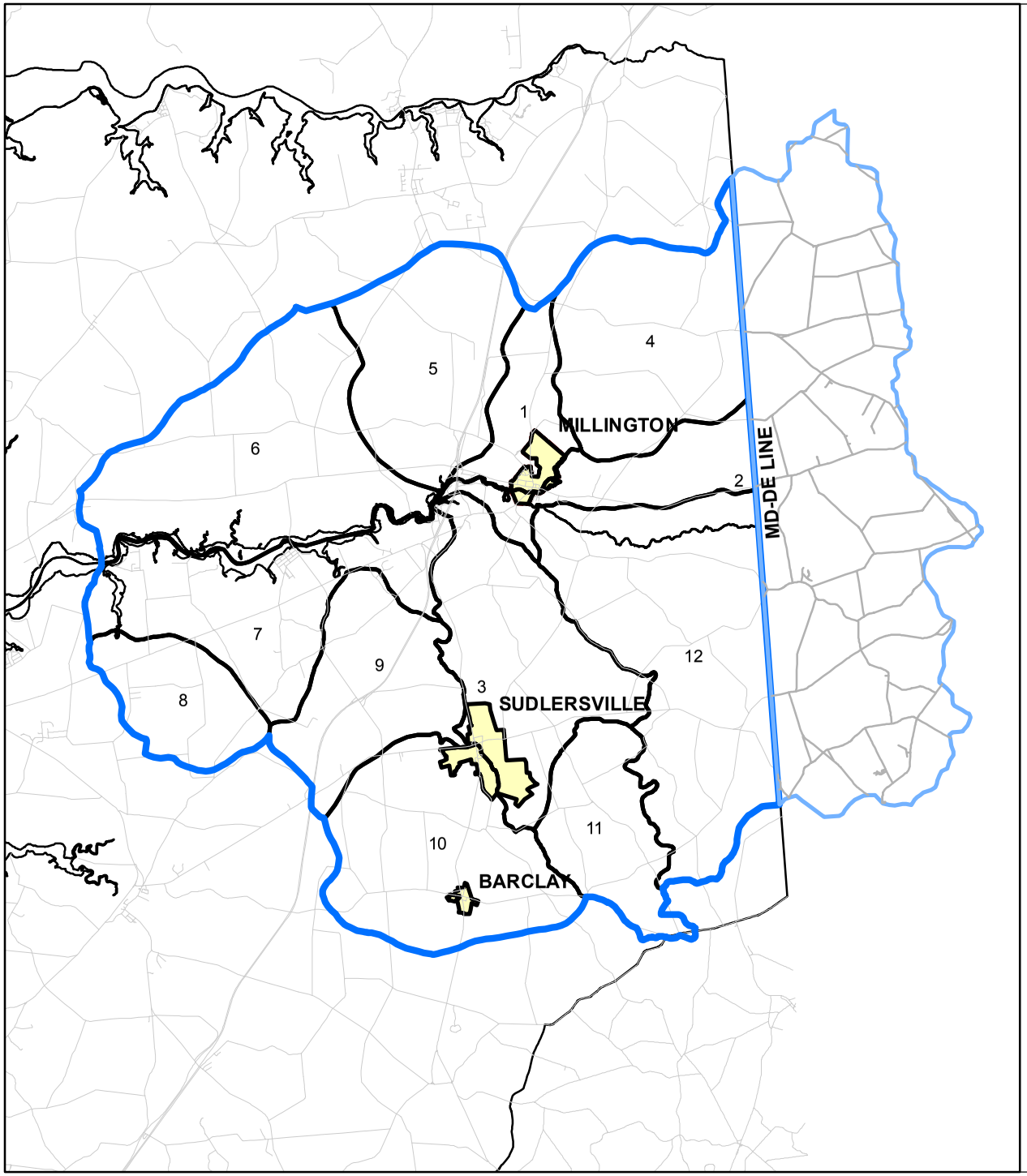
The Upper Chester River Watershed is approximately 113,485 acres and is located in Kent and Queen Anne's Counties, Maryland and includes portions of New Castle and Kent counties in Delaware where its headwaters are located. The watershed in included in the larger Upper Eastern Shore Tributary Basin.

Sudlersville is wholly located within the Upper Chester River Watershed. More specifically parts of the Town are located in the Lower Unicorn Branch (03); the Upper Red Lion Branch (10); and the Lower Red Lion Branch (09) sub-watershed (see Map 6-1).

Approximately 65% (56,176 acres) of the land in the watershed is categorized as agricultural land, 31% (26,958 acres) of land is forested, and 3% (2,932 acres) is designated as urban. In addition to Sudlersville, the towns of Barclay and Millington also are all located within the watershed. Of the 138 watersheds in Maryland, the Upper Chester is among those with the least impervious surface, the lowest population density, the most wetland loss, and the highest soil erodibility.[15]

For a more detailed discussion of the Upper Chester River Watershed, including water quality total maximum daily loads (TMDLs) and watershed restoration strategies, refer to Chapter 7: Water Resources Element of this Plan.

[15] *Upper Chester River Watershed Restoration Action Strategies*, June 2006



Map 6-1

Comprehensive Plan
Sudlersville, Maryland

Upper Chester River Watershed

- Delaware Portion
- Maryland Portion
- Maryland Subwatersheds

Subwatersheds:

1. Little Mill Pond Tributary
2. Millington Unnamed Tributary
3. Unicorn Branch Lower
4. Cypress Branch
5. Mills Branch
6. Chester Direct Kent
7. Chester Direct Queen Anne's
8. Foreman Branch
9. Red Lion Branch Lower
10. Red Lion Branch Upper
11. Unicorn Branch Upper
12. Andover Branch

0 1.5 3 6 Miles

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Easton, Maryland

Topography

With elevations of less than 60 feet above sea level the land in Sudlersville can be characterized as generally flat terrain.

Soils

Figure 1 shows soil types in the vicinity of Sudlersville. Over 60 percent of the soils in the area fall into three categories, Unicorn-Sassafras loam (UsB), Ingleside sandy loam (IgB) and Carmichael loam (CaA). Most soils in the Town have only slight limitations for building sites.

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," In the 2006 session the Maryland Legislature passed House Bill 1141 (HB 1141) which includes an expanded list of sensitive areas to be addressed in comprehensive plans, including wetlands, agricultural lands, and forest resource protection/conservation areas. As a result, sensitive areas include the following:

- Streams and stream buffers,
- 100-year floodplain,
- Endangered species habitats,
- Steep slopes,
- Other sensitive areas, such as wetlands or forested areas, that a jurisdiction wants to protect from the adverse impacts of development; and
- Agriculture and forest lands intended for resource protection or conservation.

<u>Streams and Stream Buffers</u>

Stream buffers serve as protection areas when placed adjacent to streams, preserving some of the biological and hydrological integrity of the stream basin. These areas act as run-off and groundwater pollution control systems by filtering pollutants through the soil and root zone of natural growth. For example, microscopic organisms that inhabit the soils in a forested buffer assist in the decomposition of pollutants much like microbes in a sewage treatment plant. Streams in the vicinity of the Town include Chapel Branch Ditch and several small streambeds. A treed corridor runs along the Chapel Ditch and a larger grouping of trees is located around the ditch in the northeast quadrant of the Town (see Map 6-2). With the possible exception of some smaller lots fronting East Main Street, a 100-foot stream buffer can be achieved along the entire length of these streams. Stream buffer regulations should be variable, with less required for the developed lots and planting requirements similar to the buffer creation standards for the Chesapeake Bay Critical Area for the rest of the stream corridors.

Figure 5-1 Soils

100-year Floodplain

According to the FEMA flood maps there is no 100-year floodplain in Sudlersville.

Sensitive Species Habitat

The Maryland Department of Natural Resources (DNR) Wildlife and Heritage Division has identified Sensitive Species Project Review Areas (SSPRAs) in all Maryland jurisdictions. These areas are delineated to indicate potential threats from environmental impacts due to the proximity of certain sensitive species habitat. DNR designates these areas to provide local governments with information for assessing environmental impacts and reviewing potential development projects or land use changes within these areas.

Although there are no known habitats of endangered species within the corporate limits of Sudlersville there are sensitive species project review areas within vicinity of the Town (see Map 6-2). The SSPRSA west of Town is listed as habitat of species or natural communities of concern to DNR, but with no official status. Whenever any development activity is proposed in this area the applicant should be required to consult with DNR staff concerning appropriate management measures.

Wetlands

Public and private (tidal) wetlands are important natural areas protected by state law (Title 9, Sections 9-101/9-301 of the Natural Resources Volume, Maryland Annotated Code), which sets forth strict licensing procedures for any alteration of wetlands. They are also within the protective jurisdiction of the federal government through the U.S. Army Corps of Engineers. Town policies and regulations regarding wetlands require compliance with State and Federal wetland regulations. A twenty-five-foot setback from all non-tidal wetlands is required for all development around the extent of the delineated non-tidal wetland except as may be permitted by the U.S. Army Corp of Engineers and the State of Maryland, Department of Natural Resources, Non-tidal Wetland Division.

Non tidal wetlands are located on the eastern and south western portions of Town. Most are within forested areas. However a large area of wetland can be found straddling the County Park, Elevator LLC and Friel properties.

Forest Interior Dwelling Species (FIDS)

Healthy forests are crucial to soil, air and water quality. In addition to the functions they perform for humans, such as filtering the air, providing shade to cool streams, and holding soil in place, they also provide habitat to species that rely on the interior of forests to survive and reproduce.

DNR identifies potential Forest Interior Dwelling Species (FIDS) habitat areas for all jurisdictions in Maryland. A potential FIDS habitat is defined as a forest tract that is either greater than 50 acres with at least 10 acres of forest interior habitat (forest greater than 300 feet from the nearest forest edge), or riparian forests that are at least 300 feet in total width and greater than 50 acres in total forest area (the stream must be perennial).

A small forest area in Sudlersville may contain Class 3 FIDS habitat. The majority of land containing forest interior habitat in the Upper Chester River Watershed is considered vulnerable to conversion to other land uses.

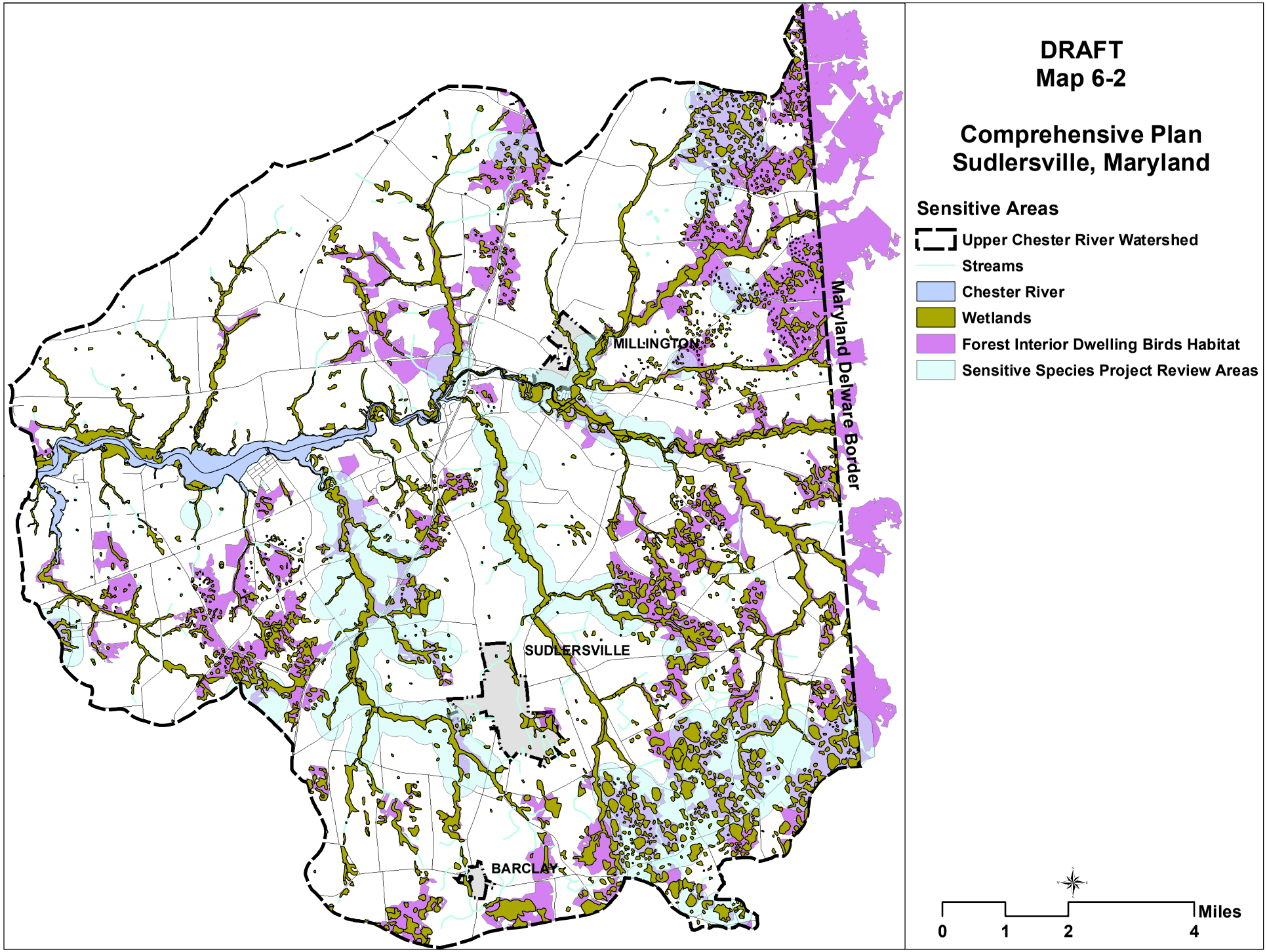
Forests

Forests and woodlands also provide a wide range of habitats used for protection and nesting, as well as a variety of food sources for many animals and aquatic ecosystems. Woodlands protect the aquatic ecosystem from harmful temperature fluctuations by decreasing the amount of light which reaches the water's surface. The ability of woodlands to decrease the amounts of sediments reaching surface water, and the amount of erosion of banks, shorelines and other areas also helps preserve the quality of aquatic habitats.

Forests also play a significant role in helping to reduce the levels of carbon dioxide (also known as a “greenhouse gas”) in the atmosphere. As trees grow, they absorb carbon dioxide from the air and replace it with oxygen. The carbon is stored in tree trunks, branches and leaves. While young, actively-growing re-growth forests take in the largest amounts of carbon dioxide from the air, older and mature forests are an important storehouse of carbon, too.

In 1991, the State of Maryland enacted the *Forest Conservation Act* to protect the forests of Maryland by making forest conditions and character an integral part of the site planning process. It is regulated by the Maryland Department of Natural Resources, but implemented and administered by local governments. The law’s intent is to maximize the benefits of forests and slow the loss of forest land, while allowing development to take place.

