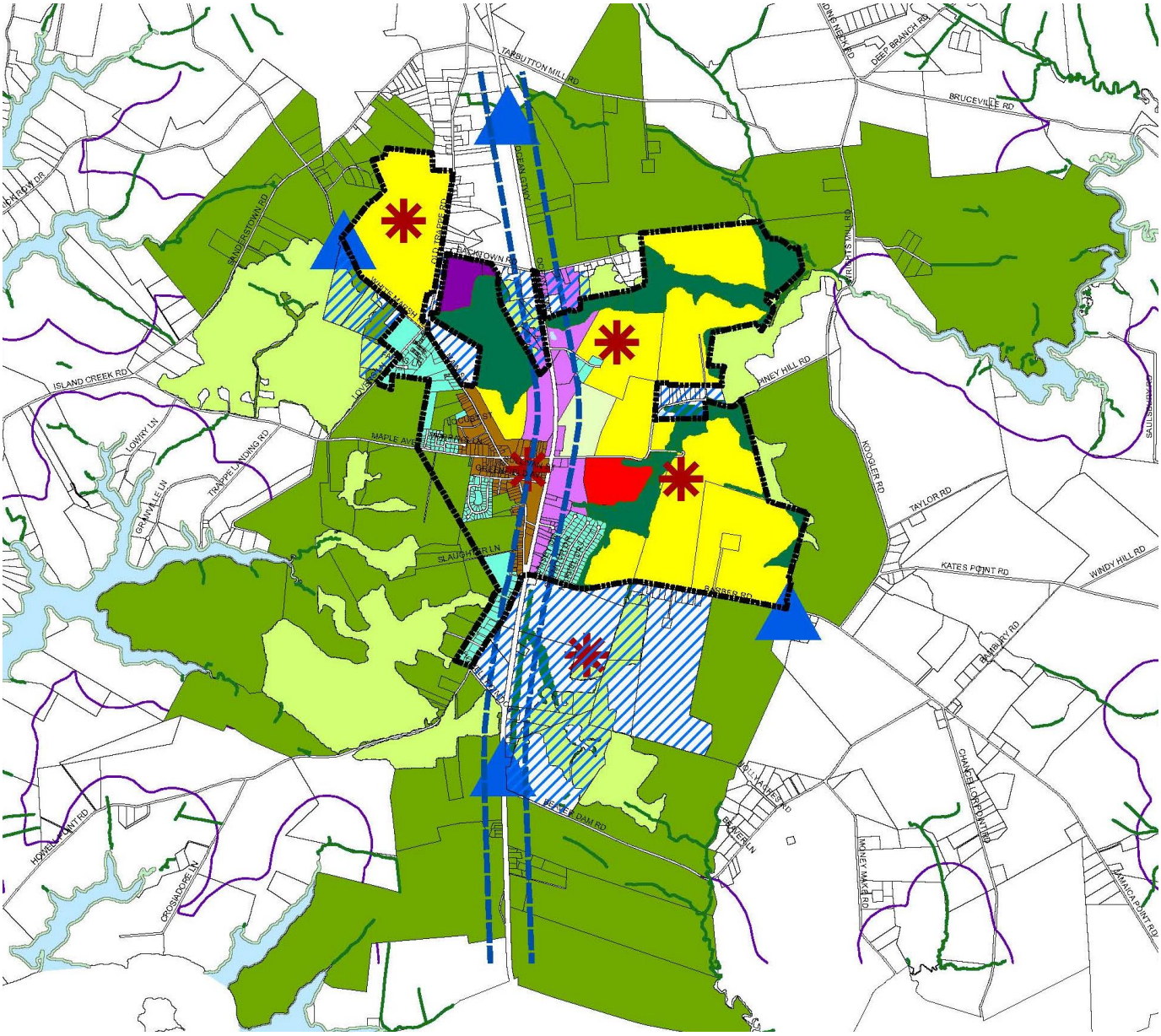
Version 9-18-19

Draft Comprehensive Plan



Town of Trappe, Maryland
September 2019

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INTRODUCTION

Authority

The Land Use Article of the Annotated Code of Maryland delegates basic planning and land use regulatory powers to the Town of Trappe. Accordingly, Town official prepared this Comprehensive Plan in compliance with the Land Use Article, § 1-201 and Title 3 of the statute, including procedures for the Plan's review and adoption.

Plan Purpose

The purpose of this Comprehensive Plan is to ensure coordinated and harmonious development in the Town and its environs while preserving the natural and traditional village settings so central to its character. The Comprehensive Plan is the primary guiding document for all decisions about the orderly development and conservation of the Town of Trappe. The Plan is also the repository of goals and objectives for the future. It is the basis for the subsequent development of land use laws, ordinances, and regulations. The Plan's recommendations, policies, goals, objectives, principles, and standards are to be carried out through these land use laws. The Plan's geographic descriptions and delineation of recommendations and policies are to be carried out through the administration of development regulations and standards, including zoning. A Plan purpose is findings of fact concerning project/plan consistency when reviewing applications such as special exception requests, variance requests from the strict application of ordinance standards, and requests for rezoning. All projects must demonstrate "consistency" with the Comprehensive Plan as specified in our adopted project review procedures to qualify for state and federal funds.

In pursuit of the essential government purpose of protecting the health, safety, order, convenience, prosperity, and general welfare of the community, the Plan promotes a healthful and convenient distribution of population, good civic design and arrangement, conservation of natural resources, reduction in resource consumption, prevention of environmental pollution, and wise and efficient expenditure of public funds.

Twelve Visions

The following twelve visions identified in Land Use Article provide the framework for growth management and the content, focus, and thrust of the Trappe Comprehensive Plan:

1. We will strive to achieve and maintain a high quality of life through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.

2. We will continue to encourage public participation in planning, community initiatives, and local government.

3. We work with Talbot County in our role as a suitable center for concentrated growth center as well as a partner in the protection of resource areas.

4. We will continue to adhere to community design that embraces the core of Trappe, and ensures that new development and redevelopment is compact, includes a mixture of uses, where appropriate, and a walkable design consistent with the existing community character, including open spaces and recreational areas, while maintaining significant historical, cultural and archeological resources.

5. We will ensure that the Town's growth areas have water and sewer resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner.

6. We will work within Trappe and the Eastern Shore to ensure a well-maintained, multi-modal transportation system that facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.

7. We will encourage and promote a range of housing densities, types, and sizes to provide housing options for citizens of all ages and incomes.

8. We will encourage appropriate economic development that promotes employment opportunities for all income levels, including public services and public sectors.

9. We will continue a universal stewardship ethic for the Chesapeake Bay and our land, protect our sensitive areas, and ensure appropriate utilization of land, water, and natural resources.

10. We will balance the conservation of forests, agricultural areas, open space, natural systems, and scenic areas with growth and development.

11. We will encourage stewardship within the public sector, businesses, and residence to promote sustainable communities. As part of this vision, we will work to reduce resource consumption and encourage conservation and recycling.

12. We will work on implementing our goals and objectives and work with Talbot County, and the State of Maryland to achieve these visions. As part of the implementation, we will actively seek out funding mechanisms to achieve these visions.

Scope

The Comprehensive Plan deals with the growth and development of the Trappe planning area for the next fifteen to twenty years. Many of the issues and opportunities addressed by the Plan may be valid beyond this time horizon. Specific determinations, additions, refinements, and amendments may be undertaken from time to time, as needed. However, state law requires that at a minimum, a comprehensive review of the Plan at regular ten-year intervals. Our Comprehensive Plan is not intended to be a rigid set of specifications forcing specific development projects. It is intended, instead, to be a practical guide to assist development decisions and provide continuity of vision about the character, location, and types of future land

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use. It also establishes the "big picture" of community needs. The Plan provides the basis for housing, economic development, and other public policy initiatives that may be developed in further detail by our Town leaders.

The Trappe Comprehensive Plan was last revised and updated in 2010. In preparing this Plan, the Town reviewed the Talbot County Comprehensive Plan, adopted in August 2016 as well as the Talbot County Comprehensive Water and Sewerage Plan, 2002 Report of the Review. In comparing the Town's Comprehensive Plan and the Talbot County Comprehensive Plan, the Town's planning area has not increased significantly since 1973 and is illustrated within this document to demonstrate the history of Trappe's growth area.

Planning Area

Trappe's planning area includes approximately 745 acres adjacent to its corporate boundary. It extends beyond Town limits to include parcels considered in our growth management strategies and priorities (for example, lands that the Town may annex in the future). The Planning Area (see Map I-1) is consistent with the County's designated growth area for the Trappe region. Our Plan is intended to provide elaboration of development priorities, and our preferences for the future mix of land uses

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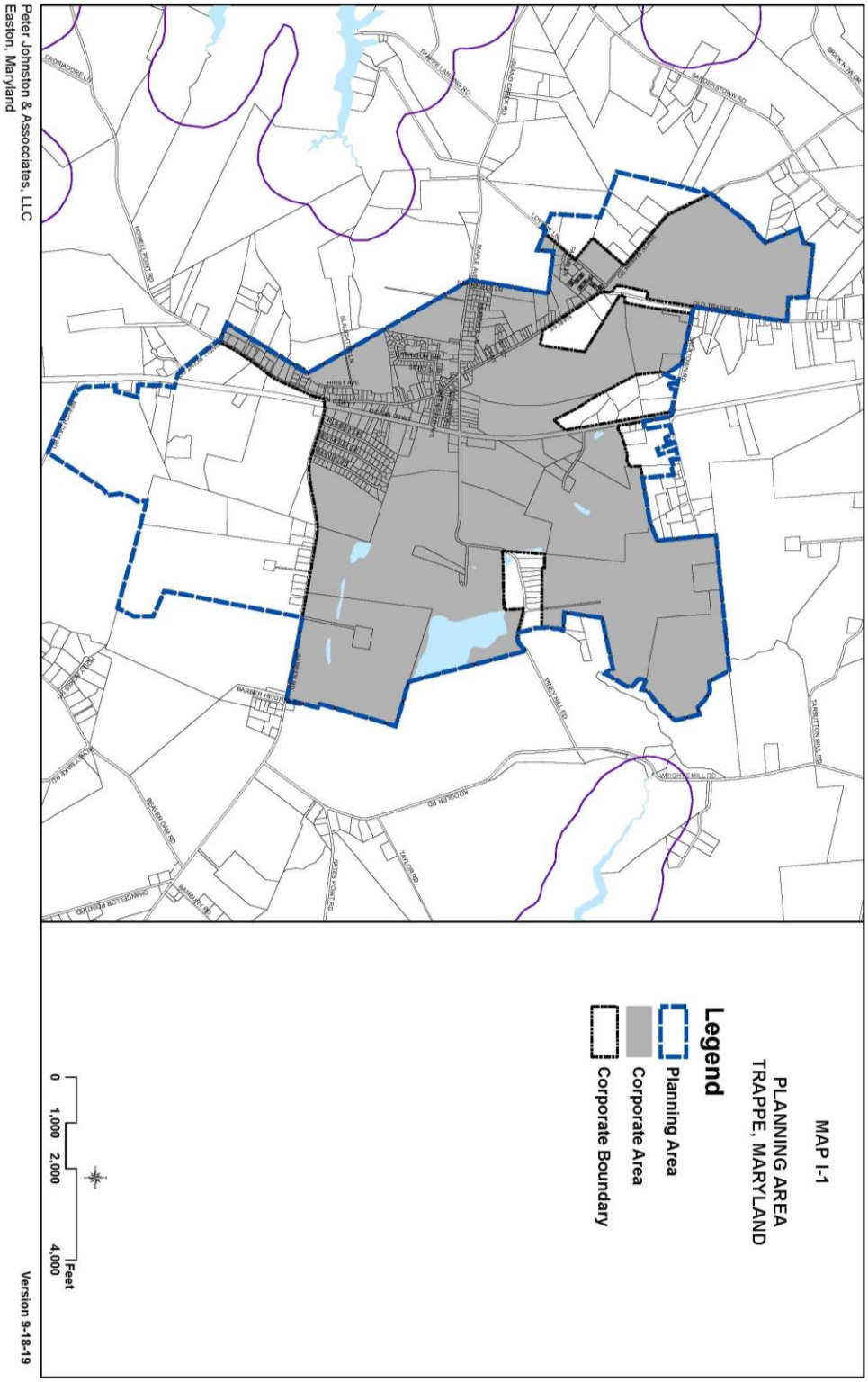
Map I-1 Planning Area



CHAPTER 1 - BACKGROUND ELEMENT

The Background Element provides a general overview and summary of our Town, its residents, and how we grew. It provides a context for planning.

Introduction

This Background Element presents an overview of our physical setting, some insight on our past, and a summary of current conditions. The Community Profile in Appendix A includes a summary of socio-economic and housing characteristics. This data has influenced our planning for the community.

Examining the causes of population change offers insight into the dynamics underlying growth or decline and highlights potential areas of inquiry. Our policies have been crafted to respond to these dynamics, to reinforce the positive and address the negative aspects of change to the extent possible. Population growth or decline is a result of natural increases (births versus deaths) and in-migration to the jurisdiction. Recent estimates indicate that population growth in Talbot County between 2000 and 2016 was primarily the result of in-migration (76 percent) as opposed to natural increase. Talbot County's population growth has slowed in large part due to a decrease in the number of people migrating to the County. Population trends for Trappe indicate the town is not capturing any of what little County's population growth is occurring. Instead, according to the U.S. Census, Trappe has lost population since 2010.

In total, the socio-economic and housing date show Trappe as a community primarily composed of working-class households and families. Residents are more likely to be renters and have less income than that of the County or State. These conditions would indicate that Town policies concerning land use, housing, and community facilities needs to be sensitive to costs imposed. We will consider policies that encourage the development of moderately priced housing. We will find a balance between policies concerning allowable residential densities and those concerning development exactions and design standards with the intent to keep housing costs as low as possible without sacrificing the quality of neighborhoods.

Our "planning area" includes parcels that have the potential to affect our growth management strategies and priorities now and in the future. The section also discusses the current land use pattern, our available public services and community facilities, and our environmental constraints. This information provides a context, or framework, for our Comprehensive Plan.

To provide the people of Trappe with a foundation for a commonly shared vision of our future; we need an understanding of who we are, how our town evolved, and what are our strengths and opportunities, That vision comprises the heart of our Comprehensive Plan. It is the basis for our goals for the future and specific objectives we want to realize to help us achieve our goals.

The Background Element provides a helpful starting point for thinking about such issues as growth management, economic development, infill development of vacant lots, municipal expansion, the character of our community and the quality of life our residents want.