Sudlersville’s zoning ordinance requires compliance with the Forest Conservation Act. Anyone making applications for subdivision, grading permit, or sediment control plan for a tract of 20,000 square feet or more to include a forest stand delineation and forest conservation plan for the lot or parcel on which the development is located (unless the activity is exempted). Forest conservation thresholds by land use categories apply. Priority planting areas include buffers for streams, corridors to connect existing forests, buffers between differing land uses and expansion of existing forests. The use of native plant materials is encouraged but not required.



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Conservation Areas

Conservation areas, including agriculture and forest lands intended for resource protection or conservation are shown on Map 6-3. As described by the Maryland Department of Natural Resources, they include the following[16]:

Rural Legacy Area: In 1997, the Maryland General Assembly approved the Rural Legacy Program as a major component of Governor Glendening's Smart Growth and Neighborhood Conservation Initiative. The purpose of the Rural Legacy Program is to protect Maryland's best remaining rural landscapes and natural areas through the purchase of land or conservation easements. Funds are awarded by grants to sponsors to purchase fee simple interests or easements on property within a Rural Legacy Area. Shown on Map 6-3 are properties that have been protected using Rural Legacy funds, as well as some properties that are in the process of being reviewed for Rural Legacy funding.

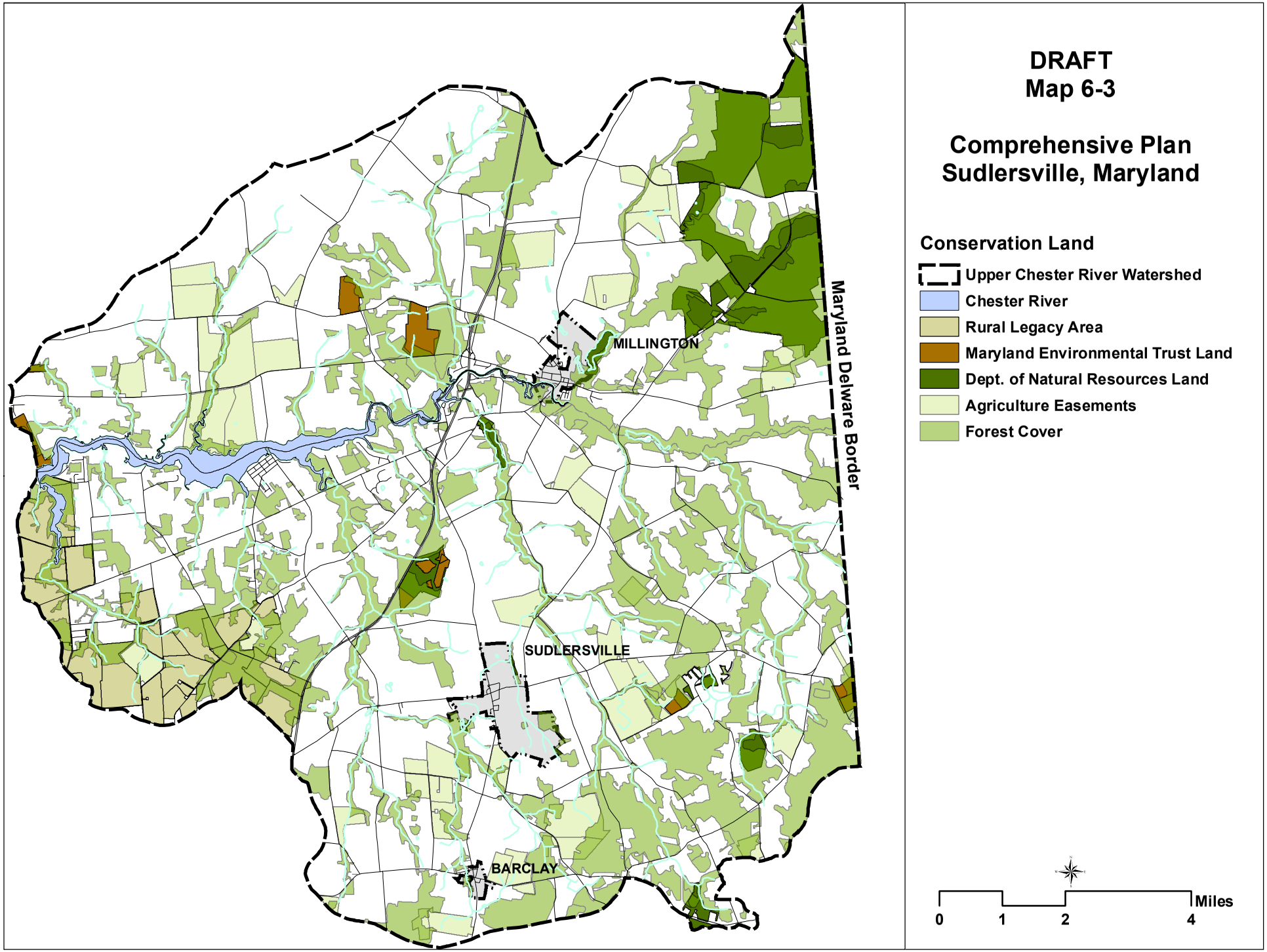
Maryland Environmental Trust Land: Areas shown on Map 6-3 are owned or protected by permanent environmental easements and managed by the Maryland Environmental Trust. The Maryland Environmental Trust (MET) is a statewide local land trust governed by a citizen Board of Trustees. Since its creation by the General Assembly in 1967, MET's main goal is the preservation of open land, such as farmland, forest land, and significant natural resources. The primary tool for doing this is the conservation easement, a voluntary agreement between a landowner and the MET Board of Trustees. MET Conservation Easements promote growth management, the protection of significant natural resources and rural areas, and discourage sprawling development patterns. A Conservation Easement is a perpetual legal agreement between a landowner (grantor) and the Trust (grantee) ensuring that a property shall not be developed beyond a limit agreed upon by both parties. The land is thereby protected and preserved without detriment to the rights of ownership, occupancy, or privacy, while the agreement provides for significant income, estate, and property tax benefits.

Department of Natural Resources Land: The areas shown on Map 6-3 are land owned by the Maryland Department of Natural Resources. They also show lands that are generally thought to be protected from development pressures.

Agriculture Easements: The Maryland Agricultural Land Preservation Foundation (MALPF), housed within the Maryland Department of Agriculture (MDA), protects agricultural lands through the use of perpetual easements. The purpose of the program is to preserve productive agricultural land and woodland in Maryland to provide for the

[16] http://dnrweb.dnr.state.md.us/gis/data/sampledata.asp

continued production of food and fiber, curb the extent of random urban development, and protect these lands as open space.



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Sensitive Areas Policies

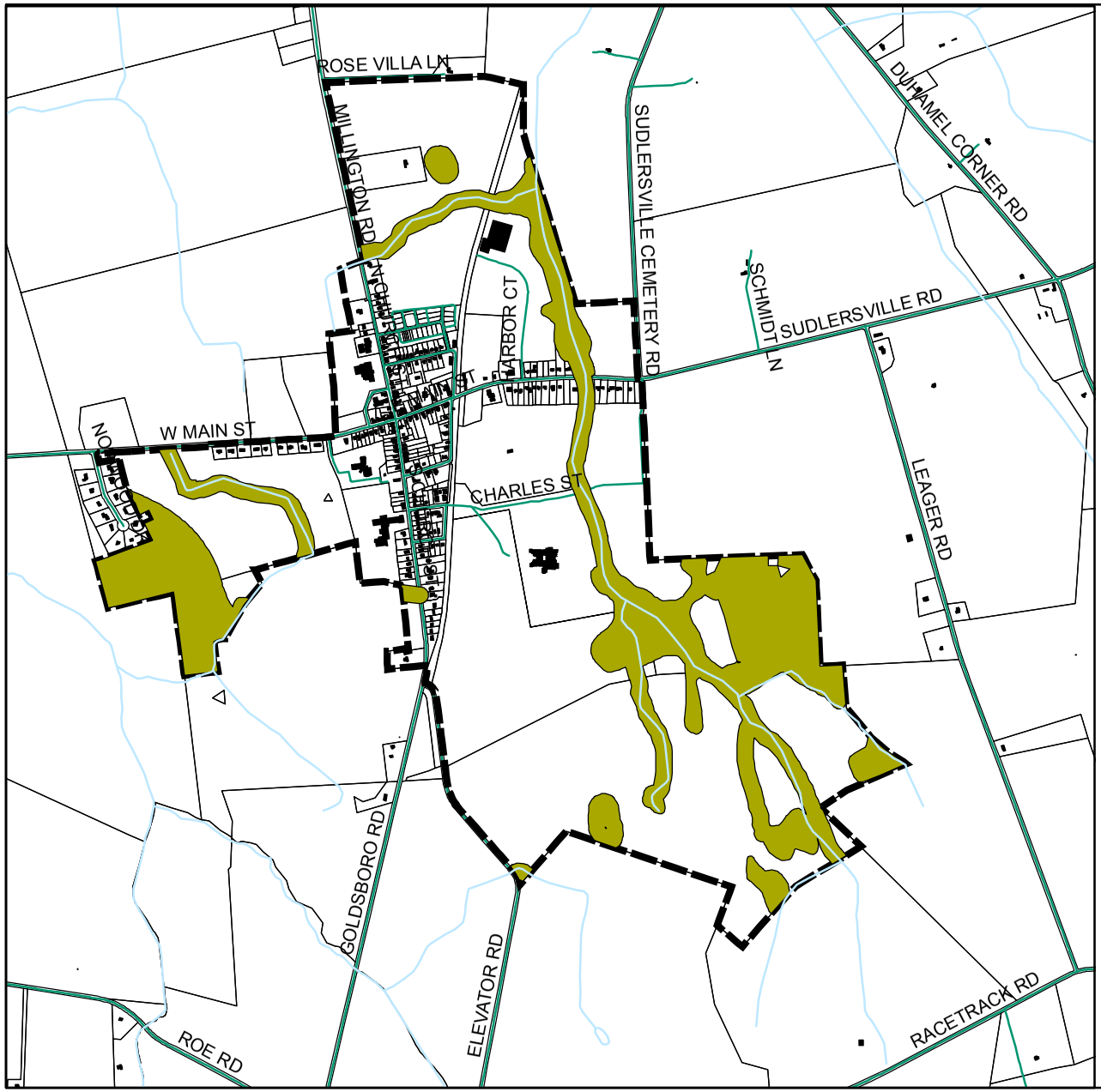
Clear policies and appropriate management requirements for protection of sensitive areas is important because these features are slightly less than one quarter of the Town area (see Map 6-4). Sensitive areas polices for Sudlersville include the following:

- Direct intensive activities away from natural area corridors.
- Protect natural areas and the natural drainage system.
- Preserve environmentally sensitive areas along waterways and major drainage features.
- Establish specific development policies for reviewing all development activities within natural corridors, with respect to impact upon and protection of ground water.
- Preserve natural drainage-ways and provide public access points for maintenance purposes.

Sudlersville's zoning ordinance establishes a minimum 25-foot buffer from all waterways and wetlands and requires tree planting within this buffer area. In addition where a proposed development may impact sensitive habitats, the developer is required to confer with the Department of Natural Resources, and if required have prepared a habitat protection plan to protect and conserve the habitats identified.

Mineral Resources

The Land Use Article requires that each Comprehensive Plan contain a mineral resources element. If current geological information is available, the plan must show how mineral resources will be extracted or reserved for future use. Sudlersville has no commercial quality mineral resources. The Town is of such a size and character that reservation of land for mineral extraction is not appropriate in any event.



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Map 6-4

Comprehensive Plan
Sudlersville, Maryland

Sensitive Areas - Town

Streams

Sensitive Areas

Corporate Limits

0 1,000 2,000 4,000 Feet

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SECTION 7 - WATER RESOURCES

Introduction

Sudlersville's "Water Resources Element" (WRE) satisfies a basic planning requirement mandated by Maryland House Bill 1141 (HB 1141). The purpose of the WRE is to assess water resource capacity to meet current and future needs. Specifically, the statutory requirements are to:

- 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 storm water 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.

The WRE informs other Plan elements including: 1) the Land Use Plan; 2) the Municipal Growth element; 3) Community Facilities; and 4) Natural Resources. In the WRE the municipality addresses three major areas including water (both supply and quality), wastewater treatment and discharge, and stormwater management. Preparation of the WRE evaluates water resource capacity limits, determines the potential implications of water resource issues for future growth, and facilitates development of management strategies.

Hydrogeological Setting

By way of context, Sudlersville is situated in the Northern Atlantic Coastal Plain aquifer system (NACP). The NACP system encompasses approximately 50,000 square miles that extend from the North Carolina and South Caroline border to Long Island, New York. The aquifer system is bounded in the west by the Fall Line, which separates the Piedmont from the Coastal Plain physiographic province (see Figure 7-1) and is bounded in the east by the Atlantic Ocean.[17]

Regional Water Resources

The Atlantic Coastal Plain aquifer system in Maryland consists of an alternating series of aquifers and confining units that descend and widen as they extend toward the Atlantic Ocean.

[17] *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.

The major aquifers in the Coastal Plain system are the Patuxent, Patapsco, Magothy, Aquia and Piney Point Formations, and the Chesapeake Group.

Total ground water use in Maryland exceeds 214 million gallons per day.[18] The urban areas of Baltimore and Washington, D.C. make up the largest percentage of the State's water usage, and their water supply is derived from surface water sources. In Maryland's Coastal Plain counties, which include southern Maryland and the Eastern Shore, ground water comprises 86 percent of the total water use.[19]

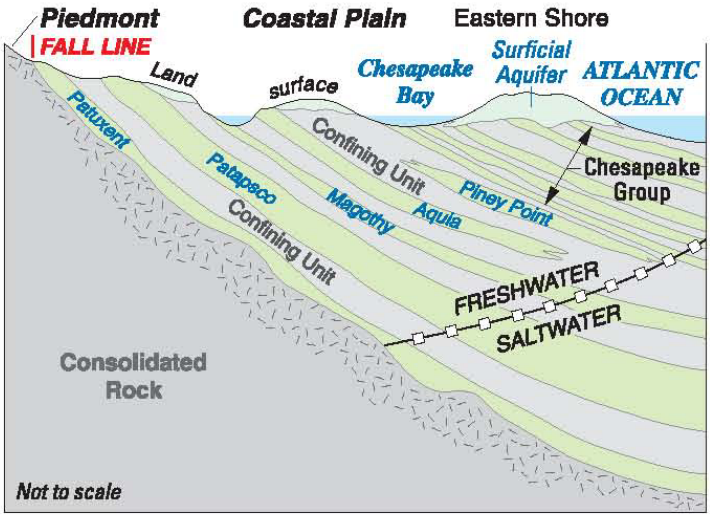


Figure 7-1: North Atlantic Coastal Plain Aquifer System

Groundwater in the Coastal Plain is drawn from unconfined (natural water table) and confined (artesian) aquifers. Unconfined aquifers are recharged by rainfall and snow melt and depleted by drought, resulting in fluctuating water levels. Artesian aquifers receive recharge from areas where water-bearing formations crop out, leakage through confining beds, and lateral movement of water from adjacent aquifers. Artesian aquifers are much less vulnerable to drought conditions.[20]

The natural water quality of Coastal Plain ground water is generally good and ranges from very soft to very hard with the average in the moderately soft range (Vokes and Edwards, 1974). Most Coastal Plain aquifers contain both fresh and salt water. Water directly below recharge areas is fresh; salt levels increase with aquifer depth and proximity to the ocean. The location of the freshwater-salt water boundary (zone of diffusion) depends on the volume of fresh water entering the aquifer from recharge or leakage.