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Regional Setting

The Town of Trappe is located in Talbot County within the Atlantic coastal plain region on Maryland's Eastern Shore. We straddle US 50 about six miles south of the Town of Easton, which is the Talbot County seat. Cambridge, the county seat of Dorchester County, is about seven miles further south across the Choptank River. Our location provides us a convenient commute to these two regional employment centers while our residents can enjoy the benefits of small-town living. We live within about an hour and a half drive of both Baltimore and Washington, D.C. and are about two and a half hours south of Philadelphia. Our region includes the southern part of Talbot County, which is rural and mainly agricultural. Neighboring communities of Easton and Cambridge have relocated their shopping districts away from US 50 to a designated area on their bypass or within a commercial redevelopment area. The typical "Gas and Go" industry supported by commuters and transients continues to occupy a place along the primary highway US 50 in both Easton and Cambridge. Our county seat, Easton, has become a regional shopping center. Of our county's boundary, about 600 miles is waterfront shoreline. The Chesapeake Bay, the Choptank River, and its many small tributaries continue to influence the character and lifestyle in the region.

Some History

Early Exploration

Traders from William Claiborne's fort on the southern shores of Kent Island explored the Choptank River in the 1630s. For nearly 30 years after Claiborne's traders made their initial forays politics and Indian problems blocked settlement in the Trappe District. However, by 1659 large land grants were being made in the area. "After 1662, with the establishment of Talbot County, the trickle of settlers and land speculators became a flood. Almost all the land along Island Creek, Dividing Creek and the choicer parts of the Choptank was patented within the next few years…. Henry Alexander was the first owner of the land on which the village of Trappe later grew, at the "head of Dividing Creek" – an indication that the inlet now named LaTrappe Creek was navigable much farther upstream than it is today." [1]

Roads

"Before 1687, Trappe District had no roads except the old Indian footpaths. Nearly all travel was by water."[2] In 1690, a simple Anglican church was built at a place called Whitemarsh in the northern part of what was to become the Trappe District. The ruins of this church, which burned in 1897, are about three miles north of Trappe near modern Hambleton. Today, the ruins of Whitemarsh Church appear located in a rather strange spot far from any real concentration of people. However, in 1692, its location made perfect sense.

In the seventeenth century, British ships unloaded some of their cargo on the upper Choptank River. The nearest town to their anchorage was a Talbot County town called "Dover" where a ferry crossed into what is now Caroline County. This town was the original destination of Dover

[1] Dixon Preston, Trappe, The Story of an Old-Fashioned Town, 12-13 (Economy Printing Co. 1996) (1976).
[2] Preston, supra, at 12.

Street and Dover Road leading eastward from Easton. Dover no longer exists. British captains sometimes preferred the small port of Dover because, as they unloaded their cargo, the fresh water in the upper Choptank would kill the saltwater shipworms that attacked the hulls of their ships.

In those early days, the principal road in southern Talbot County was from Dover on the upper Choptank to Oxford on the Tred Avon. The halfway point on this road was in a small settlement, now Hambleton, where Whitemarsh Church and infamous "Hole in the Wall" tavern were located. Tradition has it that smuggled goods from Britain changed hands through a small hole in a wall between rooms to preserve the anonymity of the lawbreakers. The goods then found their way to Oxford and beyond. The church and the tavern were sensibly located in a small population center with a solid, however nefarious, commercial base.

In the mid 18th century, two roads gradually achieved importance in the lower part of Talbot County. One led from Talbot Court House (Easton) to the church at Whitemarsh and then south to a ferry landing at the tip of Chancellor's Point on the Choptank across from Cambridge. The other connected the plantations on the southern shores of Island Creek with Abott's Grist Mill located on Miles Creek, which had been an important destination since at least 1700s and possibly earlier. The Abott's Mill later called Wright's Mill, increased in importance as wheat gradually replaced tobacco as the chief cash crop of the Trappe area. By the 1760s, a few houses, stores, and a tavern had located at the crossroads of these north-south and east-west travel routes. By 1776, a blacksmith shop, a silversmith, and a tailor were commercial additions. Sometime during the Revolutionary years, the name "the Trap" began to appear in land records that referred to this crossroads hamlet. Numerous colorful legends explain the origin of the names Trap, the Trap, Trapp, The Trappe, Trapton or simply Trappe.

Early roads improved and newly constructed served the growth and development that occurred over time. Today Trappe is split by a divided dual lane highway (US 50), also known as Ocean Gateway, which is classified by the MDOT SHA as a Major Arterial. MD 565 (Main Street) also serves our planning area and is classified as a Secondary Collector. Barber Road, Howell Point Road, Island Creek Road, and Piney Hill Road are the principal County roads that serve the planning area and feed into our system of town-owned streets. These County roads are classified as "major collectors" by the Talbot County Roads Department (since they serve more than 50 housing units). Portions of both Barber Road and Piney Hill Road are located in the Town of Trappe.

<u>Steamboats/shipping</u>

Steamboating on the Choptank was part of Trappe's life beginning in 1823 when the side-wheeler Albemarle started trips to Cambridge with a stop at Howell's Point for Talbot County passengers and freight. "After Dividing Creek, renamed the LaTrappe River, was deepened with the help of federal funds, a company was formed by local businessmen to build a steamboat wharf at Trappe Landing. In 1884, Kirby's Wharf stretched 800 feet out into the shallow Choptank to reach water deep enough for steamboats. Soon after completion, three steamboat companies were using the two landings and competing for Trappe customers with 16 trips weekly. Besides carrying passengers, they brought down mail and manufactured goods from

Baltimore and took back fish, crabs, oysters, potatoes, tomatoes, peaches, apples, melons, and livestock. It was the Trappe area's main shipping center for nearly 40 years. Kirby's Wharf Company disbanded in 1922 when auto and truck transportation ended the long reign of the steamboats."[3] Trappe Landing was a commercial grain shipping port until the early 1970s when Trappe Landing Grain was moved to US 50.

Railroads

The Maryland and Delaware Railroad, completed to Oxford in 1872, skirted Trappe District's northern edge. The depot that served Trappe was about four miles to the north and was first called Melson's stop before being changed to Trappe Station. It provided three deliveries of mail daily and provided passenger and freight access to Baltimore by way of Delaware. However, the lack of direct in-town access was a disappointment to area boosters and placed Trappe at an economic development disadvantage compared to other spots on the rail line.

Automobiles

The early 1900s saw the first automobile owned by a resident. "It was 1909 before the Trappe Commissioners even got around to establishing an automobile speed limit of eight miles an hour, the same as that applied to horses, on the Town's streets."[4] Things remained relatively quiet in Trappe until 1935 when President Franklin D. Roosevelt personally inaugurated the Choptank River Bridge by sailing through its draw in his yacht, Sequoia. Officially called the Emerson C. Harrington Bridge, it ended Trappe's importance as the hub of a peninsula bounded by the Choptank River and Island Creek by linking the upper and lower eastern shore. The increase in traffic through town was not necessarily to Trappe's advantage. Changing traffic patterns brought mixed blessings. While business prospered, Red Star Line buses and "big" interstate trucks, which had formerly crossed the Chesapeake Bay via ferries on the lower shore, now rumbled through town day and night. Speeding traffic, parking conflicts, and accidents led local citizens to complain about the changes in their quality of life. The bailiff, "empowered to enforce the traffic laws, was authorized to keep all the fines he could collect, but the Board made it clear that the Town 'shall not be responsible in any way for anything he might do."[5] The official town speed limit (of eight miles per hour) was not repealed until 1948.

Enforcement was no real solution, and over the protests of the business community plans for a new federal highway, to be called US 50, with a bypass around Trappe moved forward. US 50 was completed as a two-lane highway in 1947 and later widened to four lanes. Merchants interested in truck and tourist trade immediately moved out to the bypass, the Town relaxed, and Main Street once again belonged to the residents of Trappe.

Remaining History

The Trappe Historic District encompasses the oldest portions of Trappe. This historic district (T-946 on the Maryland Historic Trust database) was determined eligible for placement on the

[3] Preston, supra, p. 83.
[4] Preston, supra, p. 80.
[5] Id. at 118.

National Register of Historic Places in 1997 (see Figure 1-1). The eight properties listed below are considered by the Maryland Historic Trust to have potential historic significance:

- T-74, Knotts Farm (Hiram Dudley Victorian House)
- T-75, James F. Moore House
- T-76, Gordon Behrens House
- T-77, Richland (Covey Landing, John Walton House)
- T-79, Skipton Farm (Robert Hallett House)
- T-80, Skipton Landing
- T-81, Wye Heights Plantation
- T-150, Bullen's Chance
- T-151, Walnut Grove Farm

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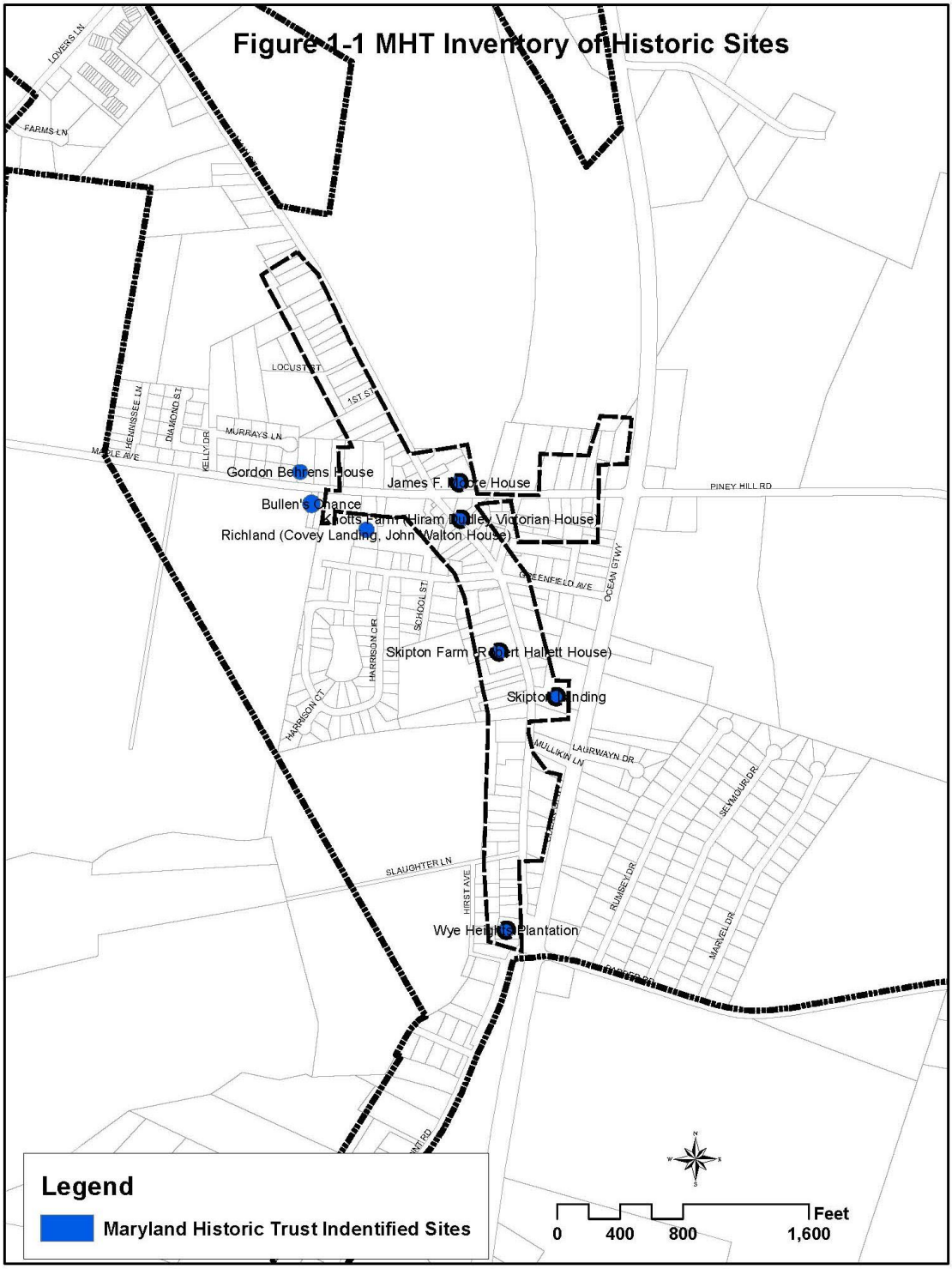
Figure 1-1 Historic Sites



CHAPTER 2 - GOALS AND OBJECTIVES ELEMENT

Introduction

This section supports and addresses all Twelve Visions of the Planning Act, which provides the philosophical framework for this Comprehensive Plan. It outlines Trappe's long-range aspirations for the community (goals) and interim milestones (objectives) to advance the community to these ends.

Goals

LAND USE - Master planning of annexation and growth areas to ensure compatibility with the existing community, and efficient utilization of land, while protecting and enhancing our residential "village character"; and taking steps to ensure choices are rooted in environmental sustainability.

TRANSPORTATION - Provide for the safe movement and parking of vehicles. Provide safe and secure pedestrian and bicycle access to all parts of the community.

PUBLIC SERVICES - Provide the public services needed to support compact and efficient land use patterns and the maintenance of public health and safety.

NATURAL RESOURCES - Protect and improve the environmental quality of our planning area and the Chesapeake Bay through the implementation of green/sustainable practices.

INTERGOVERNMENTAL COOPERATION - Foster cooperation and mutual support between Trappe and other government entities, and encourage public attendance at Planning Commission and Town Council meetings.

AESTHETICS - Create and maintain a neat and attractive village that is financially resilient, architecturally timeless, and socially enduring.

FISCAL – Maintain financial solvency as a prerequisite for long term prosperity by ensuring a favorable balance between town revenues and the expenditures required to meet community needs.

Goals Summary

Our overall goal is to keep Trappe a town in which its citizens take pride. We will continue to encourage our close-knit and diverse community through cultural interaction and promoting various community relationships. We will strive to retain the old- fashioned charm which has characterized Trappe from its beginning. We aim to keep our town a place that welcomes a broad cross-section of people from all walks of life.

Trappe has a uniquely diverse yet cohesive populace who work together to make our Town a safe, comfortable place to live for people of all ages, races, and religions. We aim to do everything in our power to keep it that way.

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We recognize, however, significant consideration seemingly beyond our control strongly influence our planning. That consideration is the increasingly disruptive, dangerous, and divisive influence of US Route 50. Adequately buffering US 50 with its associated noise and high speed is a priority as is creating safe routes for connectivity between the east and west sides of town.