One of the most common problems in Coastal Plain aquifers is salt water intrusion. Some parts of the confined aquifers in the system have been affected by intrusion of brackish or saline water, notably in more heavily populated areas along the coastlines of the Bay (Annapolis, Kent Island) and the Atlantic Ocean (Ocean City) where water usage is greater.[21]

[18] *An Overview of Wetlands and Water Resources of Maryland, by* Denise Clearwater, Paryse Turgeon, Christi Noble, and Julie Labranche. Prepared for Maryland Wetland Conservation Plan Work Group, January 2000
[19] Ibid.
[20] Ibid.
[21] Ibid.

According to the Queen Anne's County Comprehensive Water and Sewer Plan there are ten formations considered to be important, or potentially important water supplies underlying Queen Anne's County. Beginning with the surface formations and proceeding to the deepest they are:

- Wicomico Formation
- Calvert Formation
- Aquia Greensand Formation
- Monmouth Formation
- Matawan Formation
- Piney Point Formation
- Magothy Formation
- Raritan Formation
- Patapsco Formation
- Patuxent Formation

Considering depth, water quality and quantity the Aquia Greensand, Piney Points, Magothy, Patapsco and Patuxent Formations are considered the most important water sources in Queen Anne's County. Despite the need for iron removal, the Magothy Formation is important because an increasing number of wells in Queen Anne's County are penetrating the Magothy Formation. New Aquia Greensand appropriations are being restricted in the Grasonville and Kent Island area. For Kent Island, the Magothy and deeper formations will be the only sources available due to the over pumping and brackish water intrusion of the Aquia. The Patapsco Formation is considered an important replacement for the Magothy Formation as the primary source of potable water. The Patuxent, though very deep in Queen Anne's County is considered a reserve source that may be tapped in the future.

The Town of Sudlersville draws its water from the Aquia Aquifer. Scientific studies published in recent years indicate that water levels in the Aquia are dropping at a significant rate and that in some areas of Maryland the Aquia has reached its maximum allowable yield.[22] In 2004, in its report to the Governor, the Maryland Advisory Committee on the Management and Protection of the State's Water Resources observed:

> "One of the most vexing and complex water-resources issues in the State of Maryland is the declining ground water levels in the seven major confined Coastal Plain aquifers in the Southern and Eastern Shore areas of Maryland. These seven aquifers (Chesapeake, Piney Point, Aquia, Magothy, Upper Patapsco, Lower Patapsco, and Patuxent) are heavily used for water supply – about 80 million gallons per day of ground water is being withdrawn for various uses. Ground water levels are declining by an average of about 2

[22] *Future of Water Supply from the Aquia and Magothy Aquifers in Southern Anne Arundel County, Maryland,* by David C. Andreasen 2002; *Effects of Withdrawals on Ground-Water Levels in Southern Maryland and the Adjacent Eastern Shore, 1980–2005*, by Daniel J. Soeder, Jeff P. Raffensperger, and Mark R. Nardi,
Scientific Investigations Report 2007–5249, U.S. Department of the Interior U.S. Geological Survey

> feet per year in these aquifers. As noted in the Southern Maryland pilot study, a comprehensive approach that assesses all the aquifers of the Maryland Coastal Plain and that includes the entire extent of each aquifer from the Fall Line to the Atlantic Coast is needed to adequately plan for future water withdrawals and to manage water level declines."[23]

In 2007, the U.S. Department of the Interior (USDI) and U.S. Geological Survey (USGS) also reported that "decades of increasing pumpage have caused ground-water levels in parts of the Maryland Coastal Plain to decline by as much as 2 feet per year in some areas of southern Maryland. Continued declines at this rate could affect the long-term sustainability of ground-water resources in Maryland's heavily populated Coastal Plain communities and the agricultural industry of the Eastern Shore."[24]

The 2004 report of the Maryland Advisory Committee on the "Management and Protection of the State's Water Resources" recommended a comprehensive study of the sustainability of the entire Atlantic Coastal Plain aquifer system in Maryland. This study is currently being undertaken by the U.S. Department of the Interior and USGS in cooperation with the Maryland Geological Survey and Maryland Department of the Environment. The assessment will be conducted in three phases and is expected to take seven to eight years to complete. According to the most recent report, "progress continued on Phase II of the regional Coastal Plain Assessment. Activities included further development of the regional groundwater flow model, incorporation of new data and refinements to the Coastal Plain Aquifer Information System, and an evaluation of the regional monitoring networks."[25] When fully developed, the system will serve as a web-based tool and will facilitate the use of ground-water management models for evaluation of a variety of water-management strategies.

Sudlersville Water System

Sudlersville water system includes two drilled wells in the Aquia aquifer. Sudlersville also has two wells in the Calvert Formation that are used for fire protection. Water drawn from the Aquia undergoes arsenic reduction treatment and disinfectant is added to protect against microbial contaminants. Treated water is then pumped into the distribution system which consists of a 500,000 gallon elevated storage tank and water mains and lateral connecting all town residents to the public water system. According to most recent drinking water quality report, "the Town of Sudlersville drinking water met all of the State and Federal requirements."[26]

[23] Advisory Committee on the Management and Protection of the State's Water Resources, Final Report, May 28, 2004
[24] Open File Report 2007 – 1205, *A Science Plan For A Comprehensive Regional Assessment Of The Atlantic Coastal Plain Aquifer System In Maryland*, by Robert J. Shedlock, David W. Bolton, Emery T. Cleaves, James M. Gerhart, and Mark R. Nardi, U.S. Department of the Interior, U.S. Geological Survey, 2007.
[25] Groundwater Protection Program, Annual Report to the Maryland General Assembly2012, Water Supply Program, Water Management Administration
[26] Town of Sudlersville 2012 Drinking Water Quality Report, Maryland Environmental Service, PWSD:0110024

MDE manages use of ground water by issuing Ground Water Appropriation Permits (GAPs) that specify allowable average and maximum daily flow for municipal water systems. Annual average daily flow is the total volume of water flowing into a water facility during any consecutive 365 days, divided by 365 and expressed as million gallons per day (MGD) or gallons per day (GPD). Maximum daily flow capacity is the maximum quantity permitted to flow within a single 24-hour period.

The current GAP (QA2005G02503) - for Sudlersville authorizes an annual average withdrawal of 17,500 GPD and 26,000 GPD during the month of maximum use. The current permit is set to expire in July 2023. According to personnel at MDE's Water Supply Program, annual average daily usage was 6,800 GPD in 2010, 15,000 GPD in 2011 and 41,000 GPD in 2012.

Projected Water Demand

Calculations of the impacts of projected growth on water demand in Sudlersville is based on the two population growth scenarios and build out of the Town as evaluated in the Municipal Growth element. These calculations assume average residential water demand at a rate of 250 gallons per dwelling unit per day and nonresidential land use (commercial/industrial) at 0.05 gallons per square foot, the design criteria used by Queen Anne's County to estimate flow from retail establishments.[27] The calculation also assumes the Town has no permitted water source capacity as annual average daily usage for 2012 reported was 41,000 GPD. This amount exceeds the current 0.175 MGD limit in the Town's GAP by 0.0235 MG.

Table 7-1: Projected Water Demand Impacts (in Millions of Gallons Per Day)

Projected Demand	Scenario 1	Scenario 2	Build Out
Residential	0.144	0.038	0.318
Commercial/Industrial	0.007	0.005	0.174
Total	0.151	0.043	0.492
Current Demand	0.041	0.041	0.041
Projected plus Current Demand	0.192	0.084	0.533
Groundwater Water Appropriations Permit	0.018	0.018	0.018
Excess Capacity/Shortfall	-0.175	-0.067	-0.516

Source: Peter Johnston & Associates

The infrastructure capacity needed to store, treat and distribute water for either growth scenario already exists or can added as needed. However as can be seen from the results summarized in Table 7-1 the Town will need to substantially increase the allowed limits under their GAP.

[27] Queen Anne's County 2011 Comprehensive Water and Sewerage Plan, Departments of Public Works, Land Use Growth Management and Environment, and Environmental Health, February 2011 Draft, pg. 152

Sudlersville Sewer System

Sudlersville is replacing its current sewer treatment facilities with a state-of-the art waste water treatment plant (WWTP). The system consists of 0.20 MGD modules that can be added as required. In addition to serving Sudlersville the system is will provide service to the Town of Barclay. Barclay has entered into a Memorandum of Understanding with the Town of Sudlersville to provide sewer service. Construction is expected to commence in early 2015. The system will be a force main collection system with a "denied access" main connecting it to the Sudlersville plant.

Projected Sewer Demand

As was the case with projected water demand calculations of the impacts of projected growth on the Town's sewer system is based on the population growth scenarios evaluated in the Municipal Growth element. In addition sewer demand calculations assumed the following:

- flows from residential units at an average rate of 250 gallons per dwelling unit per day;
- flows from nonresidential land uses (commercial/industrial) at a rate of 0.05 gallons per square foot;
- the Town's sewer treatment plant flow rate currently averages 75,000 GPD;
- the Town can add another 0.20 MGD of treatment capacity at the existing sewer treatment plant as needed; and
- approximately 0.04 MPD of sewer will come from the Town of Barclay.

Sudlersville will have adequate sewer treatment capacity to accommodate projected population growth in the two scenarios evaluated and including sewer service to the Town of Barclay (see Table 7-2). However, under Scenario 1 which projects a higher growth rate the Town would have to add a second treatment module to the WWTP and increase total treatment capacity to 0.40 MGE. Approximately 0.532 MGD of treatment capacity will be required to accommodate the estimated sewer demand at full build out of the Town and exceeds the capacity of a two module configuration at the WWTP.

Because the new WWTP utilizes Enhance Nutrient Removal (ENR) technology waste water discharge thru 2030 will not exceed the nutrient cap established under the current NPDES discharge permit (MD0020559). However, even with ENR treatment the Town may exceed the current Tributary Strategy point source cap at full build out.

Table 7-2: Projected Sewer Demand Impacts (in Millions of Gallons Per Day)

	Scenario 1	Scenario 2	Build Out
Residential	0.144	0.038	0.318
Town of Barclay	0.04	0.04	0.04
Commercial/Industrial	0.007	0.005	0.174
Total	0.191	0.083	0.532
Excess Capacity	0.325	0.125	0.325
Excess Capacity/Shortfall	0.134	0.042	-0.207

Source: Peter Johnston & Associates

Watershed Characteristics

The Upper Chester River Watershed is approximately 113,485 acres and is located in Kent and Queen Anne's Counties, Maryland and includes portions of New Castle and Kent counties in Delaware where its headwaters are located. Parts of Sudlersville are located in the Lower Unicorn Branch (03); the Upper Red Lion Branch (10); and the Lower Red Lion Branch (09) sub-watershed (see Map 6-1).

Approximately 65% (56,176 acres) of the land in the watershed is categorized as agricultural land, 31% (26,958 acres) of land is forested, and 3% (2,932 acres) is designated as urban. Urban areas include the towns of Barclay, Millington, and Sudlersville. Of the 138 watersheds in Maryland, the Upper Chester is among those with the least impervious surface, the lowest population density, the most wetland loss, and the highest soil erodibility.[28] In its 2005 study of the Upper Chester River Watershed, the Maryland Department of Natural Resources (DNR) reported the average percent of impervious surface in sub-watersheds of the Upper Chester River Watershed is less than 2 percent which suggests that significant impacts on habitat and water quality are limited to local areas rather than watershed-wide.[29]

Water Quality Issues

The Upper Chester River was first identified on Maryland's 1996 303(d) list as impaired by nutrients, sediments, and bacteria, with listings added in 2002 for evidence of biological impacts. The listing for nutrient impairment was made due to signs of eutrophication – the over-enrichment of aquatic systems by excessive inputs of nutrients, especially nitrogen and phosphorus. Nutrients act as a fertilizer causing excessive growth of aquatic plants. These plants eventually die and decompose, leading to bacterial consumption of dissolved oxygen.
Impairments to the streams and rivers in the watershed can be eliminated by limiting the amount of nutrients that enter the river.

[28] *Upper Chester River Watershed Restoration Action Strategies*, June 2006
[29] Ibid

MDE, with approval from the EPA, established total maximum daily loads (TMDLs) for nitrogen and phosphorus in the Upper Chester River in 2006.[30] The water quality goal embodied in the TMDLs is to reduce high chlorophyll concentrations (a surrogate for algal blooms) and to maintain dissolved oxygen at a level supportive of the river's designated uses.

Total Maximum Daily Loads – TMDLs

Under the terms of the *Federal Clean Water Act* (33 U.S.C. §§ 1251-1387) the U.S. Environmental Protection Agency (EPA) delegated authority to Maryland to implement a systematic technical and administrative framework for managing water quality. Delegated responsibilities include setting water quality standards, assessing water quality, identifying waters that do not meet standards, establishing limits on impairing substances, and issuing permits to ensure consistency with those pollutant limits. The Clean Water Act's water quality standards set by the State identify the intended uses for each water body, for example, drinking water supply, contact recreation (swimming), and/or aquatic life support (fishing). In Maryland's portion of the Upper Chester River watershed all streams and other surface waters are designated Use 1 for water contact recreation and protection of aquatic life.

The State must conduct scientific studies for waters that do not meet water quality standards due to an excessive pollutant load and determine the maximum amount of the pollutant that can be introduced to a waterbody and still meet standards. That maximum amount of pollutant is called a Total Maximum Daily Load (TMDL), and the studies are called "TMDL Analyses," or simply TMDLs. TMDLs are a regulatory mechanism to identify and implement additional controls on both point (i.e., wastewater treatment plants, urban stormwater) and non-point source (i.e., stormwater runoff, erosion) discharges in water bodies that are impaired by one or more pollutants and are not expected to be restored through normal point source controls.

Total Maximum Daily Loads (TMDLs) establish limits or "caps" on the amount of pollutants permitted from point (P) and non-point sources (NPS) through an allocation system and TMDL analysis that defines a quantified framework for TMDL implementation. TMDLs are expressed as allowable loads of a specified pollutant by point and non-point sources. Point sources include wastewater treatment plants with direct discharge permits into waterways (National Pollutant Discharge Elimination System Permits-NPDES) and urban storm sewer systems.

The Upper Chester River Watershed has two minor municipal point sources: Millington WWTP and Sudlersville WWTP. Non-point sources are all discharges other than point source discharges. A TMDL is a calculation of the maximum amount of a pollutant, both point source and non-point source, that a water-body can receive and still meet water quality standards.