Our land-use strategy is to create new and protect existing neighborhoods where people of all ages, races, and ethnicity can enjoy an environment shared with neighbors, one where streets, parks and other community facilities support human interaction. Also, we want to provide for an appropriate mix compatible commercial and employment development opportunities where small scale businesses can flourish all within a cohesive development pattern that encourages safe walking, bicycling, and general community interaction.

Objectives

Land Use

- Conserve existing residential neighborhoods by protecting them from the incompatible land uses while allowing for context-appropriate infill and redevelopment of vacant and underutilized properties.

- Encourage concentrated commercial development, served by limited, safe, and convenient access to US 50. Discourage frequent curb cuts and focus on the immediate commercial needs of Town residents providing those services within easy walking distance of residential centers.

- Discourage development of land located in the Town's growth area that is not annexed and connected to municipal water and sewer. Such development along our borders is inefficient to serve with public facilities, is inconsistent and incompatible with our goal to protect and preserve existing community character, and will impede future annexation and controlled growth within our planning area.

- Encourage new development only in areas that can be economically served by Town water and sewer and incorporated into existing Town pattern and character.

- Provide a system of interconnected parks and civic structures that provide value to property owners within the community and enhance the public realm, create memorable landscapes, and provide for spontaneous gatherings.

- Seek economic vibrancy and diversity by supporting and encouraging financially-sound business creation and expansion.

- Provide a mix of residential unit types and values in safe neighborhoods in support of age diversity and independent living at all stages of life.

- Develop workforce housing within neighborhood centers and residential accommodation for the elderly within walking distance of parks and commercial areas.

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- Maintain the core of the Town, including the post office, town office, and essential services in the area adjacent to Main Street.

- Review and amend as necessary development regulations inconsistent with the achievement of these land use objectives.

Transportation

Both local and inter-regional traffic must be accommodated in a manner that maintains the physical unity of our Town. Efficient, safe circulation throughout the Town for both automobiles and pedestrians is necessary. US Route 50 divides the Town into eastern and western parts, and heavy highway traffic makes east-west circulation difficult and dangerous. The guiding principle that we will follow is to utilize roads like US 50 to move traffic safely at high speeds outside of neighborhoods. Within our neighborhoods, we will use streets to equally accommodate the full range of transportation options available to our residents. Our transportation objectives seek to improve current conditions:

- Support the development of alternative routes to the ocean beaches.

- Maintain the high quality of our Town road system and implement the planned development of access and feeder roads.

- Improve pedestrian safety by providing safe routes for pedestrians that do not include walking on the shoulders of high traffic volume roadways by extending sidewalks and incorporating new trails.

- Maintain low traffic volumes and speeds on local streets through the use of narrow streets in residential areas.

- Encourage alternatives to single-occupant automobile traffic such as park and ride facilities and bicycle routes, particularly those that link Trappe to Easton, Oxford, and Cambridge.

- Encourage public transportation stops in Town.

- Adequately buffer US 50.

Public Services

Our Town government is heavily involved in the provision of public services to Trappe citizens. These services include central water and sewer services, street lighting, solid waste disposal, parks, and recreation. Other organizations and governmental bodies also offer public services, including fire protection, twenty-four-hour paramedic service and ambulance service provided by the Volunteer Fire Company and the medical facilities of the University of Maryland Shore

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Medical Center at Easton. Our public services objectives focus on maintaining and improving those services we currently provide.

For any annexations in the Town's growth area, the developers or property owners proposing annexation will be responsible for providing adequate public facilities, including public services, for those areas. The Town's objectives for public facilities and services are to:

- Maintain sufficient water, sewer, and stormwater systems to meet Town needs as it grows.
- Maintain an adequate level of fire protection and ambulance service.
- Provide adequate facilities for community recreation, including the arts, library, and meeting center functions.
- Reserve existing water/sewer capacity for infill development.

Natural Resources

Our natural resources objective are:

- Coordinate with State, County, and other bodies on all significant actions affecting unique wildlife habitats.
- Adopt policies and regulations intended to protect and improve the water quality of streams and waterways that drain to the Chesapeake Bay.
- Promote a universal stewardship ethic toward our land, water, air, and other natural resources.
- Work with Talbot County to establish greenbelt areas adjacent to the Town.
- Encourage a town-wide recycling program.

Intergovernmental Cooperation

As an incorporated municipality, Trappe interacts with other governmental jurisdictions and local groups. Our small size and limited fiscal base prevent us from being entirely self-sufficient and make us dependent upon other governmental bodies and agencies for some services. Nevertheless, we strive for financial stability without dependence on government subsidy for the standard maintenance of essential infrastructure systems. Accordingly, we will:

- Coordinate closely with the County in decisions affecting the use of land within our planning area, including development projects adjacent to the Town.

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- Provide MDOT SHA with input regarding the future of US 50 and our need for safe east-west vehicular and pedestrian traffic.

- Explore ways in which we can avail ourselves of the technical ability of other government entities.

- Coordinate closely with the County on stormwater management planning.

- Support the establishment of a buffer area/greenbelt in rural areas adjacent to Town, and work to ensure the permanent protection of the greenbelt through tools such as conservation easements.

- Actively invite county, state, other town officials, employees, and citizens to attend meetings and events in Trappe. Maximize revenue sharing, subsidies, and grants from and technical assistance from Federal, State, and County.

Aesthetics

Trappe is, on the whole, neat and well maintained. A quality residential area necessitates pleasant, well-kept structures and grounds and will be accomplished if we:

- Encourage the generous use of landscaping in all new development, and the use of additional landscaping in areas of existing development.

- Encourage open or forested vistas between neighborhoods to separate high-speed traffic from adjacent land uses and to screen the rear of commercial uses from adjacent non-commercial uses.

- Maintain strict controls upon the design and use of signs, particularly in areas along the US 50 corridors.

- Enhance the general appearance of US 50 and adjacent parking areas.

- Maintain the crossroads village character of the central old town area.

- Continue to encourage a high level of care and maintenance for Trappe's existing housing.

- Promote the use of "A Trappe Community" signage within newly developed areas.

- Encourage individual property owners to preserve and enhance the historical integrity of their homes and buildings.

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Fiscal

Future revenues, our ability to borrow, and our capacity to find alternative funding sources will determine what services are provided for Trappe residents. Consequently, we should:

- Seek outside funding sources for identified Town needs.
- Capture the financial benefit from commercial and or industrial facilities.
- Maintain a balance between revenues and expenditures, including an adequate reserve for contingencies.
- Charge for capacity depletion associated with new connections to the water and sewer systems.
- Maintain a separation between general accounting and the enterprise fund (water and sewer revenues and expenditures).
- Require those proposing development to be fiscally responsible for the costs of adequate public facilities necessary to provide service to new development areas, particularly in the annexation areas.
- Encourage opportunities for environmentally-friendly employment through sustainable infrastructure.

Implementation

The implementation of our Comprehensive Plan will be mainly through the application of our land use development regulations and our adopted procedures to ensure that projects utilizing public funds are determined to be consistent with our approved Comprehensive Plan. Additionally:

- We will review the Trappe Zoning Ordinance and Subdivision Regulations for compliance with any changes following the adoption of this Comprehensive Plan.
- We will use the Comprehensive Plan to guide our decision-making processes about overall development policy.
- We will use this Comprehensive Plan to evaluate potential annexation requests, initial zoning of annexed parcels, and priorities for the extension of public services and facilities. Annexations must be consistent with this plan, including the Town's Municipal Growth Element.
- We will use this Comprehensive Plan together with the Trappe Water and Sewerage Subsidiary Plan and will ensure consistency with these planning documents.

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- We will continue to work with Talbot County to incorporate our land-use preferences and priorities for our planning area into the County's Comprehensive Plan.

- We will enforce property maintenance codes and livability standards to protect property values and to maintain and enhance the Town's village character.

- We will explore ways to encourage citizens to reduce resource consumption, and to promote conservation, composting, and recycling.

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CHAPTER 3 LAND USE ELEMENT

Introduction

Since the adoption of the 2002 Trappe Comprehensive Plan and later the 2010 Trappe Comprehensive Plan, the Town of Trappe has experienced significant changes in both its land-use landscape and has updated many of its codes and regulations to ensure that development is consistent with its Comprehensive Plan and vision. The Town has implemented virtually all of its goals and objectives outlined in the 2010 Comprehensive Plan. These changes have occurred not only through annexation, but also a renewed interest and revitalization in the existing downtown. As set forth herein, the protection and enhancement of our residential "village character" will continue to be our guiding principle for future land use.

This Chapter supports the following visions of the 1992 Economic Growth, Resource Protection, and Planning Act, and we will make sure that new development is consistent with these goals and objectives:

- Development is concentrated in suitable areas;
- Sensitive areas are protected;
- In rural areas, growth is directed to existing population centers and resource areas are protected;
- Stewardship of the Chesapeake Bay and the land is a universal ethic;
- Adequate public facilities and infrastructure under the control of the Town are available or planned in areas where growth is to occur; and
- Conservation of resources, including, a reduction in resource consumption is practiced.

We have established goals and objectives for our community, its character, and its economic vitality. We want to ensure that we meet the needs of our residents, both present and future, in ways that allow us to sustain a high quality of life for all, and also ensure that our built environment does not conflict with the preservation of a healthy natural environment.

Existing Land Use

Existing land use as of 2015 is summarized in Table 3-1 and shown on Map 3-1. Not counting vacant land, the vast majority of which was in agriculture use, the leading category was detached single-family residential uses. The Lakeside Planned Neighborhood Development, a large scale planned unit development, constituted approximately 67 percent of the vacant group. The primary use in the "other" category is highway right of way. Institutional uses include church properties and the volunteer fire department. Public uses include the post office, Town of Trappe, and Board of Education properties. The industrial category consists of a warehouse cold storage facility. The commercial category includes warehouse, retail, office, restaurant, auto

service, and convenience market establishments. A few retail establishments include upstairs apartments.

Table 3-1: Existing Land Use - 2015

Land Use	Acres	% of Total
Residential	187	11.4%
Multi-family	2	0.1%
Commercial	32	1.9%
Industrial	22	1.4%
Public	13	0.8%
Semi-public	7	0.4%
Park & Open Space	33	2.0%
Vacant	1,288	78.3%
Other	60	3.7%
Total	1,644	100.0%

Source: 2015 Maryland Property View

Land Use Changes in the Town since the 2010 Comprehensive Plan

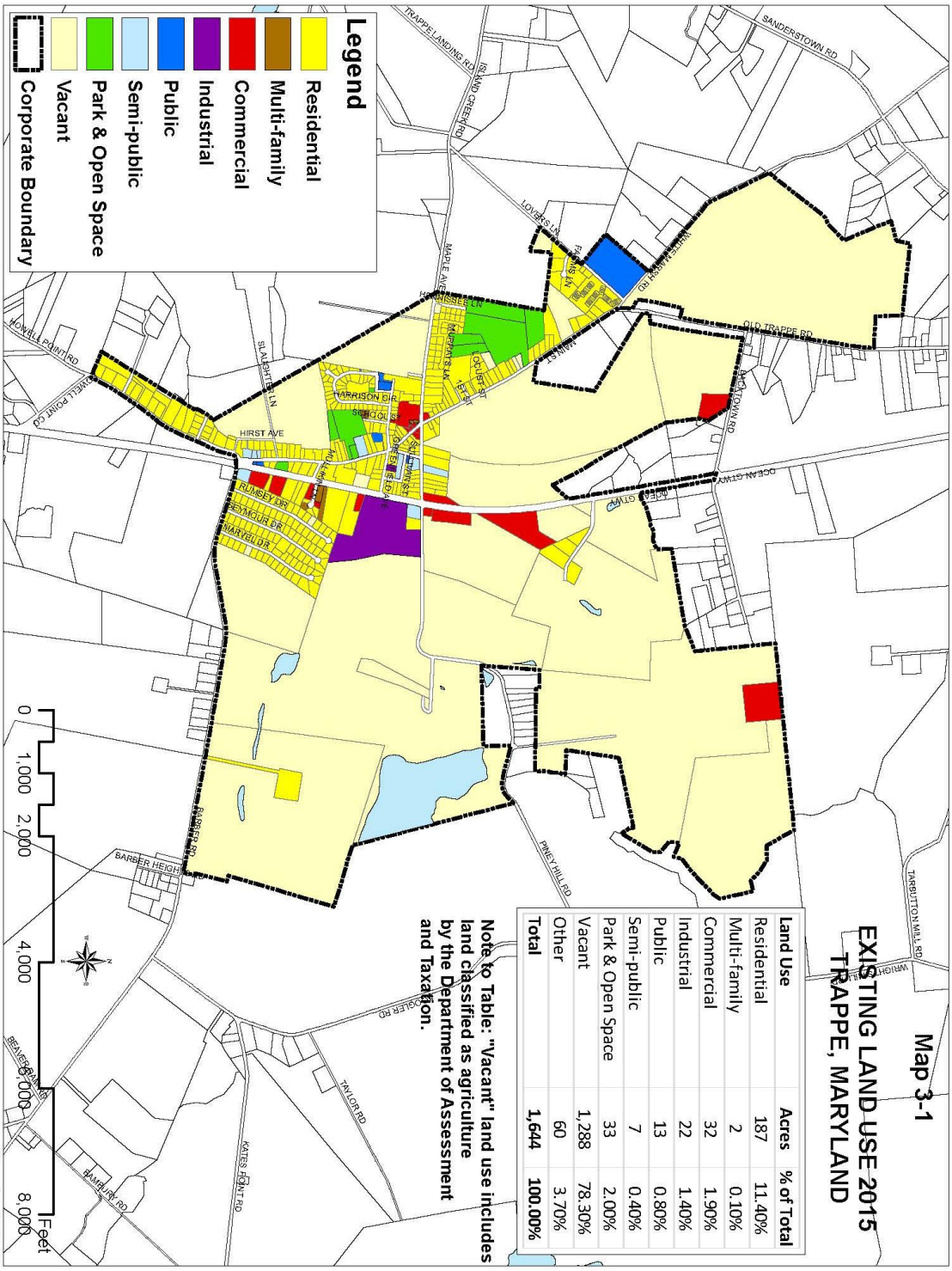
Since the last Trappe Comprehensive Plan, adopted in 2010, the Town of Trappe has made significant progress toward accomplishing the land use goals and objectives of that plan. The Town has adopted various changes to its ordinances and regulations to ensure that new and existing development conforms to the Town's objectives.