[30] "Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland", Final Report, Maryland Department of the Environment, April 2006

Legal responsibilities for programs and regulations related to water quality management such as land use control, sediment and erosion control, stormwater management and others that have a strong bearing on water quality are under the purview of local government. "To maintain control over decisions that affect their communities, local jurisdictions have a stake in how the State's legal responsibilities for maintaining water quality standards are executed. In particular, local governments have an interest in the implementation of TMDLs. They are also best situated to address many aspects of implementation, due to their geographic proximity to the impaired waterbodies, and their direct role in decisions that affect local water quality."[31]

Point and Nonpoint Source Loading

Point sources are identifiable inputs of waste that are discharged via pipes or drains primarily from industrial facilities and municipal treatments plants into streams, rivers, lakes, or oceans. There are two permitted point sources that discharge nutrients to the Upper Chester River Watershed: the Millington WWTP and the Sudlersville WWTP).

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, rivers, lakes, and coastal waters or introduced into ground water. Stormwater runoff is a significant contributor to non-point source loading.

Stormwater runoff is part of the natural hydrologic process. Human activities such as urbanization and agriculture can alter natural drainage patterns and add pollutants to rivers, lakes, and streams as well as coastal bays and estuaries. Urban runoff can be 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 (e.g. sediment and erosion control).

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 waterways. These programs promote the concept and practice of managing pollution at the source before it can cause environmental problems.

[31] MD's *2006 TMDL Implementation Guidance for Local Governments*, Maryland Department of the Environment, Document version: May 24, 2006

Upper Chester River TMDLs

According to the MDE, "the objective of the nutrient TMDLs that have been established for the Upper Chester River Watershed are to:

- Ensure that minimum Dissolve Oxygen (DO) concentrations specified for each designated use are maintained; and

- Resolve violations of narrative criteria associated with excess nutrient enrichment.

In order to achieve this objective, the MDE has established average annual nutrient TMDLs for the Upper Chester River for Total Nitrogen (TN) and Total Phosphorus (TP). These TMDLs are summarized in Table 7-3.

Table 7-3: Average Annual Allocations Upper Chester River

Classification	Total Nitrogen (TN) lbs/yr)	Total Phosphorus (TP) (lbs/yr)
Non Point Source[1]	561,653	29,078
Point Source[2]	26,451	3,810
Margin of Safety[3]	26,507	1,466
Total	614,612	34,354

1. Excluding urban stormwater loads.
2. Including urban stormwater loads.
3. Representing 5% of agricultural loads.

Source: Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland, Maryland Department of the , Final Report, April 2006

These TMDLs represent a substantial reduction from the baseline estimates of average annual loading used for modeling purposes (see Tables 7-4 and 7-5). As can be seen, significant reductions in overall NPS will be required in order to meet the TMDL caps. Further, the TMDLs establish a cap of no more than a total 40 percent of total nitrogen (TN) load and 25 percent of total phosphorous (TP) load during the growing season (May 1 through October 31) because of the particular water quality problems being addressed, i.e., low DO concentration and eutrophication. "Problems associated with eutrophication are most likely to occur during the growing season (May 1st to October 31st)… During the growing season, there is typically less stream flow available to flush the system, more sunlight to grow aquatic plants, and warmer temperatures, which are favorable conditions for biological processes of both plant growth and dead plant matter decay."[32]

[32] Page 11, Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland, Maryland Department of the Environment, Final Report, April 2006

MDE states that much of this difference will be addressed through implementation of a number of targeted programs. According to MDE, "it is reasonable to expect that NPS loads can be reduced during growing season conditions. The nutrient loads sources during growing season include dissolved forms of the impairing substances from groundwater, the effects of agricultural ditching and animals in the stream, and deposition of nutrients and organic matter to the stream bed from higher flow events. When these sources are controlled in combination, it is reasonable to achieve NPS reductions of the magnitude identified by this TMDL allocation."[33]

Table 7-4: TN Loading Estimates Upper Chester River Watershed Average Annual Versus TMDLs

Source	Average Annual Loading TN (lbs/yr)	Future Scenario TN (lbs/yr)	Change TN (lbs/yr)
Urban (Stormwater)	16,197	16,197	0
Point Source (WWTP)	12,144	10,254	-1,890
Agriculture NPS	1,095,347	503,640	-591,708
Forest NPS	47,106	47,106	0
Atmospheric Deposition	13,947	10,908	0
Total	1,184,741	588,105	-596,637
Margin of Safety		26,507	
TMDL		614,612	

Source: Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland, Maryland Department of the Environments, Final Report, April 2006

Table 7-5: TP Loading Estimates Upper Chester River Watershed Average Annual Versus TMDLs

Source	Average Annual Loading TP (lbs/yr)	Future Scenario TP (lbs/yr)	Change TP (lbs/yr)
Urban (Stormwater)	2,101	2,101	0
Point Source (WWTP)	2,024	1,709	-315
Agriculture NPS	54,475	27,858	-26,617
Forest NPS	412	412	0
Atmospheric Deposition	807	807	0
Total	59,819	32,887	-26,932
Margin of Safety		1,466	
TMDL		34,353	

Source: Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland, Maryland Department of the Environments, Final

[33] Page 39, Total Maximum Daily Loads of Nitrogen and Phosphorus for the Upper and Middle Chester River, Kent and Queen Anne's Counties, Maryland, Maryland Department of the Environment, Final Report, April 2006

Report, April 2006
MDE cites several established programs as the basis for reasonable assurances that the nitrogen and phosphorus TMDLs will be achieved and maintained. These programs, as described by MDE, include the following:

Bay Restoration Fund Enhanced Nutrient Reduction (ENR)

The Bay Restoration Fund Enhanced Nutrient Reduction (ENR) program provides up to 100 percent state grant funds to local governments to retrofit or upgrade wastewater treatment plants to remove a greater portion of nutrients from discharges. ENR technologies allow sewage treatment plants to provide a highly advanced level of nutrient removal. The ENR strategy builds on the success of the biochemical nutrient removal (BNR) program already in place. Upon completion of the upgrade, the NPDES permits will require the permittee to make a best effort to meet the load goals providing reasonable assurance of implementation. The NPDES permits should also be consistent with the assumptions made in the TMDL (e.g., flow, effluent nutrients concentrations, CBOD, DO, etc.).

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.

Chesapeake Bay Agreement

In the 1987 Chesapeake Bay Agreement Maryland made a commitment to reduce nutrient loads to the Chesapeake Bay. In 1992, the Bay Agreement was amended to include the development and implementation of plans to achieve these nutrient reduction goals. Maryland's resultant Tributary Strategies for Nutrient Reduction provides a framework supporting the implementation of NPS controls in the Upper Eastern Shore Tributary Strategy Basin which includes the Upper Chester River Watersheds. *Chesapeake 2000* updated the Chesapeake Bay agreement among the original signatory states of Maryland, Pennsylvania and Virginia and includes the headwater states of Delaware, New York and West Virginia.

Five-Year Watershed Cycling Strategy

Maryland uses a five-year watershed cycling strategy to manage its waters. Pursuant to this strategy, the State is divided into five regions, and management activities will cycle through those regions over a five-year period. The cycle begins with intensive monitoring, followed by computer modeling, TMDL development, implementation activities, and follow-up evaluation.

The choice of a five-year cycle is motivated by the five-year federal NPDES permit cycle. This continuing cycle ensures that every five years intensive follow-up monitoring will be performed.

Watershed Restoration Action Strategy (WRAS)

A Watershed Characterization Report and Stream Corridor Assessment (SCA) for the Upper Chester River completed by the Department of Natural Resources in 2005 provided the background for development of the Upper Chester River Watershed WRAS. The Watershed Characterization Report summarizes readily available natural resources and other data for the watershed including information on water quality, land use and cover, living resources, and habitat. The Stream Corridor Assessment is a survey designed to provide an overview of the condition of the stream system so that future restoration efforts can be better targeted. The most common environmental concern seen during the SCA survey of the Upper Chester River streams was inadequate buffers.

The Upper Chester River Watershed WRAS was completed in June 2006 by a workgroup composed of representatives from Kent and Queen Anne's counties, in a cooperative effort with the Maryland DNR. The purpose of WRAS is to present a strategy to reduce nonpoint source pollutants that contribute to impairment in the watershed, while at the same time conserving the unique, high quality natural resources. Strategies are developed through the combined efforts of the general public, watershed stakeholders, local and county governments, non-profit organizations and State and Federal agencies.

The goals of the WRAS are to improve water quality, protect and restore wildlife habitat and sustain viable agriculture and retain small town community. Based on these goals, about 20 strategies were developed to guide local and regional initiatives aimed at improving conditions and conserving resources in the watershed. The strategies focus on water quality, wildlife habitat, agriculture, and small town communities. Strategies include initiatives recommended for jurisdictions in the watershed that include the following:

- Develop a no net loss policy for wetlands, forests, stream buffers.
- Encourage local governments to be role models in restoring wetlands and planting buffers on public properties.
- Develop a no net increase policy for stormwater runoff.
- Have a community/neighborhood collectively install rain barrels and monitor change in runoff.
- Reexamine wastewater treatment facility and include upgrades to ENR/BNR.
- Reexamine sewer allocation policy/process so that projects that meet and/or exceed the WRAS Vision are given priority.

- Improve sediment conservation.
- Promote Public Ditch Association (PDA) Task Force recommendations.
- Expand sediment control regulations to make them applicable to smaller areas of disturbance.

Atmospheric Deposition

MDE reported that, "EPA Region 4 and EPA Region 6 have indicated that reductions in atmospheric contributions will be accomplished over time through existing and proposed Clean Air Act regulatory controls that will ensure significant reduction in airborne nutrient loading on a nationwide basis by reducing atmospheric emissions.

Delaware Portion of the Upper Chester River Watershed

Concerning the Delaware portion of the Upper Chester River Watershed, MDE's stated position is, "a portion of the drainage basin of the Upper Chester River (also referred to as "Upstream") lies in Delaware, beyond the jurisdictional and regulatory authority of Maryland. Load allocations to Delaware sources are consistent with and equitable to allocations given to sources in Maryland, and are reasonable and achievable with existing technology and practices. It will be incumbent upon the state of Delaware, and failing that the EPA, to ensure that this TMDL is implemented in Delaware."[34]

Implications of TMDLs for Sudlersville

Point Sources: Sudlersville WWTP

A basic assumption in MDE's TMDL analysis is that point source loading of TN and TP will be reduced over baseline conditions with flows at maximum design values and the concentrations at current or future permitting goals.

For the Sudlersville's WWTP the effluent concentrations were assumed to be set at no more than 18.00 mg/l TN and 3.0mg/l TP on a maximum flow of 0.75 MDG May through October and 0.90 MGD the rest of the year. Sudlersville will be able to increase its flow allocation by reducing nutrient concentrations in the flow to levels within the cap set in the TMDL. TN loadings can be reduced to 3.0 mg/l and TP can be reduced to 0.3 mg/l with the ENR utilized in the new WWTP. With this level of treatment Sudlersville's flow volume can obtain the maximum design capacity of the WWTP (0.4 MGD) with concentrations and overall loading remaining within limits.

[34] Upper and Middle Chester River TMDL for Nutrients, Document version: March 24, 2006, pg. 40

Urban Nonpoint Source (NPS)

Recent reports on water quality in the Upper Chester River indicate that the receiving waters do not have the assimilative capacity for additional loadings. Further, a basic assumption in MDE's TMDL analysis is that TN and TP load from urban sources will remain constant.

Sudlersville's corporate area represents less than one percent of the total watershed land area. This could lead one to believe that the Town's contribution to urban nonpoint source loading is to receiving waters is minimal. Nevertheless, the Town has a role to play in the Bay cleanup.

Important activities that the Town can undertake to contribute to the Bay cleanup include working with Queen Anne's County on implementation of the Phase II Watershed Implementation Plan (WIP) and insuring the Town's stormwater management requirements are consistent with current State regulations.

Maryland's Phase I Watershed Implementation Plan for the Chesapeake Bay Watershed

In December 2010, EPA issued its final Chesapeake Bay TMDL establishing a pollution "diet" to restore and protect the Bay. During 2010 the U.S. Environmental Protection Agency (EPA) set TMDLs for the Chesapeake Bay. In addition, EPA required the Bay states to develop statewide "Phase I" Watershed Implementation Plans (WIPs). The Phase I WIP allocates the allowable load among different sources and identifies statewide strategies for reducing nutrients and sediments that impair the Chesapeake Bay.

Phase II WIPs are part of a 3-phased planning process to achieve nutrient and sediment clean-up goals for the Chesapeake Bay. The State is working with local teams to develop Maryland's Phase II WIP. Local teams, organized at the county level include representation of entities with responsibility and authority to control nutrient and sediment loads like county and municipal governments, soil conservation districts, federal and State agencies among others.

Queen Anne's County submitted its Phase II WIP to the MDE in November 2011. The County's WIP set 2013 milestones the County intends to achieve. As concerns the municipalities, the County intends to work with the eight municipalities in the County to identify opportunities to implement the WIP including stormwater retrofits that improve water quality.

Stormwater Management

Sudlersville has adopted the Queen Anne's County Stormwater Management Ordinance by reference. The County Ordinance was adopted under the authority of Title 4, Subtitle 2, of the Environment Article of the Annotated Code of Maryland, 2009 replacement volume. As stated in the County Code, "the goal is to manage stormwater to maintain after development, as nearly as possible, the predevelopment runoff characteristics. It shall also reduce stream channel erosion, pollution, siltation and sedimentation, and local flooding. The environmental site design (ESD) to the maximum extent practicable (MEP) shall be used to meet the above goals, and appropriate structural best management

practices (BMPs) shall be used only when necessary. This will restore, enhance, and maintain the chemical, physical, and biological integrity of streams, minimize damage to public and private property, and reduce the impacts of land development."[35] Through implementation of the stormwater management ordinance requirements for environmental site design (ESD) the Town will be able to reduce nonpoint loading to receiving waters associated with future development. Additional gains can be had by retrofitting existing stormwater management systems with more environmentally sound management technics.

Monitoring Progress

Changing the way land use is managed to improve water quality in receiving waters is an important component of the Bay cleanup program. In addition, monitoring progress provides the State and County governments with critical information concerning the "who", "what"," when" and "where" of best management practices implementation. MDE suggests that, "many existing local programs and activities already deserve credit for contributing to the goals of TMDL implementation. Local governments are encouraged to think about integrating the tracking of these program activities in order to begin accounting for quantified credits toward TMDL implementation. Taking credit for existing programs can be done both qualitatively and quantitatively. Local governments are encouraged to begin developing a qualitative inventory of activities for which credit should be acknowledged. Guidance also stresses a recognition that the efficient protection of water quality begins with a well-conceived comprehensive land use plan. This is particularly important for local jurisdictions that are presently engaged in the process of updating their comprehensive plans." [36]

Conclusions

As outlined in the beginning of the section, Sudlersville is required to address the following in the comprehensive planning process:

- 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 storm water 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.

[35] Queen Anne's Code, Chapter 11:4, Stormwater Management, http://ecode360.com/7136772
[36] *Maryland's 2006 TMDL Implementation Guidance for Local Governments*. Prepared by the Maryland Department of the Environment (MDE), pg. 3-2. 2006.