The Town has adopted several zoning ordinance revisions to address both new development and existing development. In 2004, the Town of Trappe adopted a Planned Neighborhood "PN" Floating Zone District. The PN Floating Zone District was approved to address previous land-use regulations that were not designed to encourage efficient use of land. In 2004, the Trappe PN Floating Zone District won the Maryland Department of Planning's Vision Award for Government Innovation.

In addition to the PN District Floating Zone, the Town has also adopted a Highway Commercial Mixed Use ("HCM") Floating Zone, and a Planned Regional Commercial ("PRC") District Floating Zone. Both of these floating zones are intended to permit master-planned, commercial mixed-use development near US 50 if included in a planned unit development ("PUD") approved by the Town Council.

To ensure that the design of new development is in harmony with Trappe's village character and small-town feel, the Town has also adopted design standards that address architecture, materials, lighting, parking, street design, sidewalks, landscaping, and environmental standards. The design standards are intended to promote, among other things, neighborhood connectivity, pedestrian and bicycle travel, and traditional village building and site development, with a diversity of household types, age groups, and income levels. Commercial design guidelines will ensure, among other things, a pleasant visual appearance along major highways and corridors, encourage appropriate access and circulation patterns, and linkage between sites.

Map 3-1 Existing Land Use



In its continuing efforts to revitalize the existing village center, the Town adopted a Village Redevelopment "Sub-Area" in its zoning ordinance. This area is intended to promote and encourage the revitalization of the existing downtown by permitting small-scale commercial development by special exception at appropriate locations.

On February 5, 2003, the Trappe Town Council adopted Resolution 7-2002 and annexed the Trappe East Annexation Area (now known as the Lakeside PN District), which consists of approximately 924.22 acres of land on the east side of US Route 50. After the qualified voters of the Town of Trappe petitioned the Trappe East annexation to a referendum, 70% of the registered voters that participated in the election affirmed the annexation. The Trappe East annexation became legally effective on May 5, 2003. By resolution 4-2004, adopted in August 2004, the Town of Trappe annexed White Marsh Development Area. The White Marsh Development Area consists of 175.068 acres of land located between White Marsh Road and Maryland Route 565.

For each of the Trappe East and the White Marsh annexations, the Trappe Town Council required that the property owner(s) and contract purchaser execute annexation agreements, which agreements are recorded in the land records for Talbot County and run with the land. These annexation agreements outline the property owner(s)' and developer's obligations to the Town to ensure that the properties are developed in accordance with the Trappe Comprehensive Plan in sections, and will create interconnected planned neighborhoods with a variety of residential, commercial retail and municipal uses, as well as multiple public and private open space and recreational amenities. The annexation agreements also provide that the developers and the residents who live in those developments will pay for the services that they use, including water and sewer services, and that the existing town residents not pay for any costs associated with the new development.

With respect to the Trappe East Annexation Area, in February 2006, the Town of Trappe applied the PN District Floating Zone to the Property and approved a planned unit development (PUD) plan for 3 phases of the District. The Town and the developer also executed a Development Rights and Responsibilities Agreement (DRRA) which vests the development rights for 2,262-2,501 residential uses and some commercial uses. The DRRA also establishes the developer's responsibilities to provide facilities and services in response to increased demand associated with the development. The build-out of this development is forecasted to be over 20 years depending upon market forces. The developer and the Town obtained approvals for the construction of a wastewater treatment plant that would discharge treated effluent through land application.

The White Marsh Development Area does not have any development approvals at this time. Under the annexation agreement that property will be developed as a Planned Neighborhood ("PN") Floating Zone District. The development of that property will require expansions and improvements to the Town's wastewater treatment plant, which will be the responsibility of the developer. At this point, there are no development plans for the site.

In addition to the White Marsh Development Area, in December 2004, the Town of Trappe annexed an 11.215-acre parcel of property owned by the Talbot County Board of Education, the site of the White Marsh Elementary School.

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In addition to these annexations, in 2007, the Town annexed 41 acres of property on the south side of Backtown Road. These properties are zoned Light Industrial ("M") under the Town code. A local charitable organization is operating a museum of rural life that will celebrate and promote citizen awareness of local Trappe history and its rural Talbot County influence.

The Land Use Districts

The Town's Land Use scheme shown on Map 3-2 identifies the various planned land uses within the Town boundaries as well as the Town's growth area or planning area and proposed greenbelt. The land use areas address two primary aspects of the Town's vision:

- Protection of the existing village character of the Town and its neighborhoods from incompatible development; and
- Manage growth to ensure new neighborhoods that are compatible with and complement the existing Town.
- Encourage context-appropriate infill and redevelopment that adds value to the community.
- Ensure the Town's long term financial solvency.

<u>Village Center</u>

The Village Center area shown on Map 3-2 is the historical activity node for community life. Our historical core is characterized as a crossroads village. We see a continuing need for village commercial uses, including low-intensity commercial and business uses that are appropriate for location within the existing Village Center or located within newly created residential neighborhoods. The retail components of village commercial centers primarily serve existing neighborhoods. Village commercial areas also may provide space for small businesses and are appropriate locations for small-scale institutional and civic uses.

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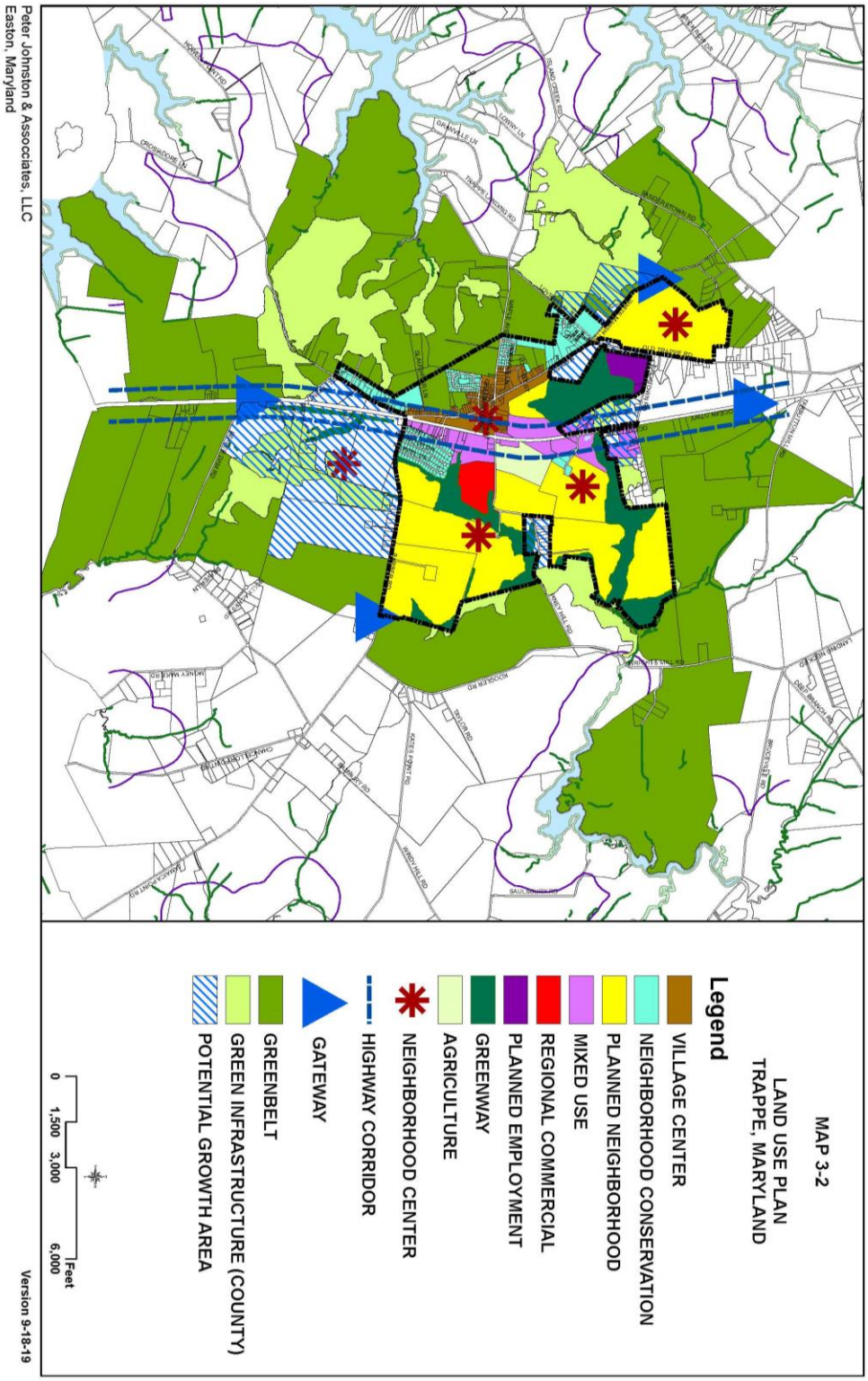
Map 3-2 Land Use Plan



Within the Village Center, we have attempted to protect the existing character by establishing a special zoning classification (Village Overlay Zone). The Village Overlay Zone is also intended to provide the Town with flexibility in addressing land-use conflicts and issues of nonconformance that may result from the existing mix of land uses, nonconforming lots, and building placements along Main Street, Maple Avenue, and Greenfield Avenue. Within the Village Overlay Zone, the Village Redevelopment Sub-Area permits small-scale commercial development by special exception at appropriate locations.

All village commercial development will be low intensity uses that generate minimal vehicular traffic and are easily accessible to pedestrians. Smaller infill mixed-use development in the Village Center presents opportunities for entrepreneurship and will enhance the aesthetics of Main Street. A partnering of housing and small commercial opportunities offers a chance to work where you live and sustain life in the downtown area after regular retail hours.

We will continue to encourage infill and redevelopment of village commercial uses on Main Street in the vicinity of our historical crossroads core. Village commercial will be designed as an integral part of plans for new residential neighborhoods in this area. New village commercial and business establishments should be of intensity, scale, and style that is appropriate to and compatible with surrounding residential neighborhoods. Design guidelines for village commercial uses will emphasize village-style architecture, pedestrian scale, and accessibility from the surrounding areas.

Our vision also includes extending our traditional village character along Main Street north to the current Town boundary and the creation of a northwest "gateway" at the confluence of MD 565 and White Marsh Road. Home Run Baker Park, a 19-acre facility located on the northwest side of White Marsh Road, provides public open space and contributes to the quality of this gateway to our community.

Neighborhood Conservation

Neighborhood conservation areas shown on Map 3-2 encompass existing residential enclaves located within the Old Trappe Town District and adjacent to the village core. These neighborhoods, though mostly developed, present some opportunities for infill development on remaining vacant lots or small parcels. Infill development in existing neighborhoods should be compatible with the predominant character of the surrounding area.

Existing neighborhoods also need protection from proposed development in adjacent districts. As part of the development review process, we will require future development to be mindful of its neighbors, requiring appropriate design, buffering, and traffic controls to ensure a peaceful co-existence.

In both the Village Center and the Neighborhood Conservation District, the emphasis is on the preservation of the existing town character, infill and redevelopment and priority allocation of the current water and sewer capacity. As outlined in the Water Resources Element, the Town reserves existing water and sewerage capacity for the Town's infill lots, and 32 lots located on the perimeter of the Town currently served by individual septic systems.

Planned Neighborhood

Planned Neighborhood areas shown on Map 3-2 encompasses properties where the PN Floating Zone district may be applied to large, vacant tracts within the corporate limits. Newly annexed properties may be considered for the PN District floating zone upon annexation. The PN Floating Zone district permits master-planned, mixed-use developments in areas designated appropriate for such development. New development within these areas is required to maintain a scale, density, layout, and style compatible with our rural village. The Town has approved a PN Floating Zone District for the Lakeside Development Area. As for the White Marsh Development Area, the annexation agreement that runs with the land provides that the property will develop as a PN Master Planned development. The White Marsh Development currently has no approved development plans.

In addition to these two newly annexed areas, there is one substantial infill parcel of approximately 104 acres. At the appropriate time, that parcel may be eligible for rezoning as a PN District. That parcel is in agricultural use, and the Town's reserve capacity for infill development does not include the development of that parcel. The property will continue to be classified by the Town for no long-range water or sewerage extensions until a specific development plan is presented, including a plan for the extension of water and sewerage utilities and capacity availability.

Large scale planned unit development is suitable for Planned Neighborhood Development District if it exhibits the following characteristics:

- New neighborhoods should include a commercial or mixed-use area and community space or park that creates a definable village center.
- All development should be designed and located to enhance views into and from the community.
- Each neighborhood should have a visible boundary or edge that provides an appropriate gateway or transition to adjacent neighborhoods.
- All development in a planned community should encourage a consistent neighborhood character.

Small, isolated subdivisions and large-lot residential development will be discouraged as inhibiting a consistent neighborhood character. Small-scale development, not part of a planned community, would not be appropriate for these areas. The Town may consider annexing properties proposed for small developments if the proposed development project fits within a master plan concept for a larger area, and the proposed development will be consistent with our design principles.

In all cases, Planned Neighborhood developments will address impacts on Town provided utilities, infrastructure, services, and programs. The Town will require a developer and or property owner to enter into a Development Rights and Responsibilities Agreement that addresses all development impacts.

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The Town has adopted PN Design Performance Guidelines that will apply to any proposed Planned Neighborhood Floating Zone District. We will use our project review process to ensure that proposed development projects are consistent with this Plan and the PN design performance guidelines. We will be guided in our review of proposed development by the following neighborhood design principles:

- Neighborhoods are compact and identifiable, and their boundaries are visually discernable.

- Neighborhoods are linear, crossroads or grid-patterned, with variations to enhance view and landmarks.

- Neighborhoods are visually coherent and reflect consistent rules of organization and architecture.

- Street corridors are visually bounded and intimate in feeling. Street trees, sidewalks, and front yard design elements create visual layers and contribute to the intimacy of streetscape.

- Street blocks help describe component neighborhoods, suggesting the role of the street as a channel for neighborly interaction.

- Neighborhoods accommodate a mix of uses, even at the "Hamlet" scale.

- A mix of on-street and unobtrusive off-street strategies will accommodate parking without resorting to large-scale parking lots. Older lots will become smaller, landscaped segments.

- Most important, neighborhoods and surroundings will convey a strong "sense of place."

<u>Commercial and Industrial Areas</u>

The Town has several distinct types of commercial, business, and industrial land uses. These include village center, general, regional, highway mixed-use commercial uses, and a light industrial classification, each characterized by its location, intensity of use, critical design considerations, and the market area served. The Village Center, Regional Commercial and Planned Employment areas on Map 3-2 encompass existing and planned commercial and industrial areas.