As concerns the third bullet above, the Town adopted its first WRE in 2010. This comprehensive plan updates this element of the comprehensive plan.

Based on the best available data it seems safe to conclude that the Town has adequate drinking water sources available to it to meet the needs of existing and future development. Water sources include the Aquia Aquifer as a primary source of drinking water with the potential to tap other aquifers if needed.

The Town has adequate sewer treatment capacity to serve projected growth through 2030. Depending on which growth scenario evaluated in the Municipal Growth section most closely approximates actual growth, the Town may need to add the second module to the WWTP by 2030, bringing total WWTP capacity to 0.4 MGD. Projected sewer demand at build-out will exceed the maximum capacity of the WWTP. In addition, without treatment beyond that which can be achieved with ENR or a modified point source cap the effluent from the WWTP may exceed allowable limits.

Water quality trends in the Chester River indicate the need for improved point and non-point source management practices. By upgrading its WWTP to ENR standards, Sudlersville will make a significant contribution toward meeting the Tributary Strategy for the Chester River. Going forward, the Town can play an important, albeit minor, role in achieving water quality improvement objectives by working with Queen Anne's County to implement strategies outlined in the County's Phase II Watershed Implementation Plan and by rigorously enforcing its stormwater management requirements.

Finally, wastewater treatment capacity, even using ENR technology, will be limiting factor for growth in the long term. Meeting the needs of existing and future development within the existing corporate limits as well as serving Barclay will require all of the system's planned capacity. The implications for municipal growth are that the Town should carefully consider additional annexations in the context of their ability to provide wastewater treatment.

SECTION 8 - TRANSPORTATION

Introduction

Efficient and effective movement of people and goods is an important concern in any community's planning process. Providing a safe and efficient transportation network with minimal disruption of the area requires that transportation planning be closely coordinated with other elements of the Comprehensive Plan to assure that transportation plans and policies complement and support those of other sections. The control of transportation systems is divided among the State, the County, and the Town. Subsequently, managing transportation facilities to ensure adequate capacity when needed will require coordination and cooperation among the various levels of government.

Developers will be the primary agents responsible for expanding the local transportation system in the future. Streets, pedestrian and bicycle facilities and recreational trails that are components of new developments will result from a combination of the developer’s response to market demands and ordinance requirements as interpreted and applied by the professionals engaged in the development process. The objectives, policies and concepts put forth in the Transportation element highlight public expectations for new neighborhoods and provide an important interpretative framework for the development design review process.

Existing Transportation Facilities

State Highways

There are approximately six miles of roadway in the Town street system that includes State highways, County roads, and Town streets. Sudlersville is served by three State highways, MD Route 300, MD Route 313 and MD Route 837. Route 300 is nearly 22 miles long and provides east-west access from the Delaware line to MD Route 213. MD Route 313 is nearly 76 mile long and provides north-south access from US Route 50 in Mardela Springs to MD Routes 213/290 in Galena. MD Route 300 is classified by the State as a minor arterial route and MD Route 313 a major collector. Maryland Route 837 is the unsigned designation for Church Circle between MD 300 (Main Street) and MD 313 (Church Street).

MD Route 300 becomes Main Street in Sudlersville MD Route 313 becomes Church Street. MD Route 300 is part of the National Highway System between the Delaware Line and US Route 301. The National Highway System (NHS) is a network of strategic roads serving major airports, ports, rail and truck terminals, railway stations, pipeline terminals and other strategic transportation facilities. Estimates of average daily traffic (ADT) for 2012 provided by the Maryland State Highway Administration are summarized in Table 8-1.

Table 8-1: Average Daily Traffic Volume (ADT) Estimates

Route	ADT
MD Route 313 north	2,443
MD Route 313 south	2,453
MD Route 300 east	2,471
MD Route 300 west	3,261

Source: http://www.marylandroads.com/Traffic_Volume_Maps/queenannes.pdf

The State Highway Administration currently has no planned improvements for either of these routes.

Local Streets

The Town is responsible for the maintenance of local streets. These streets and alleys account for approximately 2.81 miles of the total Town roadway (see Table 8-2). Town streets form a grid pattern off the State routes for the most part. Roadway and right of way widths vary (see Map 8-2).There are no planned improvements to the Town's street system at this time.

Pedestrian and Bicycle Systems

The Town Center and the older adjacent residential areas have public sidewalks for the most part, outlying residential areas not so much (see Map 8-2). The conditions of the sidewalks that do exist vary. Many are in need of some level of repair. The cost of such repairs is a concern to the Town due to limited funds. The Town is undertaking an evaluation of sidewalk conditions to determine priorities and cost estimates. The intent is set aside funds in each annual budget for repairs.

For sidewalks located along State highways, State funding is available through the Maryland State Highway Administration's Retrofit Sidewalk Program. This program is aimed at providing or improving safe pedestrian access along state routes in existing communities, especially in the vicinity of schools. The State Highway Administration, working in partnership with counties and local communities identifies and prioritizes a list of proposed sidewalk locations. The guidelines used in the selection of projects include the following:

- Sidewalks must be along a State Highway
- The project should demonstrate safety benefits to pedestrians.
- It should provide or improve mobility for the general and disabled populace.
- Priority is given to projects that demonstrate that the addition of sidewalks will benefit revitalization by providing access to business, commercial and/or recreational areas that does not currently exist. Projects that are within Smart Growth Areas designated by local

governments according to State criteria can be funded totally through this program. Projects not within these designated areas are only funded for 50% of the cost

- The local jurisdiction should show evidence that they are in support of pedestrian facilities.
- It should be evident there is either existing or projected pedestrian traffic.
- The project should have the support of the adjacent local community that will be the potential users of the community.

These conditions would seem to apply in Sudlersville. The possibility of utilizing this program to improve the Town's sidewalks, and possibly add other amenities such as new redesigned street lights, trash receptacles, and benches should be considered.

Table 8-2: Road Inventory

Road/Street/Alley	Roadway Width	Length (miles)	Sidewalks
MD Route 300	22'-40'	1.92	Partial
MD Route 313	22'-40'	0.94	Partial
Church Circle (MD Rte. 837)	40'	0.12	No
Subtotal		**2.98**	
Charles Street	35'	0.73	Yes
S. Linden	20'	0.22	one side
N. Linden	20'	0.11	no
Maple	18'	0.11	one side
Miller	27'	0.17	Yes
Wayne Street	30'	0.07	no
Foxxtown Drive	24'	0.22	no
Sledmore Way	Not Constructed	0.10	no
Harbison Alley	Not Constructed	0.13	no
Elliot Farm Drive	Not Constructed	0.06	no
Emma K Alley	Not Constructed	0.26	no
Avondale Lane	Not Constructed	0.14	no
Thomson Alley	Not Constructed	0.04	no
Dr. Sudler Way	Not Constructed	0.04	no
John E. George Street	Not Constructed	0.04	no
Harbor Court	18'	0.36	no
Subtotal		**2.81**	
Total		**5.80**	

Source: Peter Johnston & Associates

The seven-member Queen Anne's County Bicycle and Pedestrian Advisory Committee appointed by the County Commissioners advises and makes recommendations to the County on bicycle and pedestrian access. This Committee's role is to identify opportunities where bicycle routes that will provide connectivity via non-motorized travel throughout Queen Anne's County can be designated. Designated bicycles routes are identified in the Queens Anne's County

Comprehensive Plan 2010. MD Route 313 through Barclay and Sudlersville appears on this plan map and is designated the "Monster" route (see Figure 8-1).

Transit Services

The County Ride Public Transit System provides transit service to Sudlersville. The North County Route of this system provides service to residents north of State Route 19. Stops are in Crumpton, Sudlersville, Barclay, and Millington with daily trips to Chestertown. Two stops for this service are provided in Sudlersville. One is located at Dogwood Village and occurs at 9:30 a.m. The other is at PNC located at the intersection of Main and Church Streets and occurs at 9:40.

Rail

The rail line through Town is still active. It is owned by the State of Maryland's Mass Transit Administration (Office of Rail Freight Service) and operated by the Maryland and Delaware Railroad Company (MDDE) a short line railroad operating 120 miles of rail lines on the Delmarva Peninsula. The Centreville Line begins at the Norfolk Southern interchange in Townsend, Delaware and continues southward 31 miles through the stations of Golts, Massey, Millington, Sudlersville, Barclay, Roberts, Price and Carville. The majority of MDDE operations on the Centreville Line occur between Townsend and Massey, as the connection to the Chestertown Line is at Massey and all traffic operating on the Chestertown Line must use the Centreville Line to access Norfolk Southern interchange, thus increasing the corridor's usage. Customers on the Centreville Line include Wenger Feeds in Massey, Harbor Sales in Sudlersville, Perdue in Roberts, as well as CPS, Southern States and Tidewater Direct at Carville. MDDE has runaround tracks at Massey, Sudlersville, Roberts and Carville to help facilitate operations.[37]

[37] Source: http://www.delmarvarails.com/Info_MDDE.html

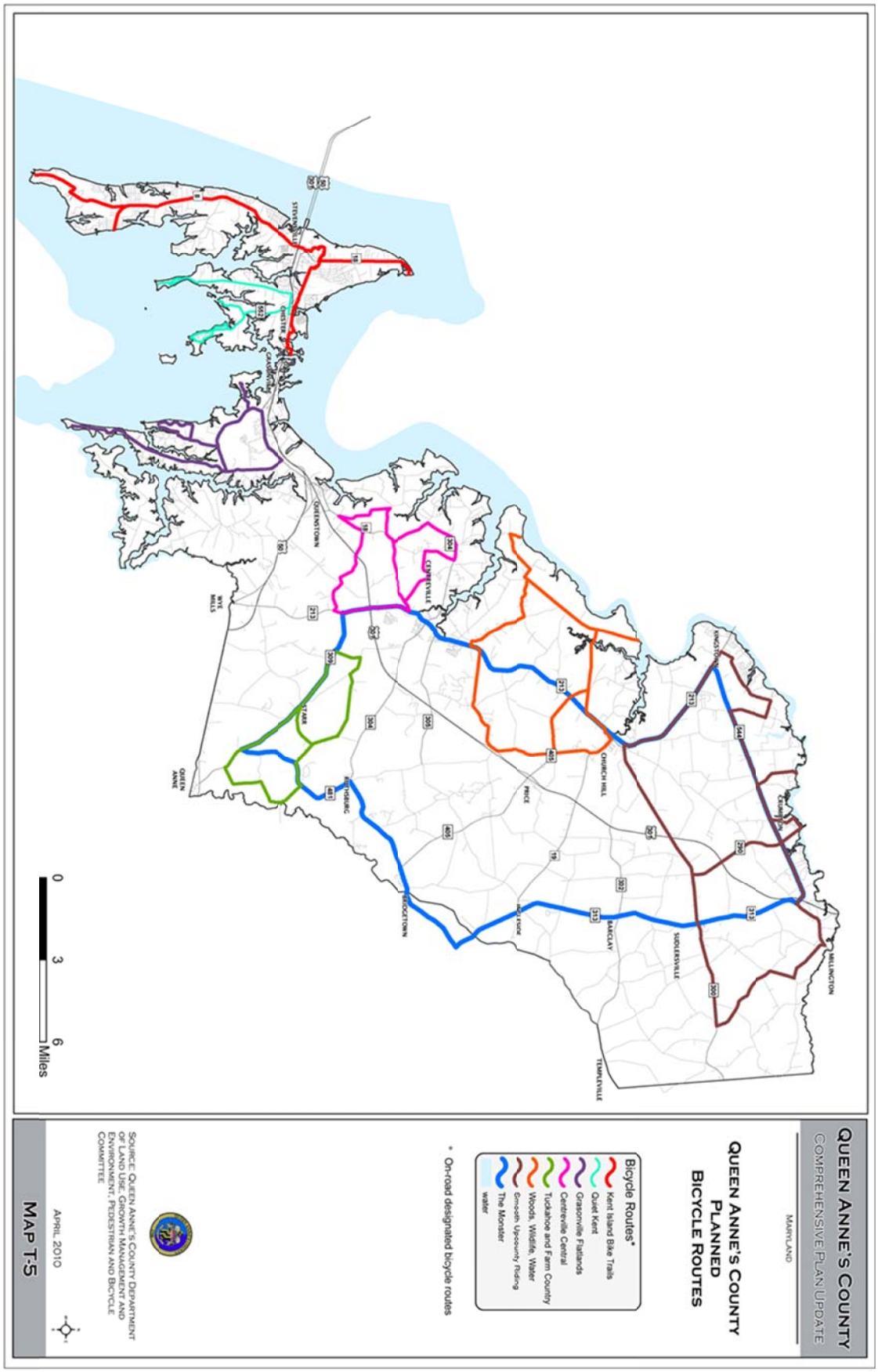
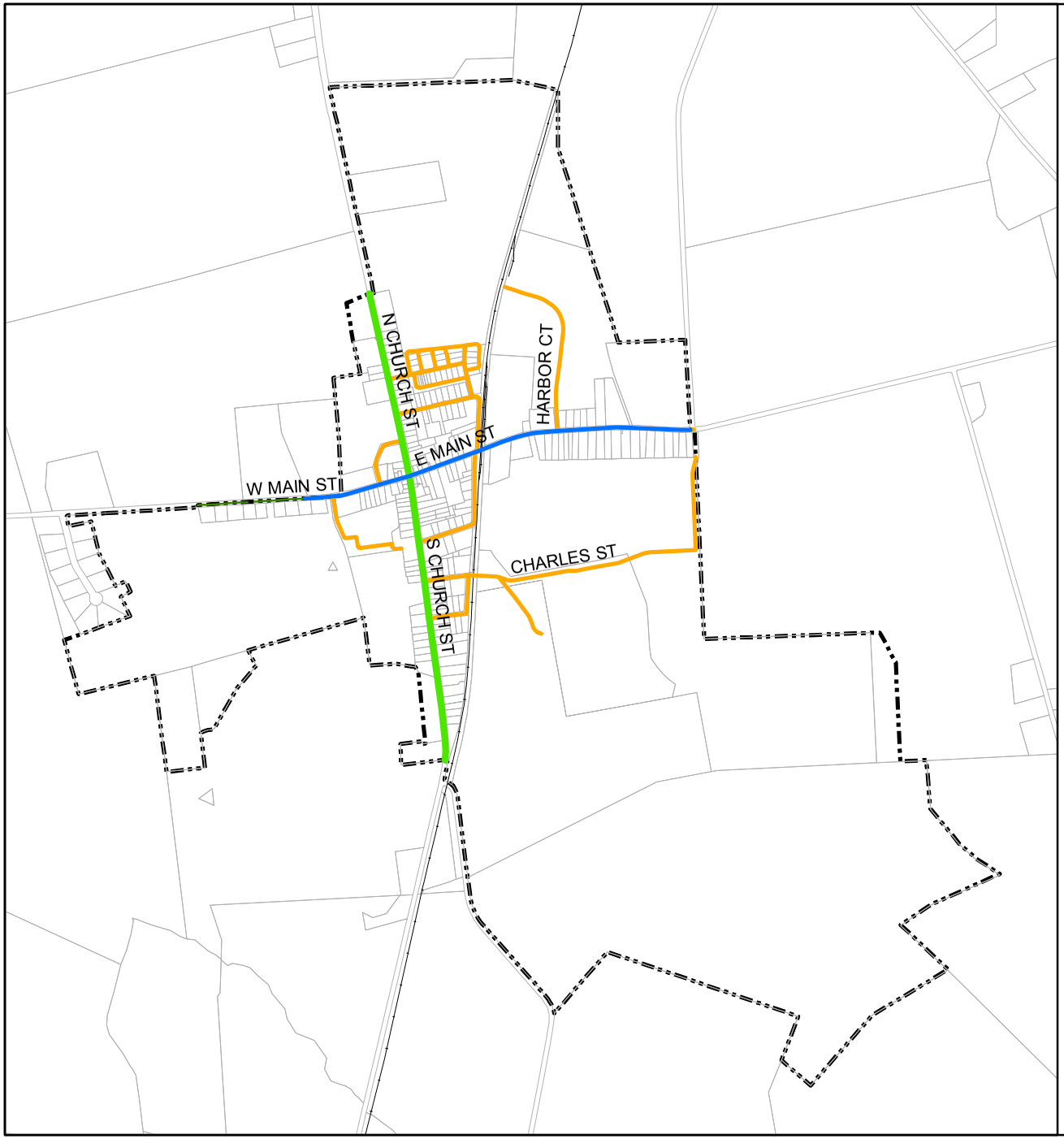