Village Center Commercial Districts (Village Center on Map 3-2) - The Village Center commercial area is a mixture of residential and commercial properties concentrated in the core of the Town. Preservation of, and compatibility with, the character of the Town core is critical in determining the appropriateness of any proposed use. This area does not include large-scale commercial or highway-oriented commercial activities but is a blend of local shops typical of many main streets in rural communities.

***General Commercial Districts (Village Center on Map 3-2)* -** The Town's general commercial districts include properties identified on the land use map, most of which are existing commercial uses along US 50. The Town's commercial development guidelines for new development are intended to ensure a positive visual appearance along major highways and streets corridors, and improve access and circulation to and within new and existing commercial and business sites, and encourage sensitive site planning and building design.

***Regional Commercial Floating Zone District (Regional Commercial on Map 3-2)* -** The Town has adopted two commercial floating zone districts – the Planned Regional Commercial District, and the Highway Mixed Use ("HCM") District. The intent of the Planned Regional Commercial ("PRC") District is to establish an area for master-planned regional commercial uses at an appropriate location near US 50. Such uses must be carefully located to avoid adverse impacts on existing and future residential neighborhoods. Given the location of existing residential areas, and our emphasis on protecting their current character, such uses will be limited to one centralized site located east of US 50. To ensure compatibility with future residential neighborhoods, we will only consider a regional commercial center included as part of a large-scale, planned mixed-use project wherein the developer controls enough land area to design appropriate transitions between regional commercial and other less intense uses. We will pay special attention to the potential impact of regional commercial development on local traffic circulation (positive and negative), visual impressions at the Town's gateways and the potential cost and benefits of such uses to the Town of Trappe.

***Highway Commercial Mixed Use Floating Zone Districts (Mixed Use on Map 3-2)* -** The Highway Commercial Mixed Use (HCM) District is intended to permit master-planned, commercial mixed-use development near arterial highways in areas designated appropriate for such development. The HCM District is not pre-mapped on the Zoning Map but may apply in areas designated for such uses. The Town has identified three infill areas along US 50 that are eligible for the application of an HCM Floating Zone District, and that may be suitable locations for a mix of commercial, business, and multi-family residential uses. These infill areas consist of larger parcels of land within the Town that could be developed as a master-planned mixed-use development. Commercial and business uses locate here to take advantage of the highway frontage and exposure. Such uses typically serve regional markets as well as providing services for motorists. Special design considerations include visual impacts on the Town's primary gateways from the north and south, traffic operations and safety, and protecting adjacent residential neighborhoods.

The Town has identified suitable locations for the application of the HCM District floating zone but has not applied it. The Town's water and sewer services presently do not extend into these areas. Water and sewer services would have to be extended to these areas and at the developer's expense before development. Such extensions also would depend on whether capacity at the water and sewerage treatment plant is adequate to service such development. As outlined in the Water Resources Element, the Town's reserve for infill development does not include capacity for subdivision of large vacant parcels of land with no development plans.

The Town adopted development design standards that address design and placement concerns. Any such development will comply with these commercial development design guidelines and the designed standards that apply in an HCM District or PRC District. We will require service roads to service commercial development to minimize traffic conflicts. We will require

appropriate signage and landscape buffers between businesses and US Route 50 to improve the visual character along the corridor.

We will improve the appearance and attractiveness of our existing and new commercial areas through the addition of landscaping and buffer requirements, appropriate architectural design guidelines, and improved site plan submission requirements and review guidelines. Revised development regulations will address improved signage and lighting in commercial areas.

Light Industrial (Planned Employment on Map 3-2) - The Town's Light Industrial ("M") District provides for industrial uses and structures that have been considered low-impact, and do not create undue noise, odor, traffic or aesthetic conditions that would be harmful to residential neighborhoods. Zoning Ordinance list the uses permitted in the Light Industrial District. The M District is located along the north side of town adjacent to Backtown Road.

We recognize and encourage the need for employment opportunities for residents of our community. Appropriate employment use would be welcome in our Light Industrial ("M") District providing wages that will enable residents to support themselves and their families while living within walking and short driving distances of their jobs. We will give special attention to the compatibility of the end-users, and support efforts to incorporate a variety of high tech businesses that may be using new or innovative technology to produce their service or product.

Greenway

The Green Infrastructure (County) and Greenway areas on Map 3-2 include areas located in and around the town. These areas are intended to serve as a greenbelt to the Town and the location for a greenway system. The greenbelt area coincides with Talbot County's Priority Preservation Area.

We envision a Town greenway system that extends throughout the Town. The Town's greenway system will encompass park and open space areas, sensitive environmental areas, wildlife corridors, and a network of connecting pedestrian trails. This greenway system will be part of an overall pedestrian circulation system linking residential neighborhoods to activity centers. Parts of the greenway system may also connect forested areas to permit wildlife movement. We will coordinate planning for our greenway system with plans for Talbot County's "green infrastructure." Our greenway plan also envisions a more or less continuous greenbelt of protected open space surrounding the Town and consisting of permanently preserved agricultural land. The greenbelt will serve as a permanent-growth boundary for Trappe. It will provide views of open fields and forested areas from within the community and enhance our gateways by sharply defining the edges of our Town. The Town will work with the County to implement programs to achieve the greenbelt concept and to permanently preserve the land in the greenbelt.

Agriculture

The Agriculture area shown on Map 3-2 includes land currently not planned for development. The Town is not planning to provide public water and sewer service during the planning period.

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Annexation and the Planning Areas

The Town's planned growth areas are identified as "Potential Growth Areas" on Map 3-2. For development to occur in the Town's growth area on municipal facilities, the Town will require that any such properties be annexed. Town policy is that our public water and sewer facilities will extend beyond Town limits. Annexation will be a condition of the extension of these services. Developers seeking the extension are responsible for the cost of extending water and sewer mains and force mains. Additionally, all petitions for annexation should include an analysis of our available system capacity at the time annexation is proposed to assist our town engineer, town officials, and residents to evaluate the feasibility of providing services to existing in-town properties and the new areas proposed for annexation.

We want to maintain our traditional identity and location with a reasonably compact development pattern that retains the village crossroads character. The Town's growth area is most appropriate for future expansion and accomplishing the projected growth. Other development districts may be suitable for annexation if large-scale planned communities are proven to be fiscally viable in terms of local service provision and meet all design requirements for approval. The Town will also consider annexation of additional land to accommodate the expansion of the M District for high tech businesses.

Our environmental concerns, including the plans for a town-wide greenway system, suggest that the portions of a large farm within the planning area on the Town's western border should remain in agricultural use. This farm, in an agricultural district, is near the wastewater treatment plant and is suitable for land application of municipal waste. Preserving this property as open fields will provide a portion of a community greenbelt for the Town and will serve to protect farmland outside of the area.

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CHAPTER 4 MUNICIPAL GROWTH ELEMENT

Introduction

In 2006, the General Assembly passed House Bill 1141, titled "Land Use-Local Government Planning." House Bill 1141 amended Article 66B and required that municipalities adopt additional elements in their comprehensive plans by October 1, 2009, including a municipal growth element and water resources element. As part of the municipal growth element, the Town is required to examine past growth trends and patterns, and include a projection of future growth in population and resulting land needs based on a capacity analysis. It also requires an examination of the effects of growth on infrastructure and natural features both within and adjacent to the present municipality and on future growth areas that may be annexed.

The Trappe municipal growth element will discuss and project the dynamics of Town growth, including:

- Where growth has occurred and will be encouraged;
- The amount of growth involved and land to be utilized;
- The rate of growth; and
- The impacts of growth on community facilities and services.

The central focus of Trappe's municipal growth element focuses on recently annexed areas where a considerable amount of the Town's growth is expected to occur over the next 20 years and beyond.

The Talbot County Comprehensive Plan states that incorporated towns are the best possible location for growth, whether such growth is residential, commercial, or industrial. The emphasis on municipalities as growth centers is due in part to the presence of existing infrastructure for development, as well as the existing opportunities for infill and redevelopment.

Past Growth Patterns of the Town of Trappe

We have looked at the population trends of the County, our election district, and our town for the period 1930 to 2010. Over these 80 years, we have seen the dramatic increase in average annual growth rates that corresponded to the economic activity of the 1980s. These "boom" years spurred an unprecedented demand for waterfront land for second homes and retirement homes throughout Talbot County. The economic spin-offs created a need for additional support activities and overall growth in secondary jobs. The growth explosion of the late 1970s and early 1980s also resulted in the enactment of the Chesapeake Bay Critical Area Program as recognition of the damage that population growth in the Bay watershed was doing to the health of the Bay.

The 1980 Census reported a population of 739 people in the Town of Trappe. By the 1990 Census, the Town of Trappe had a population of 974, a 31.8% increase. The 2000 census reflected a population of 1,146, a 17.6% increase from 1990. From 1995-2003, the population figures were artificially stagnant because of a building moratorium during the construction of the wastewater treatment expansion. During these 8+ years under a consent order between the Town of Trappe and the MDE, the Town was only permitted to extend water and sewer to 50 existing lots of record within the corporate limits. By 2010 Trappe's population had decreased to 1,077.

Future Growth Patterns

Because of recent annexation, the Town has sufficient land within its Town boundaries for development for the foreseeable future. Moreover, any significant development (aside from our infill development) will require substantial upgrades to the wastewater treatment plant and water systems.

Newly Annexed Areas

The Town annexed two significant areas within its growth area – the Trappe East Planned Annexation Area, and the White Marsh Village Planned Annexation Area. Both areas were identified in the Talbot County Comprehensive Plan for more than 20 years as growth areas for the Town of Trappe. Before the annexation of these areas all but approximately 230 acres were zoned under the Talbot County Zoning Ordinance to permit densities of four dwelling units per acre with public sewer.

Additional Infill Areas

Development capacity for the existing Town was estimated using Geographic Information Systems (GIS) and the most recent Department of Assessment and Taxation database to calculate the buildable area on existing lots. The Town collected data on all parcels greater than 20,000 square feet with subdivision potential, all vacant parcels, commercial parcels, and parcels with the highest potential for redevelopment (See Map 4-1). The results of this research identified 20 vacant lot plus parcels with infill development potential (see Table 4-1).

Table 4-1: Estimated Development Capacity

Infill Category	Parcels	Acres	Estimated Capacity	Units
Residential	15	46	116	Dwelling Units
Commercial	4	107	464,175	Gross floor area
Industrial	1	36	156,522	Gross floor area
Total	**20**	**189**		

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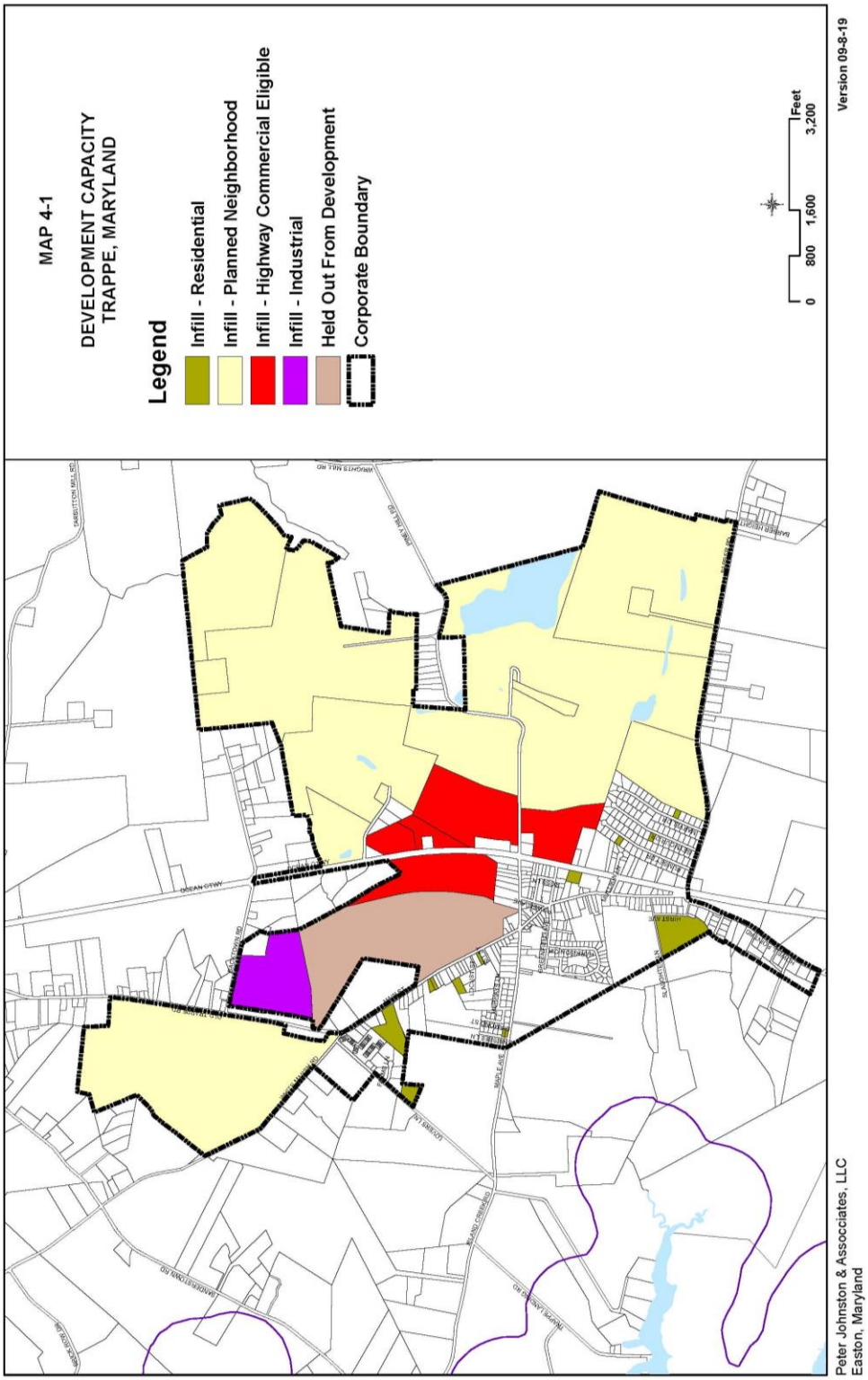
Map 4-1 Infill Areas



These figures do not include several substantial infill parcels adjacent to Route 50. Specifically, the Town has one infill parcel of approximately 104 acres that is currently being held out from development. It also has four parcels that are about 15-20 acres each that are eligible for rezoning as part of a Highway Commercial Mixed Use Floating Zone. It is difficult to analyze any build-out potential of these properties because no development has been proposed. However assuming a minimum floor area ratio of 0.10, these collectively these properties could support over 450,000 square feet of commercial floor area. Full development of these parcels will very likely require upgrades to the wastewater treatment plant and or significant water and sewer extensions. The Town has not reserved sewer capacity for the development of these properties. However, evaluation of potential demand for both water and sewer service in the Water Resource Element assumes adding approximately 36,000 square feet of commercial floor area during the planning period.