Figure 8-1 Queen Anne's County Planned Bicycle Routes



DRAFT
Map 8-1

Comprehensive Plan
Sudlersville, Maryland

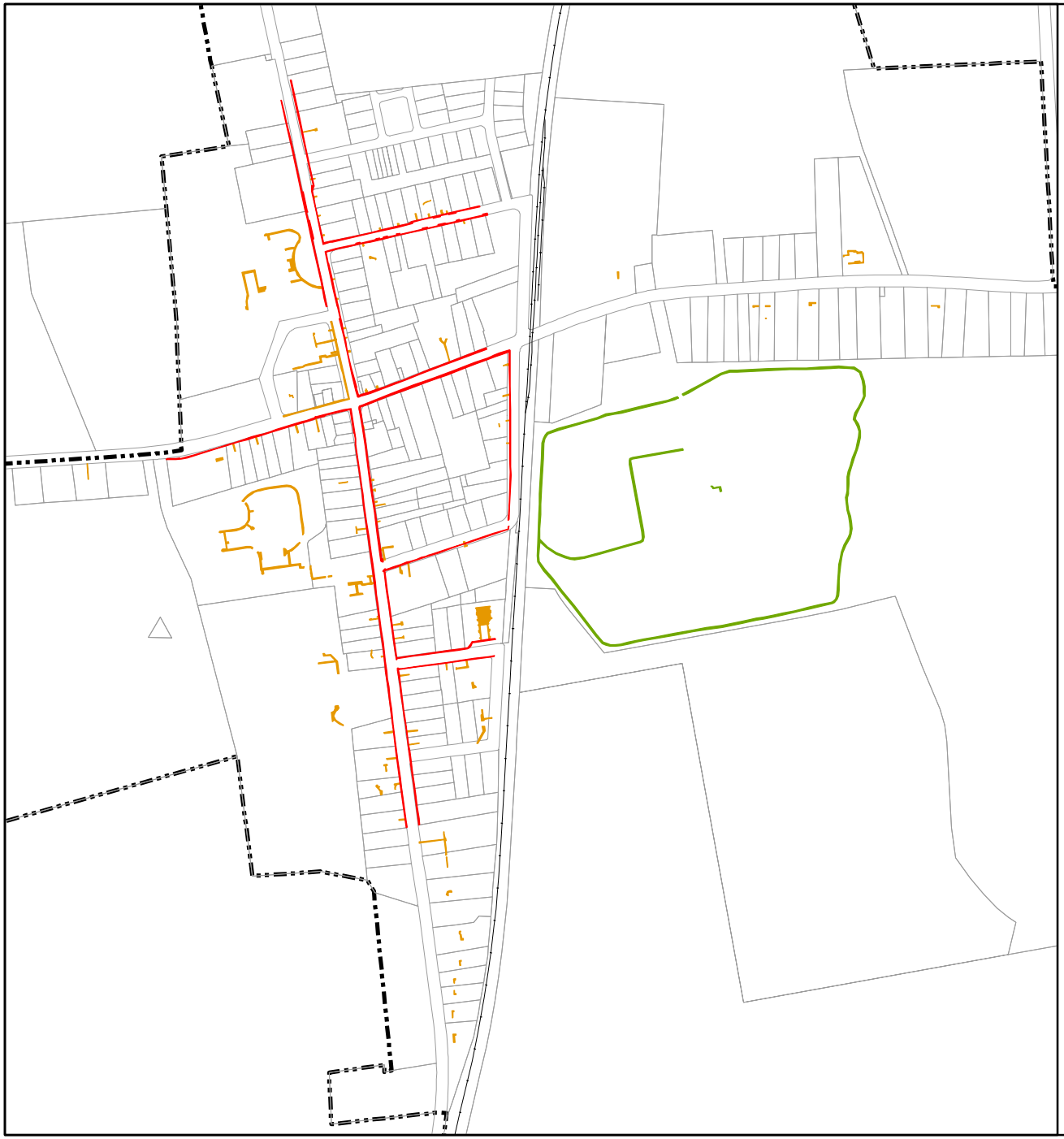
Town Street System

- Minor Arterial
- Major Collector
- Local
- Corporate Boundary

Feet
0 250 500 1,000

Peter Johnston & Associates, LLC
Easton, Maryland

Version 9-2-13



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Map 8-2

Comprehensive Plan
Sudlersville, Maryland

Town Pedestrian System

- Public Sidewalk
- Private Sidewalk
- Trail
- Corporate Boundary

0 100 200 400 Feet

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Easton, Maryland

Version 9-2-13

Transportation Plan

As indicated above, the State and County have no planned improvements to the road system in the vicinity of Sudlersville. The nearest anticipated improvement is along US Route 301 which is identified for intersection improvements and/or grade separated interchanges for much of its length within Queen Anne's County, including the intersection west at US Route 301 and MD Route 300. This particular intersection is identified as "hazardous" in the County Plan.

Sudlersville's primary objectives for the local transportation system are to integrate land use and the street and highway networks to provide for the logical continuation and improvement of existing streets and highways in proper coordination with the State, County, and municipal facilities in existence. In existing neighborhoods, Town officials want to minimize the adverse effects of vehicular traffic on local residential streets, particularly truck traffic. Considering the Town has limited funds for street and sidewalk improvements they want to maximize the capacity, safety, and efficiency of the existing street and highway system.

Enhancing quality of life for existing and new residents is dependent not only on safe and efficient streets but also on appropriate pedestrian and bicycle routes that link residences with activity centers, including shopping, recreation and civic space. The Town wants to improve pedestrian safety by providing safe routes for pedestrians and non-motorized transport.

The Town's "Transportation Plan" is illustrated along with a land use plan concept as the two cannot be thought of separately (see Map 8-3). When these concepts become detailed development plans the Town expects the results to contribute to a logical street hierarchy. For this reason, new development will include a minimum of three (3) street types that include:

1) Collector Streets – The Town envisions a collector street system that will connect to the existing Town street system, link neighborhoods and serve as the primary circulation routes throughout the community. Direct access on arterial and major collectors should be strictly limited to the intersections of other major streets, roads and local streets. Design features, such as street lighting, signage and street tree plantings should distinguish the collector streets from lower order streets. Pedestrian and separated bicycle routes should be provided along these routes where appropriate.

2) Local Streets – Local streets, primarily serving residential properties, will make up a significant portion of the Town's street system. Local street standards may vary, depending on the number of units served, but the essential characteristics of these streets will be the same. Local street design should emphasize low vehicle speeds and pedestrian safety, pedestrian scaled design (e.g., street lighting, signage) and appearance. All local streets should be identifiable by distinct street trees.

3) Alleys – Alleys provide access to the rear of properties where off-street parking and/or garages are located. Alleys present an opportunity for a more positive front yard streetscape by eliminating the need for curb cuts and by providing an alternative location for utilities and trash pick-up. Alleys will be encouraged in new developments.

The Transportation Plan also includes primary portions of a pedestrian/trail system. When connected to existing and new sidewalks as well as pedestrian and separated bicycle routes along the collector street systems the overall pedestrian system will provide access from neighborhood to neighborhood and to other activity centers.

Transportation Policies

A small community like Sudlersville has difficulty accommodating all the needs of the users on its roads. Since Sudlersville serves as a major connecting area for busy State highways and also as a residential area, conflicts are inevitable. These conflicts will increase as growth occurs in the region, and certainly if substantial development occurs within the Town or nearby.

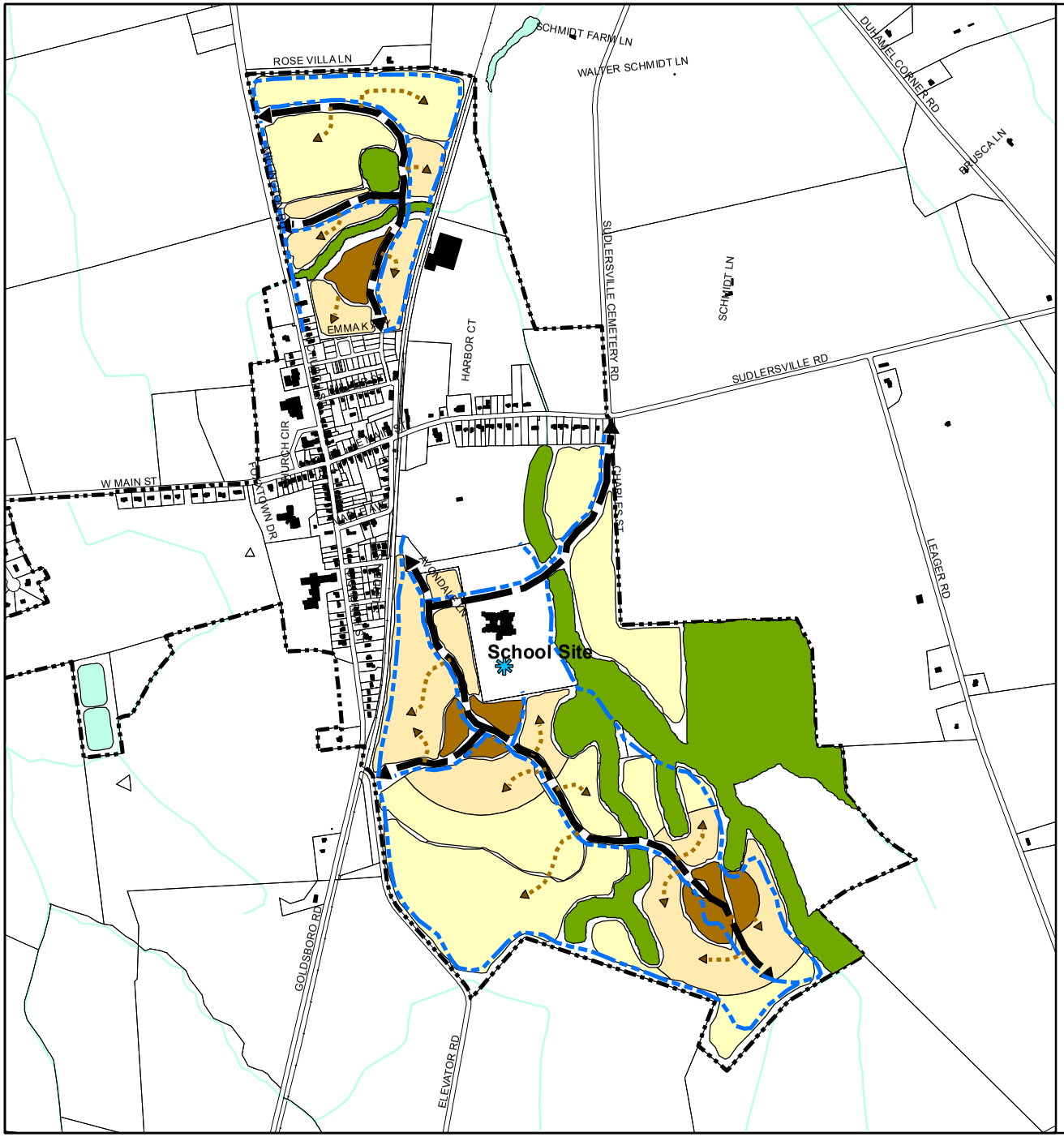
Improvements are needed to the circulation system to protect pedestrians and maintain property values as well as to prepare for the increased use. The Town should work with Queen Anne's Counties, the State Highway Administration, and the Mass Transit Administration to make sure its needs are understood and all development proposals are coordinated with the plans of the appropriate County and State agencies. Action strategies include:

- Continue the grid pattern of town streets in any future developments and discourage any dead-end arrangements. Ensure that any modifications to existing streets are carried out in a grid or network that produces alternate routes to every destination.

- Identify the opportunities to expand and extend the internal system of walkways and bikeways throughout the Town and design a program to reserve land for future walkways and bikeways in new developments and ensure their connection with planned overall circulation systems.

- Identify and establish resting areas for pedestrians and bicyclists, e.g. benches, flower gardens, or fountains in important activity areas.

- Develop a multi-year plan to repair, replace, and construct sidewalks in areas of identified need.



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Map 8-3

Comprehensive Plan
Sudlersville, Maryland

Transportation Concepts

- Collector Streets
- Local Streets
- Pedestrian/Trail Routes

Transportation/Land Use Concept

- Single Family Residential Area
- Central Residential Area
- Neighborhood Center Area
- Conservation Area

0 250 500 1,000 Feet

PJA Peter Johnston & Associates, LLC
Easton, Maryland

Version 9-03-13

To achieve their transportation objectives the Town has established the following transportation policies:

1) The Town endorses alternatives to driving alone and encourages the County and State to inform the public and private entities of the monetary and environmental costs of continued dependence on automobiles.

2) The Town encourages the County to establish a program for commuters including park and ride facilities at appropriate locations.

3) The Town will support bicyclists and pedestrians by providing safe, convenient, and inviting routes and walkways between activity centers where possible.

4) The Town will strive to develop a pedestrian friendly street system within the corporate limits.

5) The Town will establish street design standards for new development that will contribute to reaching the transportation and land use goals of the area, provide safe and efficient mobility for all people, and contribute to the quality of life for residents.

6) The Town will work with the State and County to coordinate the land use and transportation elements of the Comprehensive Plan in order to achieve a reduction in drive alone rates.

7) New collector and local streets will be built by developers according to the Town standards and specifications and in accordance with concepts shown in this Transportation Plan.

8) The layout of new street connections in undeveloped areas will assure connectivity to the overall Town street system.

9) Adequate rights-of-way will be required for new and planned streets taking into account existing and future development.