In addition to the four parcels along US 50 eligible for Highway Mixed-Use development or redevelopment, in 2008, the Town annexed 36 acres of vacant property on the south side of Backtown Road zoned for light industrial uses in the County. The property was placed in the light industrial district in the Town and will be available for industrial uses. Again, assuming a minimum floor area ratio of 0.10, the property could provide over 150,000 square feet of floor area for industrial use.

Population Projections

The following population projections for Talbot County from the Talbot County Comprehensive Plan 2016 are based on population projections developed by the Maryland Department of Planning (see Table 4-2).

Table 4-2: Talbot County Population Projection

Year				**Change, 2010-2040**		
2010	**2020**	**2030**	**2040**	**Number**	**Percent**	**Average Annual**
37,780	40,850	42,900	44,000	6,220	16.46%	0.51%

Source: Talbot County Comprehensive Plan 2016

The Maryland Department of Planning's County-wide projects Talbot County's population will reach 42,100 by the year 2030 based on an average annualized growth rate of approximately 0.7 percent and a total increase of 16 percent between 2007 and 2030. The population projections used herein reflect consideration for recent municipal and regional growth trends. The initial phase of development of the Lakeside PN District is expected to begin in 2020. While only a small portion of expected growth in the Lakeside PN District may be reflected in the regional growth projections, the Town supports and intends to facilitate the growth of the Town through the development of Lakeside.

Growth Scenarios

We examined two potential population and housing growth scenarios that represent a moderate and somewhat accelerated rate of growth (see Table 4-3). Our purpose is to evaluate the capacity

of critical public facilities and services to support these scenarios reflecting conservative and moderately positive outcomes, and that comports with State and County projections.

Table 4-3: Scenario Population and Dwelling Unit Projections

	2010	2015	2020	2025	2030	2035	2040	Chg.
Scenario 01								
Population	1,077	1,077	1,077	1,099	1,117	1,135	1,150	73
Dwelling Units	434	434	434	447	460	472	485	51
Scenario 02								
Population	1,077	1,077	1,088	1,143	1,202	1,263	1,327	250
Dwelling Units	434	434	434	466	497	529	560	126

Source: Peter Johnston & Associates, LLC

Both scenarios take account of recent historical and projected decline in population and housing growth in the region tempered by plans to begin the first phase of the Lakeside planned development. The Lakeside owners intend to proceed with Phase I of the project. This activity provides one potential source of residential growth, approximately 320 dwelling units. Consequently, it seems reasonable to include some or all of Phase I of the Lakeside project in the construct of growth scenarios.

Both scenarios for Trappe assume little or no population and housing growth through 2020. Scenario 01 conservatively assumes an average annualized growth rate in the period 2020 to 2040 of about half the average assumed by MDP for the region. The Maryland Department of Planning projects an average annualized population growth rate among Queen Anne's, Caroline, Talbot, and Dorchester Counties of 0.68 percent. At this rate, the Town will accommodate about one percent of the population growth Talbot County projects.[6]

Scenario 02 allows for a combination of higher than projected sales of new homes in the Lakeside planned development beginning in 2020 and or a combination that includes infill development of some of the approximately 116 lots created within the old town portions of Trappe and identified in the capacity analysis. There currently is adequate capacity in the WWTP for these lots. It assumes Trappe's average annual population growth will exceed that of the region and that Trappe will accommodate approximately four percent of the population growth projected for Talbot County.

Trappe officials recognize the Lakeside PN development, a project supported by the Town, may build units and add population more rapidly than is reflected in the two growth scenarios evaluated herein. Trappe will revisit the Comprehensive Plan's underlying assumptions, planning objectives, and policies if the rate of building and sales activity in Lakeside exceeds the population and housing trend projections for the planning period outlined in Table 4-2.

<u>Assumption underlying dwelling unit projections</u>

Households serve as a surrogate for estimating occupied dwelling units counts associated with population growth. In 2010 Trappe’s average household size was 2.48 persons per household.

[6] Talbot County Comprehensive Plan 2016, pg. 1-3.

Through the planning period, the average household size was adjusted downward proportionate with the projected household size in Talbot County, which is expected to decrease from 2.31 in 2010 to 2.21 persons per household in 2040. Similarly, Trappe's average household size is projected to decline to approximately 2.37. Projections also assume a vacancy rate of eleven percent throughout the planning period.

Planning Areas

As a result of the recent annexations within its growth area, Trappe does not have an immediate need for large areas of developable land. The Town has sufficient infill property within its boundaries to accommodate growth and does not anticipate any additional annexations of any significant size for development within the planning period. The Town recognizes that responsible planning includes taking into account its growth area. The Town will consider additional annexations within its growth area depending upon the specific request and the needs of the community. Map 4-1 identifies potential growth areas that could be considered for annexation in the future. These areas are consistent with the Trappe Growth Area outlined in the 2016 Talbot County Comprehensive Plan (see Map 2-B 2017 Talbot County Comprehensive Plan) and Trappe's Tier Map.

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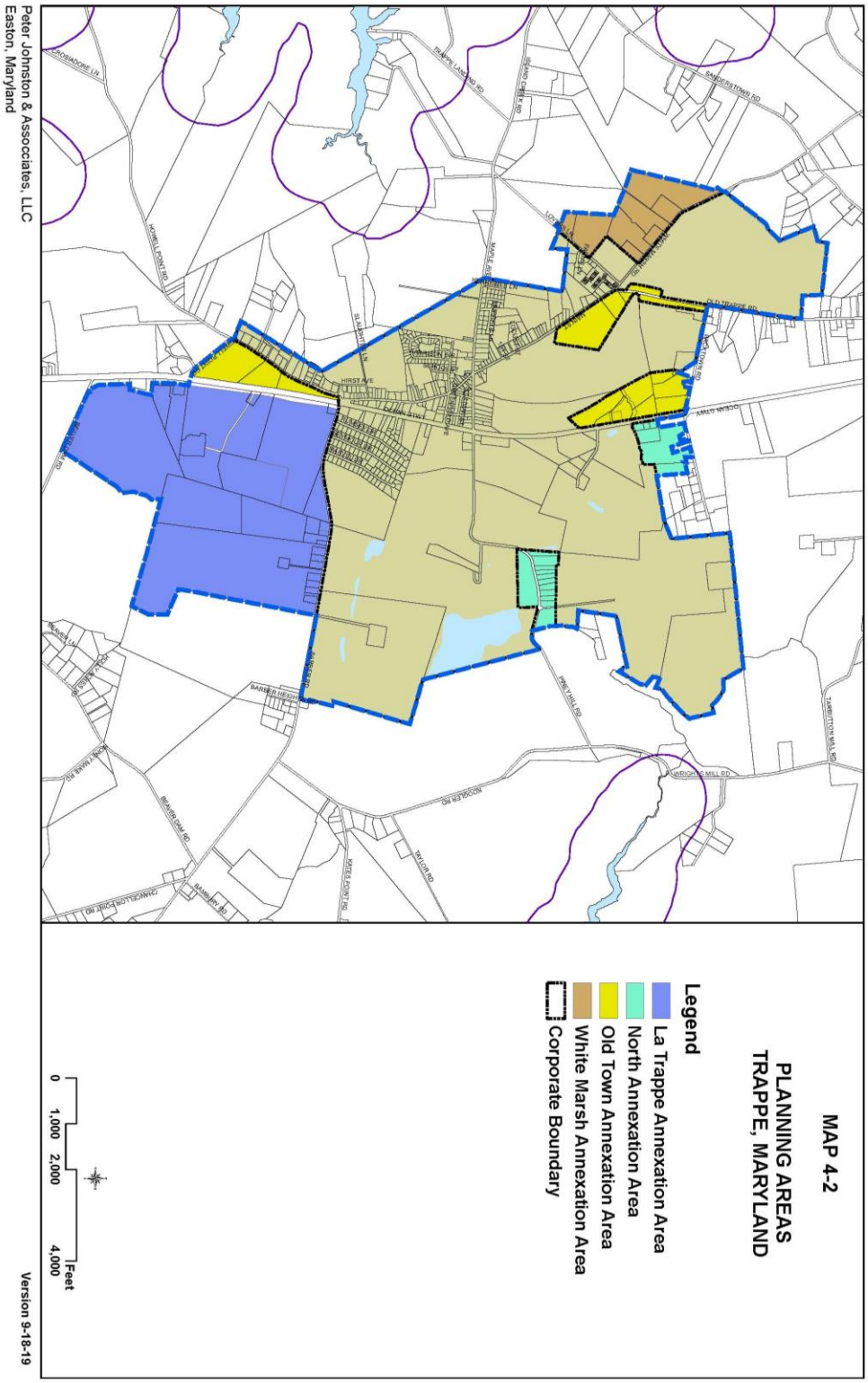
Map 4-2 Planning Areas



Annexation Policies

Town officials are aware that any annexations include the potential for adverse fiscal impacts if not carefully consider. Specific conditions of annexation will be made legally binding in an executed annexation agreement. Such agreements will address, among other things, consistency with the goals, objectives, and recommendations contained in the Comprehensive Plan. Agreements also will address zoning and developer expectations, responsibility for appropriate studies, and preliminary agreements concerning obligations for the cost of facilities and services provided by the Town. These initial agreements formalized in Developers Rights and Responsibility Agreements (DRRA) will address the following annexation policies:

1. Proposed annexation areas will be economically self-sufficient and will not result in more substantial municipal and county expenditures than anticipated revenues, which would indirectly burden existing town or county residents with the costs of services or facilities to support the area annexed. Appropriate impact fees or other offsets will be required.

2. Those gaining the most value from such facilities as roads, utilities, parks, other community services through income, profits, or participation will bear the costs of providing them.

3. The Town Commissioners and or Planning Commission may require appropriate impact studies for annexations involving larger parcels of land. Applicants for annexation shall pay the cost of completing all studies related to expanding capacity in existing public facilities and or services.

Before annexing any land area not included in the Annexation Plan, the Town will first consider appropriate amendments to this comprehensive plan and will follow the procedural requirements for comprehensive plan amendments and annexation established in State law. The Town will review the proposed annexation in the context of the goals and objectives of this comprehensive plan and give appropriate consideration to the adequacy of public facilities and services.

Assessments of Impacts on Infrastructure and Services

The information outlined in this section and summarized in Table 4-4 presents a rough estimate of the impacts of two growth scenarios may have on existing public facilities and services in the Town of Trappe.

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Table 4-4: Estimate Impacts of Growth on Services and Facilities - 2040

Growth Factors	Scenario 01	Scenario 02	Measurement/unit
- Dwelling Units	73	250	New dwellings
- Population	51	126	Population increase
ADDITIONAL FACILITY/SERVICE DEMAND			
Elementary School			
- Students	16	54	New Students
- Teachers	1	4	Additional Teachers
Middle School			
- Students	8	27	New Students
- Teachers	0	2	Additional Teachers
High School			
- Students	11	39	New Students
- Teachers	1	2	Additional Teachers
TOWN ADMINISTRATION			
- Personnel	0	0	Personnel
- Facilities (GFA)	136	337	Building Space (sf)
PUBLIC WORKS (GFA)			
- Personnel	0	0	Personnel
- Facilities (GFA)	30	73	Building Space (sf)
LIBRARY (GFA)			
- Personnel	0	0	Personnel
- Facilities (GFA)	33	82	Building Space (sf)
POLICE	0	0	Sworn Officers
RECREATION LAND (acres)	2	4	Acres
EMERGENCY SERVICES			
-Firemen	1	1	Personnel
- Facilities (GFA)	240	592	Building Space (sf)
- EMS	0.10	0.25	Personnel

Source: Peter Johnston & Associates, LLC

Public Schools

Trappe's schoolchildren attend White Marsh Elementary School, and Easton Middle School and Easton High School. There are also several private schools in Talbot County (including the Country School and St. Peter and Paul).

As concerns school-age children, caution is advised when applying standard school-age population multipliers to projected household increases in the region as they may overstate potential impacts. As noted in the Talbot County Public Schools Educational Facilities Master Plan 2017:

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> "While the total population of the county grew by almost 12% between 2000 and 2010 and is projected to grow by a further 16.5% by 2040, this growth is almost entirely restricted to individuals older than 45 years. This age group increased at a remarkable average rate of 30.7% per decade between 1970 and 2010 and is projected to increase by a further total of 25.3% by 2040. By contrast, the age group in the child-raising years between 20 and 44 has steadily declined by a total of 10% since reaching a peak in 1990 and is projected to grow by only a modest 4.8% by 2040. Residents in the school-attending age group of 5 to 19 also show a long-term pattern of stability: this cohort in 2010 was only 74 persons larger than in 1970, and is projected to grow by only 9% by 2040. As would be expected, the public school enrollment pattern follows a similar trend: beginning in 2006 with a total full-time equivalent (FTE) student population of 4,224, by 2016 the FTE enrollment had increased by only 98 students (2.3%). The Maryland Department of Planning projects that the student population will grow to 4,480 in 2024; an increase of 158, and then will decline somewhat to 4,460 in 2026.
>
> Thus, unlike the experience of several other jurisdictions in Maryland, in Talbot County, the population increase and the student enrollment are dissociated from one another. Population growth has mostly consisted of the in-migration of older residents without children, while the school-age population has been driven by the birth rate and the stability of the child-raising portion of the population. The factors that typically give rise to increases in the public school population, particularly the rapid growth of employment opportunities or transportation improvements that allow easy access to nearby employment centers, are absent in Talbot County, now and for the foreseeable future. Given the current policies of both the Talbot County government and the principal town of Easton, which emphasize the continuity of the rural and historic small-town qualities of the geographic region and its environmental beauty, these demographic patterns are likely to continue for many decades."[7]

<u>White Marsh Elementary School</u>

White Marsh Elementary School serves pre-kindergarten through 5th-grade students and has a State Rated Capacity (SRC) of 386 students. Enrollment in 2016 was 379 students, 98 percent of capacity. Enrollment is projected to decrease to 365 students by 2026, 94 percent of capacity. Assuming Trappe's population growth generates students at an average rate during the planning period and somehow these additional students are not accounted for in the School Board's projections, Scenario 01 would result in 16 additional elementary school-aged students, Scenario 02, 54 additional students.