10) All developments will have adequate access and circulation for public service vehicles but actual paved street sections should be as narrow as feasible to maintain a human scale.

SECTION 9 - HOUSING AND COMMUNITY DESIGN

Introduction

Proactive housing programs that address safe, decent, and affordable housing for its residents are administered by the County and/or State for the most part. The Town's primary role in housing is through enforcement of building and housing code standards affecting new construction and property maintenance. In addition the Town supports housing affordability through flexible zoning, development incentives, and by allowing accessory dwelling units in certain neighborhoods.

Housing Conditions

Overall condition of the existing housing stock is a determinant of the quality of the Town's neighborhoods. Housing characteristics such as tenure, age, condition and value of the existing housing stock can indicate the need for strategies to conserve existing structures. The focus of community planning is to improve the quality of life for residents and to promote the availability and affordability of decent, safe, and sanitary housing for all Town residents. Consequently, housing and conservation of existing residential neighborhoods is an important local concern.

The 2010 Census reported 244 housing units in Sudlersville. Of this total, approximately 86 percent were occupied housing units (see Table 9-1). Owner occupied housing units accounted for approximately 54 percent of all occupied housing units as compared with 83 percent for Queen Anne's County and 68 percent for Maryland (see Table 9-2). Sudlersville's homeowner vacancy rate, 4.9 percent was higher than the County's 2.7 percent the State's rate of 2.7 percent. The Town's rental vacancy rate of nine percent also was higher than that of the County (6.1 percent) and slightly higher than Maryland's rate (8.1 percent).

Table 9-1: Housing Occupancy 2010

Housing Occupancy	Sudlersville	%	Queen Anne's County	%	Maryland	%
Total housing units	244		20,140		2,378,814	
Occupied housing units	211	86%	18,016	89%	2,156,411	91%
Vacant housing units	33	14%	2,124	11%	222,403	9%
Homeowner vacancy rate	4.90%		2.70%		2.20%	
Rental vacancy rate (percent)	9%		6.10%		8.10%	

Source: U.S. Census Bureau, 2010 Census of Population and Housing

Table 9-2: Housing Tenure 2010

	Sudlersville	%	Queen Anne's County	%	Maryland	%
Occupied housing units	211		18,016		2,156,411	
Owner-occupied housing units	113	54%	14,928	83%	1,455,775	68%
Population	307		39,574		3,940,520	
Average household size	2.72		2.65		271.00%	
Renter-occupied housing units	98	46%	3,088	17%	700,636	32%
Populations	180		7,798		1,694,657	
Average household sizes	1.84		2.53		2.42	

Source: U.S. Census Bureau, 2010 Census of Population and Housing

The detached single family dwelling unit was the predominant housing type in 2010, 78 percent of all dwelling units (see Table 9-3). Approximately 16 percent of dwellings were classified as multi-family units (three units or more).

Table 9-3: Number of Units in Structures 2010

	Sudlersville	Percent of Total
Total Housing Units	183	100%
1-unit, Detached	143	78.1%
1-unit, Attached	6	3.3%
2 Units	5	2.7%
3 or 4 Units	20	10.9%
5 to 9 Units	7	3.8%
10 or More Units	2	1.1%
Mobile Home, Boat, RV, Van, etc.	0	0.0%

Source: U.S. Census Bureau, 2010 Census of Population and Housing

Over half of the Town's housing units in the Town were constructed prior to 1980. Slightly more than 25 percent were built prior to 1939 (see Table 9-4).

Table 9-4: Year Structure Built

Total housing units	**189**	**100.0%**
Built 2005 or later	28	14.81%
Built 2000 to 2004	2	1.06%
Built 1990 to 1999	8	4.23%
Built 1980 to 1989	45	23.81%
Built 1970 to 1979	13	6.88%
Built 1960 to 1969	2	1.06%
Built 1950 to 1959	29	15.34%
Built 1940 to 1949	12	6.35%
Built 1939 or earlier	50	26.46%

Source: U.S. Census Bureau, 2010 Census of Population and Housing

According to the Maryland Department of Assessment and Taxation, over 70 percent of the existing housing stock is described as below average or economy (see Table 9-5). Classification as "average" or grade 3 means these dwellings usually meet minimum building codes, workmanship and materials are acceptable and service equipment consists of stock type items. "Economy" grade dwellings are characterized as low cost and meeting minimum building codes.

Table 9-5: Housing Condition

Housing Grade	Number	Percent
Grade 5 – Above Average	14	8.64%
Grade 4 – Average	32	19.75%
Grade 3 – Below Average	104	64.20%
Grade 2 – Economy	12	7.41%
Total	**162**	**100.00%**

Source: Maryland Department of Assessment and Taxation, Computer Assisted Mass Appraisal (CAMA) manual, 2000

Housing Programs

Queen Anne's County Housing Authority

The stated mission of the Queen Anne's Housing Authority is to provide a broad range of housing related services to assist residents of Queen Anne's County to acquire and maintain decent, safe and affordable housing. The agency develops and administers programs to provide or promote affordable rental housing, rental housing assistance, family self-sufficiency, homeownership.

Specific to Sudlersville is the Authority's Foxxtown Apartments. This is a 40-unit, three-story senior apartment complex. The complex includes 37 one-bedroom and 3 two-bedroom apartments. Applicants must be at least 62 years of age. All units are designed for fully independent living but are adaptable for wheelchairs. Rents range between $430 and $500 per month. Utilities are additional. Prospective tenants must meet income guidelines. Amenities in the apartment complex include a library/lounge, community space, and a resident-run country store.

Maryland Department of Housing and Community Development

The Maryland Department of Housing and Community Development (DHCD) administers a number of housing programs applicable to some residents of Sudlersville that include, among others, the following:

The CDA Maryland Mortgage Program – This program provides low-interest mortgage loans to eligible homebuyers with low- to moderate-income households through private lending institutions throughout the State. The Program began in 1980 and is targeted primarily to first-time homebuyers.

The Down Payment and Settlement Expense Loan Program (DSELP) – This program is used in conjunction with the Maryland Mortgage Program offering 0% deferred loans for down payment and settlement costs to low- and moderate-income homebuyers.

The Homeownership for Individuals with Disabilities Program - This program provides low-interest mortgage loans to eligible disabled homebuyers and homebuyers with a disabled son or daughter.

Maryland Housing Rehabilitation Program, Single Family – This program is intended to preserve and improve single family properties and one-to-four unit rental properties by assisting owners to bring properties up to applicable building codes and standards.

Accessible Homes for Seniors (AHS) – This program partners DHCD with the Maryland Department of Aging (MDoA) to undertaking a project to promote accessibility related improvements to the homes of seniors. These improvements may include, among others, the installation of grab bars and railings, widening of doorways and installation of ramps. The program provides zero percent interest, deferred loans for a term of 30 years to finance accessibility improvements.

Rental Allowance Program (RAP) - The purpose of the Rental Allowance Program (RAP) is to provide grants to local governments to provide flat rent subsidies to low-income families who either are homeless or have an emergency housing need. The goal of the program is to enable these households to move from homelessness or temporary emergency housing into more permanent housing and to return to self-sufficiency.

Section 8 Housing Choice Voucher Program – This program subsidizes the rent of lower-income families through the use of federal funds. The Maryland Department of Housing and Community Development (DHCD) administers the Section 8 Housing Choice Voucher Program in jurisdictions around the state that do not have legislative authority to act as a public housing authority or do not choose to administer a Section 8 program.

Maryland Affordable Housing Trust (MAHT) – This program provides funding for capital costs of rental and ownership housing, financial assistance for nonprofit-developer capacity building, supportive services for occupants of affordable housing, and operating expenses of affordable housing developments.

Community Design

Most communities facing the prospect of growth at a scale that could over shadow what exists are understandably concerned about the impacts of that growth on their "community character". Folks are concerned about the way new buildings are arranged on the land, as well as what those new buildings will look like.

Planning policies addressing "community character" must attempt to translate rather broad and sometimes vague concepts into more specific public guidance. In an article entitled Great Neighborhoods: Places that Stand-Out for their Character, Livability, and Positive Community Feeling[38], the authors reported the results of a survey that was conducted to determine what the respondents perceived as the characteristics of "a great neighborhood". Respondents cited the following identifiers:

1. Has a variety of functional attributes that contribute to a resident's day-to-day living (residential, commercial, mixed uses);

2. Accommodates multi-modal transportation (pedestrian, bicyclists, autos, transit);

3. Has design and architectural features that are visually interesting;

4. Encourages human contact and social activities;

5. Promotes community involvement and maintains a secure environment;

6. Promotes sustainability and responds to climactic demands; and

7. Has a memorable character.

The concepts embodied in "place making" as guiding principles for a community design are consistent with and reflective of these identifiers. Because the scale of new development in the Town will strongly influence the look and feel of Sudlersville in the future, establishing guidance for development design is an important component of the Comprehensive Plan and its implementation. In addition to new "greenfield" development the Town encourages infill and redevelopment of vacant and underutilized properties. The design of this type of development also needs to demonstrate "context sensitive" design that takes into account its surroundings.

[38] American Planning Association *Planning* Magazine, January 2008

Design Guidelines - Place Making Principles

Sudlersville expects well-planned projects that relate well to the surroundings. Instead of simple subdivisions the Town will encourage projects that result in new neighborhoods that fully integrate into the Town's existing physical and social fabric. To achieve these ends the Town will expect the design and construction of new neighborhoods adhere to the following criteria:

- Natural features and site constraints will suggest common-sense design solutions. This includes designing with nature, not fighting, controlling, or dominating natural and ecological processes;

- The automobile will not be the dominant force that dictates the layout and design of residential communities. New residential streets will be as narrow as possible to discourage fast moving through traffic, be well-landscaped with shade trees, and be recognized as the principal public spaces that they are. In view of their visual and functional importance, thought, deliberation, and investment in landscape and streetscape design should be evident;

- Substantial landscaping will be included in common open spaces. Landscaping should provide shade, shelter from wind, and visual screens or buffers from unsightly elements on adjoining properties such as parking lots, loading areas, dumpsters, or utility structures. Landscaping can also provide wildlife habitat and linkages to forested and natural areas, greenways, and walking paths;

- Parking will not be a dominant site feature. Parking areas will be small scale, highly landscaped, and attractive. Whenever possible, it is better to give preference to green space over asphalt and paved parking. This also assists in achieving water quality objectives;

- Signage will be informative without being intrusive. Signs will not dominate the visual landscape. Signs will be compatible with their purpose, be clear, concise, and as small as reasonably possible;

- The architecture and styles proposed will be in keeping with the best building types and styles that have evolved in the region, albeit taking advantage of new building material and techniques associated with "green building". The Town encourages traditional designs and materials so that new developments blend seamlessly with the old. Modern materials and layouts need not conflict with the existing Town character if developers and builders are sensitive to the overall appearance of their creation; and

- The views of a site and from a site will be clearly considered by developers and addressed.

Large-scale developments are of particular concern because their scope has the potential to dominate the impressions one gets of the Town. For this reason, large-scale development projects will be designed to achieve the following characteristics:

- Architectural harmony without monotony, including compatibility in styles, materials, colors, and building size and setbacks;

- Variety in housing types, density, and cost;

- Parks, squares, and other common open spaces for residents to interact and recreate, and to provide a setting for the architecture of the development;

- Neighborhood centers and civic spaces, which, depending on the scale of the development, can include places to shop, work, learn, or worship;

- Interconnected streets based on a modified grid system consistent with the Transportation Plan element of the Comprehensive Plan;

- Sidewalks, street trees, and substantial on-street parking that provides distinct separation between pedestrians and traffic;

- Streets and sidewalks that are spatially defined by buildings in a regular pattern, unbroken by parking lots;

- Pedestrian and bicycle circulation systems that connect residences to activity centers and shopping;

- Traffic calming, including narrow streets with shorter turning radii than suburban streets, and medians, circles and related features along prominent streets;

- Lighting which is designed for safe walking and signage which has a pedestrian orientation; and

- A system of land subdivision and development which links one neighborhood to another.

SECTION 10 – IMPLEMENTATION

A principal legal device for implementing many of the recommendations of the Comprehensive Plan is the Town zoning code. Zoning's primary role is implementations of the land use plan but it also supports other elements of the Comprehensive Plan, including transportation, community facilities, natural resource protection and community design. State law requires that zoning, as well as other implementation tools, techniques and policies, are consistent with the Comprehensive Plan. The following outlines recommended revisions and additions to the Zoning Code intended to enhance the Town's ability to achieve the goals and objectives of the Comprehensive Plan.

Infill and Redevelopment

Encouraging compatible development of and reinvestment in properties within the corporate limits is a key land use objective of the Town's comprehensive plans. One way to advance this objective is to adopt zoning provisions that facilitate infill and redevelopment. Infill refers to new development on vacant, bypassed, and underutilized land within built up areas of the Town. Infill also includes redevelopment of lots in these areas that may already have been developed.

Although the Town has design standards for infill development in the Zoning code, there are no provisions that can be described an incentives for "context sensitive" design. Flexible infill and redevelopment standards will be included in the Zoning Code. Zoning standards will accommodate growth by encouraging and facilitating new development on vacant, bypassed and underutilized land where such development is found to be compatible with the existing neighborhood. Infill and redevelopment standards will encourage efficient use of land and public services and stimulate economic investment and development in older established neighborhoods. Zoning standards will be crafted so as to provide developers and property owners flexibility so that they can achieve high quality design and develop infill projects that strengthen or enhance existing neighborhoods. Design standards promote compatible infill and redevelopment by, among other things, requiring context sensitive design but development on sites that may not meet the minimum land area and dimension requirements of the underlying zoning district. The Planning Commission will be given the ability to waive certain standards where relief furthers the Town's objectives.

Master Planned Development

Careful planning and sensitive design are required in order for new residential developments to be fully integrated into the Town's existing physical and social fabric. For this reason Sudlersville will adopt planned neighborhood floating zone with standards and make it

applicable to all development on larger parcels of land, e.g., ten acres or more or in selected areas where coordinated planning of adjacent parcels is warranted.

Planned development provisions will include incentives for land developers to select the master planned development option, e.g., bonus densities. Specific development standards now contained in the Zoning code will be supplemented with design guidance to insure both the developer/designer and the public clearly understand what results are being sought in the design of new neighborhoods.

Employment Floating Zone

Depending on which population growth scenario outline in the Municipal Growth Element actually occurs, the town could need between eleven and 43 acres of additional commercial and/or industrial land to support projected population growth by 2030. There are only three properties currently zoned for mixed use development. All are located along the rail line. The Harbor Sales property is approximately 39 acres, has a rail spur, and is partially developed. The Southern States properties, one about nine acres and other about two acres, also are partially developed.

The mixed use zoning district contained in the town Zoning Code is intended to provide for higher intensity non-residential uses in the existing light industrial and heavier commercial areas and in some adjacent potential annexation areas. Commercial uses are permitted by-right in this district for the most part. Industrial uses are classified as special exceptions and must be approved by the Board of Appeals.

Ideally, any new employment uses, e.g., light industrial establishments, would make use of the existing Maryland Delaware rail line, helping to insure continued service along this system. However, some new employment uses such as commercial, business and light industrial may not need rail service and in fact do not want to be located adjacent to the rail line.

To insure the opportunity to consider additional employment centers the town will add an employment floating zone to the zoning code. The employment floating zone will provide a mechanism for the town officials to entertain applications for development of a master planned park meeting appropriate standards for multi-use employment centers in areas not currently mapped for such use, but which may be particularly well suited for these uses.

Design

Design standards and guidelines will translate policies into performance measures for new development in the Town, whether it is a small-scale infill, a large-scale planned use development or a master employment park. These design standards are contained in

implementing ordinance, including the Zoning Ordinance, Subdivision Regulations, Stormwater Management Ordinance and codified road standards. The intent of these standards is to:

- Ensure that new development enhances the character, beauty, and livability of the Town;
- Ensure that infill and redevelopment of structures in established neighborhoods make a positive contribution to the Town's character;
- Ensure the historic and aesthetic integrity of existing Town structures is maintained as new development and redevelopment occurs;
- Enhance the environment for pedestrians in Town;
- Improve the quality of housing and commercial development;
- Promote natural resource conservation;
- Control the impacts on water quality and property damage associated with increased stormwater runoff; and
- Implement the policies contained in the Comprehensive Plan.

Standards for infill and new development are contained in the Sudlersville Zoning Ordinance. Infill development standards apply to all development and redevelopment where site plan review is required in Town Center Commercial (TCC), Commercial Floating Zone (CFZ), Mixed Use (MU), and Town Residential (TR) zoning districts. Standards for new development are applicable to subdivisions in the Single Family (SF) zoning district. Under the current zoning scheme, approximately 240 acres of property zone TR is not subject to these standards. The Zoning Ordinance will be amended to make design standards for new development applicable to subdivisions in the TR district.

Before granting final plat approval for any major subdivision the developer must submit and have approved a comprehensive list of design standards for the subdivision (Design Manual) that are responsive to the requirements contained in the Zoning Ordinance. The Design Manual guides the developer and builders in the design of the community, the architecture of structures, the use and style of materials, landscaping, vegetation, and the siting of structures, paved surfaces, and landscaping on individual lots. These design standards are binding on all who would build on the new lots or develop property in the subdivision. The design standards in the Design Manual are to be enforced using deed restrictions or covenants on the subdivided lots and a developer sponsored and enforced review and approval procedure to ensure that the standards are consistently applied during the initial build-out of the subdivision.

The design standards for architecture and landscaping that must be addressed in the Design Manual are extensive and include:

- Elevations of the structures to be built in the subdivision that demonstrate a clear and consistent image for development in the subdivision; and

- A comprehensive landscaping plan to guide the selection and planting of acceptable vegetation on individual lots and on common open spaces and to ensure that such plantings are properly coordinated with landscaping that may be required within the street right-of-ways.

These standards will be expanded to provide guidance on the overall design of the development to insure a diverse neighborhood character that is reflective of the policies and objectives outlined in the Comprehensive Plan. Planned neighborhoods are intended to provide for a range of complementary uses and may include a neighborhood center with surrounding walkable residential areas. In addition, neighborhoods can include conservation areas that incorporate sensitive natural areas. The Zoning Ordinance will be revised to specify that planned neighborhoods include at least three of the following use areas and that the regulating plan outlined in the Design Manual prescribe appropriate standards for each area:

Neighborhood Center – the neighborhood center is the identifiable focal point of each neighborhood. The neighborhood center may include retail and service uses as well as civic and institutional uses of community wide importance all at a scale and intensity consistent with traditional community centers. Where the neighborhood center can be located to effectively serve a dual role, that of neighborhood identity and commercial center serving a larger market area it may be placed adjacent to a major highway. The challenges include designing the site and buildings to accommodate auto access from a major highway to “strip commercial” type establishments while at the same time integrates with the qualities sought in adjacent neighborhood setting.

Central Residential Area – The central residential areas lie just beyond neighborhood center and within a comfortable walking distance. This area should offer variety of housing options and related uses at densities that make efficient use of the land.

Single Family Residential Area – The single-family residential area provides locations for a broad range of housing types, including single-family detached, semi-detached, and attached albeit at a slightly lower overall density, and along with conservation areas may define the neighborhood edges.

Conservation Areas – Conservation areas include permanently protected open spaces, including greens, commons, and habitat protection areas.

Finally, appropriate development standards will apply to proposed projects in the employment floating zone. Standards for employment uses will address such things as access and traffic control, building location and appearance, signage, lighting, storage, screening, and waste control. Processes associated with permitted uses in the park will be examined for potential adverse impacts to neighboring properties and the environment including glare, heat, liquid or solid wastes, smoke and particulate matter, toxic and hazardous materials and odor.

Housing

The best opportunity the Town has to positively impact housing affordability is by requiring an appropriate mixed of residential unit types in large scale, planned development. To insure a healthy mix of unit types that expand housing opportunities for a diverse population mix of age groups and income levels standards for these developments will specify the minimum and maximum percentages of types of residential units for each project. Of the five unit types, detached single family, two family units, townhouse, multi-family units and apartments, the overall development should have a mix of at least three unit types. The following table is a suggested standard that establishes the maximum and minimum percentage of each unit type allowable in the development.

Table 10-1 Suggested Dwelling Mix Standards

Unit Type	Minimum	Maximum
Detached Single Family Dwelling	50%	80%
Two (2) Family Dwelling	20%	40%
Townhouse	5%	40%
Multi-Family	5%	40%
Apartments	5%	15%

Environmental Protection

The Visions for Maryland encourage stewardship of the land as a universal ethic. In addition, the Planning Act of 1992 requires Town adopt policies for the protection of sensitive environmental areas. The Town's zoning code includes minimum protection standards for streams, nontidal wetlands, steep slopes and the habitats of threatened and endangered species. These standards will be revised to require a 100-foot buffer where possible and provide flexibility where substantial buffers are not feasible. In addition, the Town will encourage development design that maintains or enhances "green infrastructure," incorporates low impact design techniques for water quality and quantity management, and green building technology that conserves energy and improves indoor and outdoor air quality.

Landscape Standards

The Town's zoning code includes minimum landscape standards for parking lots and commercial and industrial sites. Additional requirements, such a site landscaping, Bufferyards and street trees will be added to the code.

Site Landscaping - The zoning code will require all developments needing site plan approval provide minimum levels of landscaping on the site. Landscaping of parking facilities will be required to reduce the visual and environmental impacts of large expanses of parking areas including water quality impacts associated with runoff. Landscaping in parking lots breaks up paved parking areas with plantings and provides improved aesthetics and micro-climatic benefits by reducing heat and glare. These provisions will apply to new sites and parking areas that are to be expanded, moved, or removed and/or reconstructed. Property line landscape buffers between adjacent land uses and buffers along adjacent roads or public rights-of-way will be required as well.

Bufferyards - The bufferyard is a combination of setback and a visual buffer or barrier and is a yard or area together with the planting required thereon. Both the amount of land and the type and amount of planting specified for each bufferyard will be designed to minimize nuisances between adjacent zoning districts and to ensure the desired character along public streets and roads.

Bufferyards will be installed to eliminate or minimize potential nuisances at the property line between zoning districts allowing uses of different intensity, e.g., residential adjacent to commercial. Bufferyards will also be required along the perimeter of commercial and industrial uses that abut major highway corridors, scenic routes, and less intense land uses.

Street Trees - The Town will require that street trees be planted or retained along both sides of all newly created streets. At a minimum developers will be required to either plant or retain sufficient trees so that for every 50 feet of street frontage there is at least an average of one deciduous tree that has or will have when fully mature a trunk at least 12 inches in diameter.

Parks and Open Space

The Sudlersville Zoning Code establishes minimum open space requirements to all residential developments. These neighborhood parks will be attractively landscaped and will be provided with sufficient natural or man-made screening or buffer areas to minimize any negative impacts upon adjacent residences. Each neighborhood park should be centrally located and easily

accessible so that it can be conveniently and safely reached and used by those persons in the surrounding neighborhood. Each neighborhood park will be constructed on land that is relatively flat, dry, free of nontidal wetlands, and capable of serving the purposes intended.

Subdivision Regulations

The town's subdivision regulations will be amended to require sidewalks along all streets and connect to existing sidewalks where possible. In addition the town's subdivision regulations and site plan requirements in the zoning code will establish street and parking lot lighting standards including spacing and lamination specifications.

Affordable Housing

A zoning technique the Town may consider to address housing affordability is permitting accessory dwelling units in addition to accessory apartments as are now permitted. An accessory dwelling unit is a residential living unit that provides complete independent living, sleeping, eating, cooking and sanitation on the same parcel/lot as the owner-occupied single family dwelling in which it is contained but may have a separate entrance. The advantages of accessory dwelling units include the potential to:

- create additional housing stock while respecting the look and scale of single-family dwelling neighborhoods;
- increase the housing stock of existing neighborhoods in a manner that is less intense than alternatives;
- allow more efficient use of existing housing stock and infrastructure;
- provide a mix of housing that responds to changing family needs;
- provide a means for residents, particularly seniors, single parents, and families with grown children, to remain in the their homes and neighborhoods, and obtain extra income, security, companionship and services; and
- provide a broader range of affordable housing.

Design standards for the design and construction accessory dwelling units will:

- Ensure that accessory dwelling units are compatible with the desired character and livability of residential districts;

- Respect the general building scale and placement of structures to allow sharing of common space on the lot, such as driveways and yards; and

- Ensure that accessory dwelling units are smaller in size than the principal residential unit.

Water Resources

Managing land use in a way that benefits water resources requires assessing development regulations, policies and guidelines from a new perspective. Among other things, it requires minimizing the footprint of new development to the maximum extent possible (compact development), encouraging water conservation measures, protecting forested areas and natural buffers, retrofitting existing developed areas with improved stormwater management techniques, encouraging best practices in the management of public drainage ditches and requiring best management practices in all new development. In addition the Town will consider the following strategies to reduce the impacts of future growth on water resources:

- Make education material available to residents regarding nutrient management to reduce fertilizer applications to grassed areas and lawns.

- Establish, maintain, or expand forest buffers in the form of linear wooded areas along streams to help filter nutrients, sediments and other pollutants in runoff where feasible.

- Work with developers, homeowners associations and individual homeowners to reduce the amount of impervious cover by implementing techniques such as clustered houses, narrow streets, reduced pervious surface in parking lot areas, shared driveways, and pervious paving materials.

- Require new development and infill and redevelopment projects to treat stormwater using nonstructural and micro-scale practices to the maximum extent feasible. Techniques such as submerged gravel wetlands, rain water harvesting (cisterns and rain barrels), landscape infiltration, infiltration berms, and dry wells will become common practices. Stormwater will be filtered using such techniques as rain gardens, landscape and tree planters (e.g., linear tree pits, sidewalk planters), grass swales and bio-swales, tree-swales, grass filter strips and vegetated buffers.

- Encourage development design that maintains or enhances green infrastructure, and incorporates low impact design through stormwater management techniques for water quality and quantity management.

- Work with Queen Anne’s County to address failing septic systems in areas that can be served

by public water and sewer.

- Increase the Town's tree canopy to reduce the volume of stormwater and resulting sedimentation while increasing nutrient uptake and reducing urban heat generated from impervious and reflective surfaces. Trees also can improve the aesthetic appeal of the community and enhance property values.

- Work with Queen Anne's County and the State of Maryland regarding source water protection planning to coordinate water resource related initiatives.

- Evaluate the need for additional source water protection measures.

Sudlersville can help the State and County achieve water resource protection objectives and make a positive contribution to improving water quality in the watershed. For its part, Queen Anne's County has outlined strategies to achieve the TMDL limits for the watershed in its Phase Watershed Implementation Plan (WIP). County strategies in which the Town can participate include identify opportunities for stormwater retrofits in the Town and establishing a system for tracking, verification and reporting water quality improvement projects.

Mineral Resource Extraction

The Town has no known mineral resource deposits within the corporate limits. In addition, the Town does not permit mineral extraction.

Adequate Public Facilities

Currently, the public facilities of interest to Sudlersville include sewer, emergency services, roads, sidewalks, schools, libraries, parks and other recreational facilities, and our Town Office. Of these, the Town is most concerned about sewerage treatment capacity and road capacity. There currently exists an undocumented degree of wet weather inflow and infiltration. That problem needs to be studied further to determine a cost-effective solution. There are also 17 vacant privately owned parcels and 3 vacant municipal parcels that may need sewer service in the future. The Town has an obligation to ensure adequate service capacity is reserved for these existing parcels. That equates to approximately 5,000 gallons per day of treatment capacity. Some additional capacity should also be reserved for potential expansion/increased flows from the renovation and remodeling of our existing housing stock. For planning purposes, and until the Town Commissioners establish a more refined number, it is recommended that the Town use a 10,000 gallon per day set aside which will be deducted from permitted discharge capacity to be a "measure of adequacy." Projects may be approved if review by the Planning Commission discloses that there is "adequate available capacity" in the sewerage treatment system. In the event that a development project, subdivision, or an extension of services agreement related to an annexation proposal will utilize or require

more than the available capacity, approval of said project may be contingent upon the applicant providing the necessary capacity in a manner acceptable to both the Maryland Department of the Environment and the Town Commissioners of Sudlersville. However, in no instance may any single project monopolize all of the available capacity. For phased projects, approval for subsequent phases will be dependent, among other issues, upon sufficient available capacity to ensure connections, treatment, and discharges within the limits of our system and discharge permit.

The Town will "front load" the costs for expanding system capacity in a speculative manner. Our intent is to protect the existing residents and taxpayers from unnecessary financial burdens. Developers must pay their own way. In accordance with this policy, the Town of Sudlersville may entertain developer proposals that include funding for capacity expansions. However, this policy in no way commits nor requires the Town to approve any such development proposal. Project approvals shall be contingent upon "findings of adequacy" or contingent upon the provision of system improvements to ensure adequacy.

Streets and sidewalks are under the jurisdiction of both the State Highway Administration and the Town Commissioners. The adequacy of streets and highways will be evaluated by the Planning Commission in the course of potential annexation reviews, major subdivision reviews, and site plan reviews. The review of road impacts and the determination of "adequacy" may include a traffic impact study. A grid or modified grid, as specified in the Transportation Element, will have the effect of increasing the number of intersections, access points, and traffic flow alternatives, thereby maximizing the efficiency of the existing and proposed circulation system. Project approval will be dependent upon a "finding of adequacy" or contingent upon the provision of system improvements to ensure adequacy.

Fees

The Planning Commission and staff do not have the necessary knowledge or experience to review technical plans and reports such a traffic impact study or stormwater management plans associated with a proposed development project. Nor does the town have sufficient funds to be able to hire appropriate professionals to review plans. The Zoning Code and Subdivision Regulations will include provisions requiring the applicant for development approvals be responsible for the cost of whatever professional expertise the Town feels is necessary to evaluate a proposed development. Fee requirements will be addressed in a cost recovery agreement negotiated between the town and applicant before any substantive review commences.