According to the Talbot County Public Schools Educational Facilities Master Plan 2017, "if the projections are accurate, White Marsh Elementary will remain in the comfortable 90% to 100% utilization range. However, the utilization in 2016 was just below 100%. <u>To avoid potential</u>

[7] Executive Summary, Talbot County Public Schools Educational Facilities Master Plan 2017, Educational Facilities Planning LLC, pg. 1.

overcrowding, future enrollments should be monitored carefully."[8] Talbot County Public Schools Educational Facilities Master Plan 2017 goes on to suggest, "redistricting a small area south of the Town of Easton from White Marsh Elementary School to Easton Elementary School will support better utilization of both schools. If the Easton Dobson and Moton facilities are approved for a replacement facility at an SRC of 1,167, the redistricting of about 60 students will result in utilization of approximately 85% for Easton Elementary School in 2021 and approximately 88% in 2026. Concurrently, the White Marsh utilization would be somewhat on the low side in 2021 at approximately 76% but would rise to 79% by 2026. Given a consistent pattern of growth at White Marsh Elementary going back to 2011, future growth would be well accommodated within the facility."[9]

Easton Middle School

Easton Middle School has an SRC of 903 students in grades 6 through 8. Enrollment in 2016 was 772 (85 percent capacity) and is projected to decrease to 761 (84 percent capacity) by 2026. Scenario 01 and 02 are expected to general 8 and 27 students respectively by 2040. Again, assuming Trappe's population growth generates students at an average rate during the planning period, and somehow these additional students are not accounted for in the School Board's projections, there appears to adequate existing capacity in Easton Middle School for these additional students.

Easton High School

Easton High School has an SRC of 1,283 students in grades 9 through 12. Enrollment in 2016 was 1,143 and is projected to decrease to 1,137 students by 2026, or about 89 percent of facility capacity. Scenario 01 projects 11 additional high school students. Scenario 02 projects 39 additional high school students. Once again assuming Trappe's population growth generates students at a standard rate during the planning period and somehow these additional students are not accounted for in the School Board's projections, there appears to adequate existing capacity in Easton High School for these additional students.

Adequate school facilities are only one aspect of the impacts of growth in the public school systems. With growth comes increased costs associated with staffing and transportation. Concentrated growth, such as is possible in an urban setting such a Trappe has the added benefit of minimizing transportation costs. In 2016 White Marsh Elementary had the second-highest percentage of students who walked to school (8.4 percent).

Libraries

The Talbot County Public Library System operates a library in Easton and has branch facilities in St. Michaels and Tilghman. Trappe citizens must travel to one of these sites to use the public library. Part of the Talbot County impact fee is dedicated to libraries, and new development

[8] Talbot County Public Schools Educational Facilities Master Plan 2017, Educational Facilities Planning LLC, pg. V-4.
[9] Ibid, pg. V-6.

within Trappe will be required to pay the county's impact fee. Also, Trappe would be willing to discuss the possibility of locating a library site within Trappe.

Public Safety

Police

The Talbot County Sheriff's Department provides policing services for Trappe. Both scenarios will have minimal effect on service provision assuming the current national level of service standards for sworn officers,

Emergency Services

The Trappe Volunteer Fire Department (TVFD) currently has approximately 70 active members providing service to the Town of Trappe and surrounding areas. TVFD's service area has an estimated population of 3,577, indicating a current staffing level of service as eleven active volunteers per 1,000 people. Either scenario considered has little or no effect on the current level of service.

The Emergency Medical Services Division is made up of 42 full-time paramedics and emergency medical technicians along with 38 personnel that provide pre-hospital care to citizens and visitors of Talbot County. Either scenario maintains is served can be served at the current staffing levels.

Water and Sewer

Chapter 7 Water Resources Element discusses the Town's water and sewer and growth-related issues.

Park and Recreation

The State of Maryland 2017 Goals for Recreation, Parks, and Open Space area as follows:

1. Make a variety of quality recreational environments and opportunities readily accessible to all of its citizens, and thereby contribute to their physical and mental well-being.

2. Recognize and strategically use parks and recreation facilities as amenities to make communities, counties, and the State more desirable places to live, work, play, and visit.

3. Use State investment in parks, recreation, and open space to complement and mutually support the broader goals and objectives of local comprehensive/master plans.

4. To the highest degree, feasible locate recreational land and facilities for local populations are conveniently located relative to population centers, are accessible without reliance on the automobile, and help to protect natural open spaces and resources.

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5. Complement infrastructure and other public investments and priorities in existing communities and areas planned for growth through investment in neighborhood and community parks and facilities.

6. Continue to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.

The Town currently has 25 acres of parks and open space or approximately 0.025 acres per 1,000 population. The location of these parks is consistent with the State goals. Home Run Baker Park, described as a hub location for sports programs in the County in the most recent Talbot County park master plan[10]. The concept plan for the Lakeside planned development includes the provision of 100+acres of park and open space land. A portion of this land may be dedicated to the Town. The Town's Zoning Ordinance and regulations address both active and passive open space requirements for new development.

Town Administration

Town administration accounts for the facilities and personnel required to provide day-to-day services to town residents. Facilities house functions related to governance, meetings billing, collection, accounting, and permitting. These functions are currently housed in a 2,880 square town office building and administered by 2.5 staff persons. Under either scenario, Trappe would not need additional staff and nor extra building space. This observation holds for public works facilities and personnel as well.

Financing of Infrastructure Expansions Needed

Financial solvency, a prerequisite for long term prosperity, is a primary motivation when considering funding of infrastructure. The Town will be diligent about accounting for its revenues, expenses, assets and long term liabilities and where possible avoid dependence on government subsidy for the standard maintenance of essential infrastructure systems. For all new development, the Town requires that these users pay all associated infrastructure costs, including costs related to water and sewer, stormwater management, roads, etc. State or federal funding sources will be sought, but not be the sole consideration when updating existing infrastructure in redevelopment areas. The Town should actively pursue grant funding where available. Community legacy programs or Neighborhood conservation programs should be considered where possible for additional resources.

Concerning potential impacts of any town growth on services provided by Talbot County, Talbot County has adopted an impact fee on all new residential and commercial development within the County, including development occurring within the municipalities. In 2004, Talbot County commissioned an impact fee/excise tax study from Tischler & Associates, Inc. The Talbot County impact study assessed the impacts of new development on county facilities and services, including, but not limited to:

- Libraries

[10] Talbot County Land Preservation, Parks and Recreation Plan 2017, Page 2-8.

- Parks and recreation
- Schools
- General government facilities
- Transportation
- Chesapeake Community College

As a result of that study, in January 2005, the Talbot County Council adopted Bill No. 967 titled "A BILL TO FIX, IMPOSE, AND PROVIDE FOR THE COLLECTION OF DEVELOPMENT IMPACT FEES FOR FINANCING IN WHOLE, OR IN PART, THE CAPITAL COST OF ADDITIONAL OR EXPANDED PUBLIC WORKS, IMPROVEMENTS, AND FACILITIES, INCLUDING BRIDGES, STREETS AND ROADS, PARKS AND RECREATIONAL FACILITIES, AND SCHOOLS REQUIRE TO ACCOMMODATE NEW CONSTRUCTION OR DEVELOPMENT". Pursuant to that legislation, Talbot County's impact fee within a municipality, as of Fiscal Year 2019, is $7,680 for a single-family detached unit and $5,582 for other residential units. For any development occurring within the Town of Trappe, these fees are paid to the County to address the impacts of development on county services.

In August 2004, the Town of Trappe commissioned its impact study to assess the fiscal, economic, and capital asset impact of the Lakeside PN District on the Town's services. Urban Analytics, Inc. performed the study. As part of that study, the consultant considered and analyzed the operating revenues, expenditures, fixed assets, and levels of service for Trappe and four other municipalities located in Talbot and Caroline Counties. The study concluded that the impact fee for the Lakeside PN was $2,761 per residential dwelling unit. For any significant additional development, the Town will also require an updated impact fee analysis to assess the effects of development on municipal services. The costs associated with these impacts will be addressed in a Development Rights and Responsibilities Agreement.

Other potential sources of revenue to address growth impacts may need to be considered (see Table 4-4). Funding mechanisms the Town may want to consider include:

Table 4-4: 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	

Table 4-4: Potential Funding Source to Address Municipal Growth Impacts

Facility/Service	Potential Funding Sources
- 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	
- Facilities	DRRA, grant, public and private contributions
County-Provided Fire and Rescue	
- Facilities	Property tax, excise tax, impact fee, special tax district (e.g., fire districts), grants
- Personnel	Property tax, special tax (e.g., fire district tax)
Water and Sewer Facilities	DRRA, Public Works Agreements, connection fees, user charges

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. Trappe will work with State, County, and other officials to coordinate local strategies that have the potential to affect regional land use patterns, transportation infrastructure, public safety, surface and groundwater quantity and quality and to ensure meaningful community involvement in the planning process.

Rural Buffers and Transitional Areas

As set forth on Map 3-2, the Town has established a greenbelt to create a natural buffer, which corresponds closely with the County's growth area maps in its Comprehensive Plan. Two agricultural parcels, totaling 300 acres, extend to the west side of Town, have agricultural district status. An additional 2,200 acres are also in agricultural districts.

The status of the agriculture areas within the corporate boundary may change in the future. The Maryland Agricultural Land Preservation Foundation website states, "Land that lies within the boundaries of a 10-year water and sewer service area plan is generally not eligible for the program unless it has extraordinary productive capability and is of significant size." If these

properties are not allowed permanent agriculture easements, the Town may reconsider their role in planning for the Town and development status in the future.

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CHAPTER 5 TRANSPORTATION ELEMENT

Introduction

Transportation and land use are directly related to the creation of the Town of Trappe as we know it today. First as a place where Indian trails crossed, then as a tavern and trading post location and now as the Town of Trappe, people traveled through the area, settled and used the land for a variety of purposes. Colonial-era horse paths were widened and improved, and new roads were added to the circulation system until we achieved our present pattern. The various maps and graphics included throughout this Comprehensive Plan adequately show this relationship between land use and roadways.

Going forward, Trappe will be guided by the following principles when planning for and executing transportation-related projects:

- Our transportation system is a means of creating prosperity in a community, not an end unto itself.
- Safety will be a priority for all roadway types.
- We will utilize roads to move traffic safely at high speeds outside of neighborhoods and urban areas. Within neighborhoods, we will use streets to equally accommodate the full range of transportation options available to residents.
- We will strive to make more efficient transportation systems that help create economic opportunities and enhances the community.

Roadway Inventory

The Federal Highway Functional Classification System describes a highways mobility role. The function of a highway facility is related to the type and magnitude of trips accommodated on a facility, e.g., through versus local trips. The hierarchical system ranges from the high volume, high-speed principal arterials, networks that carry a high amount of traffic for interstate and intra-state travel to local streets, systems that primarily provide direct access to the land. In the Trappe context, local roads and streets are meant to carry low traffic volumes at slow speeds and share the right of way with non-motorized users.

US 50, which passes through Trappe, is classified as a Principal Arterial. Island Creek, Barber Road, and State Route 565, including Main Street are minor collectors that serve intra-community travel providing access to the land using lower order roads or to property.
All other roads and streets in the planning area are local roads.

Within our planning area, the Maryland Department of Transportation State Highway Administration (MDOT SHA) is responsible for all state roads, and Talbot County is responsible for all County-owned roads. The Town of Trappe is responsible for Town-owned roads.

Level of Service

Level of Service (LOS) is descriptive of the operating conditions a driver will experience while traveling on a particular facility. They are also often used to express public policy concerning performance expectations for a given road type. Level of service reflects driver satisfaction with several factors that influence the degree of congestion, including speed and travel time, traffic interruption, freedom to maneuver, safety, driving comfort and convenience, and delays. LOS measures range from A through F, with "A" associated with a high level of driver satisfaction and "F" associated with the functional breakdown of the road or intersection performance.

Traffic conditions within our planning are LOS C or better nearly all of the time. At certain times, such as holiday weekends during the summer, LOS D may be observed on US 50 due to high volumes of traffic bound to or from coastal beach resorts. The SHA considers LOS D conditions as acceptable.

Transit Service

Delmarva Community Transit provides a couple of deviated transit routes serving the Trappe area. Additional transit services, including more capacity, regular scheduling, and shorter headways would be ideal, but like most rural communities, demand is not currently at a level to support additional transit services.

Transportation Policies

Good local road and street systems are essential to the orderly functioning of our Town. We depend on our roads and streets for communication, commerce and emergency service delivery, and physical access to our surrounding region and beyond. Too often, transportation planning begins in reaction to a problem. The Comprehensive Plan and the Planning Act of 1992 suggest that a proactive approach to mobility issues is needed. We intend to plan in a manner that defines a coordinated, evolutionary approach toward achieving less reliance on driving alone, to enhance the choices, mobility, and quality of life for our citizens. Our vision for our future streets and roadways is that they are pleasant to walk along, including safe and efficient bike routes, and provide effective incentives for carpools and vanpools. We want a network of roads, streets, and trails that move people and goods efficiently throughout our region, especially throughout the planning area.

The following are the Town policies concerning existing and future transportation improvements:

- Streets are important public spaces and planned accordingly.
- New streets should be coordinated with and build on the existing street hierarchy.
- The design and construction of new streets should be suited to the street's primary function.

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- New street systems should form a dense network of interconnecting roadways in a modified grid.

- New street systems should include designations for public transportation stops.

- Local streets should be designed for speeds of 25 mph or less.

- Appropriate traffic calming techniques should be incorporated into street design and layout.

- Networks for pedestrians and bicyclists as good as those for motorists should be provided.

- Streets should be as narrow as possible consistent with national guides and standards.

- Parallel parking should be provided on both sides of local streets, including streets in the village and commercial centers.

- We should avoid development that would result in an unacceptable level of service on roads and intersections serving the development. Require new developments that result in a level of service that is not acceptable traffic to offset impacts.

- Roadway capacity on County and State roads should be conserved by limiting and controlling future access points.

- Strip forms of development should be discouraged. Commercial development oriented toward US 50 should be served by frontage roads.

- We will cooperate with the County initiatives to support bicyclists and pedestrians through safe, convenient, and inviting routes and walkways. We note that US 50, Old Trappe Road, Main Street, and Barber Road have been identified by the County as potential bike routes and support their designation.

- The Town of Trappe should be consulted by County and State agencies whenever changes or improvements are contemplated to road sections under their jurisdiction located within our planning area.

- While recognizing our dependence on automobiles, we promote alternatives to driving alone and encourage the State to inform citizens about the public and private monetary and environmental costs associated with single-occupant car use.

- New development should be responsible for the cost of any off-site improvements to Town streets and County roads necessitated by the proposed development. This responsibility includes the cost of upgrading County roads that may become part of the Town street system.

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- We will work with the MDOT SHA to develop ways to reduce the barrier effect of US 50 on our community, including additional signalized intersections at critical locations.

Transportation Plan

Development of the Lakeside PN District and other properties in the Trappe planning area will require the coordinated expansion of the Town's street system to safely and efficiently accommodate the anticipated growth in local traffic. Our transportation plan must ensure appropriate connectivity between existing and new neighborhoods and between residential areas and local activity centers. To facilitate the linkage of communities on both sides of US 50 the Town has proposed three locations for an overpass in consultation with the MDOT SHA. The Town will continue to work the MDOT SHA to coordinate this, and other improvements in the US 50 corridor.

We must pay special attention to the needs of pedestrians and bicyclists if we are to maintain the degree of safety that we currently provide. Finally, we recognize that streets are an essential public space, and consequently, we need to ensure that new street systems are easily understood and present positive images.

Town Street Classification System

Map 5-1 shows the Town's transportation plan concept. The Trappe Transportation Plan consists of a local street hierarchy (in addition to the State and County systems) that is made up of four street types that include:

Collector Streets – We envision a collector street system that will connect to the existing Town street system, link neighborhoods on the east and west sides of US 50 and will serve as the primary circulation routes throughout the Planning Area. Direct access to 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 will be provided along these routes.

Commercial Streets – We envision several types of commercial streets. Access to new commercial uses located along the US 50 corridor should be provided from frontage streets or rear access streets. Where possible, existing commercial uses will be incorporated into the commercial street system. The design of these streets will emphasize access control, safety, and appearance along the corridor. Commercial streets in village centers will emphasize safety, streetscape amenities for pedestrians, appearance, and the relationship of buildings to the street. Commercial streets serving new regional commercial will be designed to discourage traffic in residential neighborhoods and provide for the safe and efficient movement of traffic onto and off the US 50 corridors. Ideally, such uses will be accessed from a major signalized intersection. The location of such intersections must be coordinated to facilitate east-west as well as north-south travel.

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Local Streets – Local streets, primarily serving residential properties, will make up the bulk of the Town 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.

Alley - 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. The Transportation Plan also includes a pedestrian circulation plan that is designed to provide access from neighborhoods to activity centers (e.g., parks, open space, Town office, community centers) and allow residents access to proposed greenways for recreational enjoyment (see Map 5-2).

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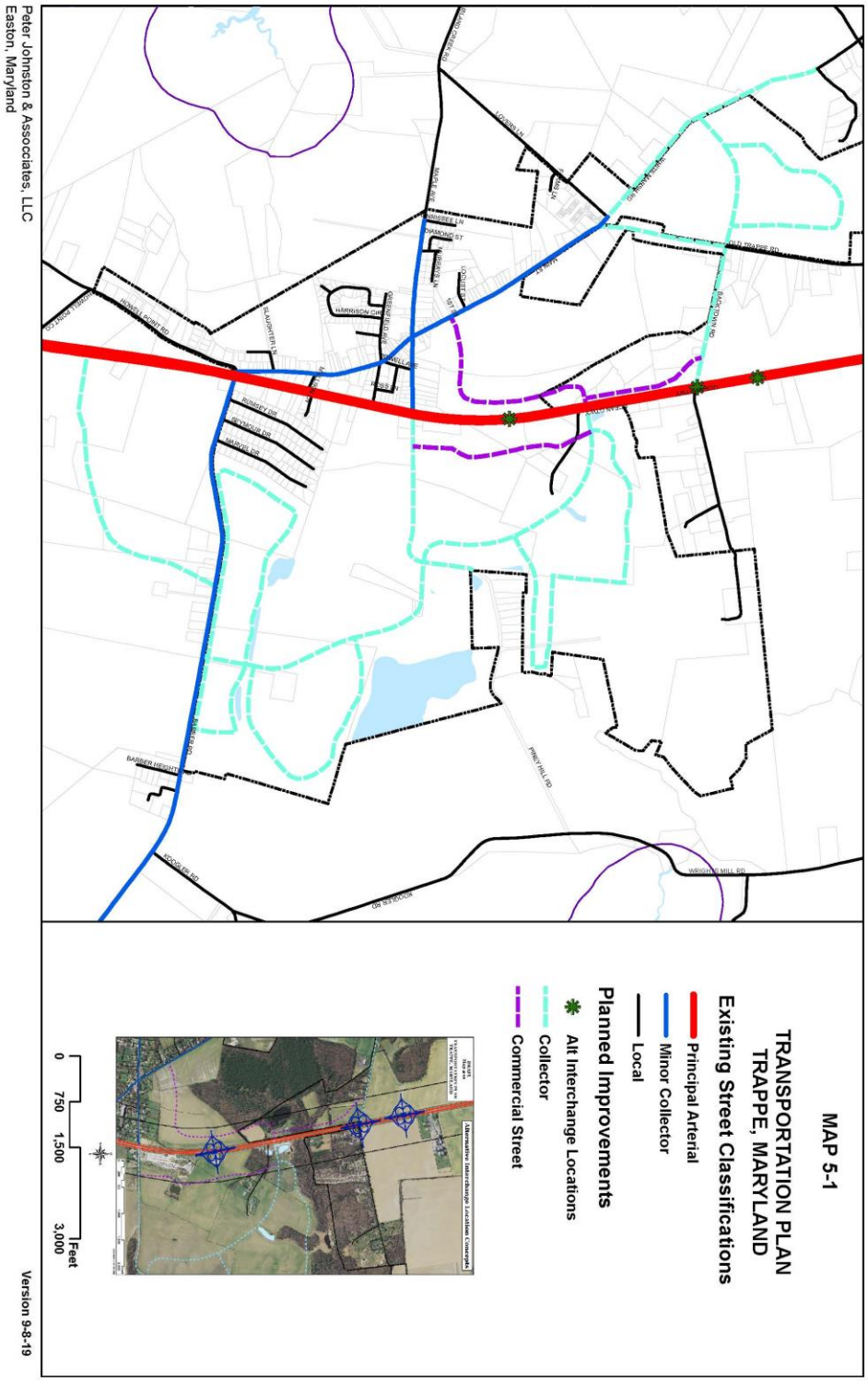
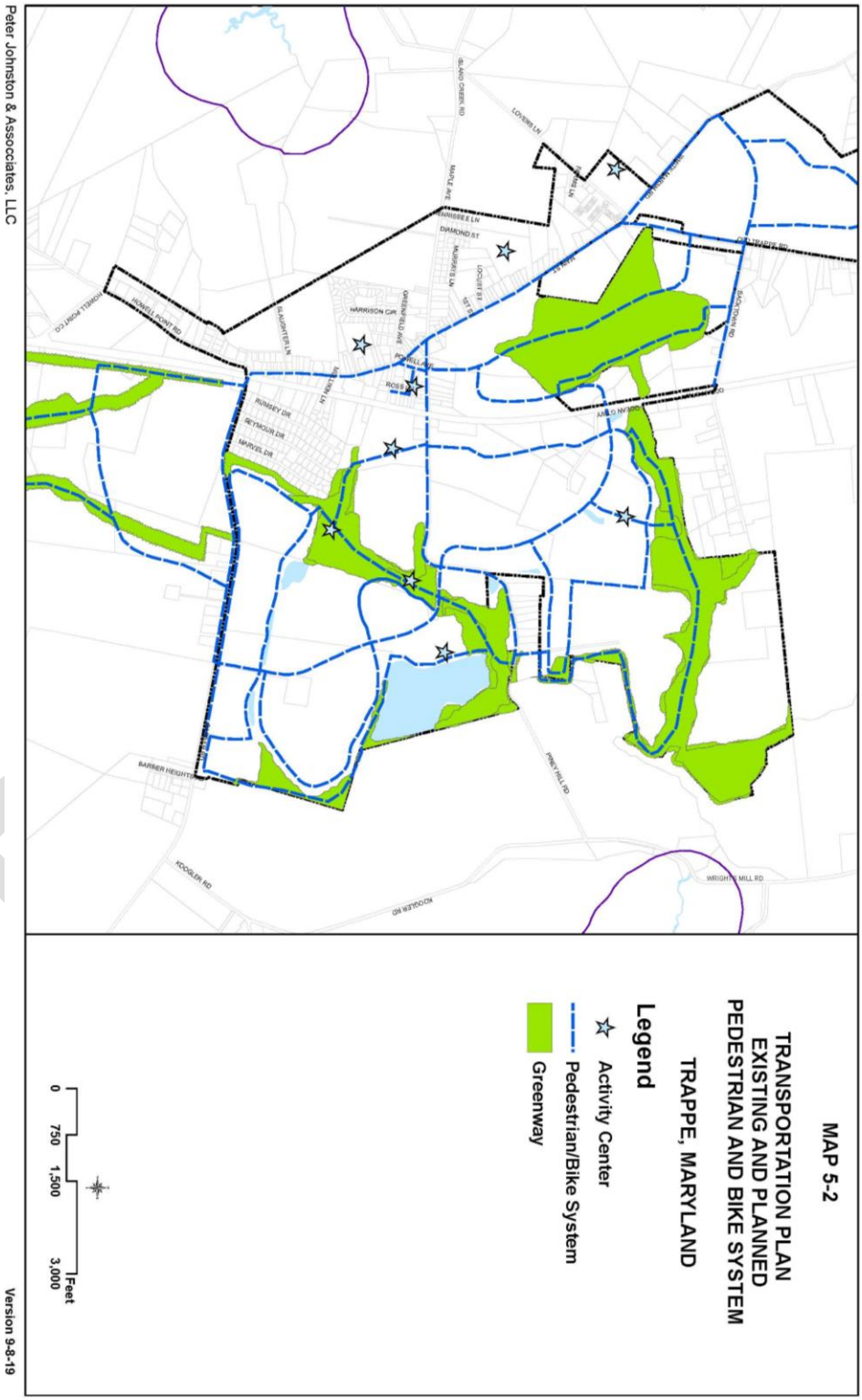
Map 5-1 Transportation Plan



Map 5-2 Pedestrian Systems



CHAPTER 6 COMMUNITY FACILITIES ELEMENT

Introduction

The goal of the Community Facilities element is to maintain and enhance our level of public facilities and public services. This element supports and addresses Visions One, Three, and Seven to ensure that:

- Development is concentrated in suitable areas;
- Growth is directed to existing population centers, and resource areas are protected; and
- Adequate public facilities and infrastructure under the control of the Town are available or planned in areas where growth is to occur.

To ensure that the provisions of our facilities and services are consistent with the Comprehensive Plan, the Town Council will remain informed regarding the long-term needs of Trappe through comprehensive and ongoing planning efforts. We will require that all project approvals and favorable recommendations of the various town boards and commissioners include "findings of fact" determining if the project is consistent with our Plan. Also assessed is the adequacy of existing and proposed public facilities needed to serve the proposed development. Our priorities are:

- Maintain an adequate level of police protection.
- Maintain an adequate level of fire protection and ambulance service.
- Provide adequate facilities for community recreation, library, the arts, and meeting center functions.
- Maintain adequate stormwater management systems.
- Ensure that planning for community facilities provided by County and/or State agencies, e.g., schools, social services, regional parks is coordinated with and supports the visions included in this Plan.
- Maintain and improve park facilities and amenities to promote increased usage by all members of the community.

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General Description

The center of town at Greenfield, Main, and Powell Streets (see Map 6-1) is the location of most of Trappe community facilities. The Trappe Town Office, the Trappe Post Office, and the Trappe Volunteer Fire Department which provides both fire and 24-hour emergency medical services, are all located within the Village Center. Park and recreation areas include the Trappe Veteran's Memorial Park (formerly known as the School House Park), the Nace Hopkins Park, and the carnival grounds all of which provide a variety of recreational opportunities for residents. Within walking distance from the village's center is the Harrison Circle Park. This park improved in 2008 features a picnic pavilion and playground equipment. On the north side of town, the White Marsh Elementary School is a significant community facility and easily accessible by most residents, and is located just beyond the Talbot County-owned ball field known as Home Run Baker Park.

Sewer System

The Town owns and operates the wastewater plant and seven pumping stations. The existing wastewater system has a design and permit limitation of 200,000 gallons per day (0.2 mgd). The plant has a reserve capacity of approximately 64,000 gpd (0.64 mgd). Sludge was removed from the primary pond in 2002. This facility was completed with $870,000 of federal grants and $545,000 of Maryland Department of the Environment (MDE) assistance. The total cost was more than $2.2 million.

In 2002, plans to upgrade the treatment system to a Biolac® treatment system with chlorination/dechlorinating and sand filtration were completed. Treatment would occur before discharging the treated effluent into a tributary of LaTrappe Creek. The proposed upgrade included an influent screen, an extended aeration basin, a clarifier, sand filters, and a holding pond for sludge. The effluent screen would be sized for 1000 gallons per minute (gpm). These upgrades have not yet been implemented.

In November 2009, the Town completed a water reuse program at the plant, which will enable the Town to utilize treated effluent in the day-to-day operations of the plant, instead of potable water. By making some changes in the plant operation, the Town was able to pump 30,000 gallons per day (gpd) less water from its wells. These changes not only contribute to the conservation of potable water but will also increase the plant's reserve capacity.

In terms of future improvements, the Town has an inflow and infiltration (I&I) correction program. Infiltration of groundwater reduces usable wastewater treatment plant (WWTP) capacity. Several pump stations and the existing utility buildings need overhaul and stations 1 and 2 are operating at near capacity. A reed bed, designed but not constructed due to cost over-runs, would reduce the need for costly sludge removal and should be restored as a long-term cost-saving measure.

Immediate priorities include extending sewer service to areas of the Town not currently served. These areas include service southward along Howell Point Road and northward along US 50 to Timber Wind Lane. Long-range improvements will be required as growth begins to use the existing plant capacity. Implementing cropland or forest application of sludge as was reviewed in the Town Engineering study performed by Davis Bowen and Friedel, Inc., relocating the discharge point for the WWTP to La Trappe Creek will add capacity to the existing plant, thus extending its useful life.

The Lakeside PN District is expected to be served by a new wastewater treatment plant constructed in phases at no cost to the existing residents of the Town.

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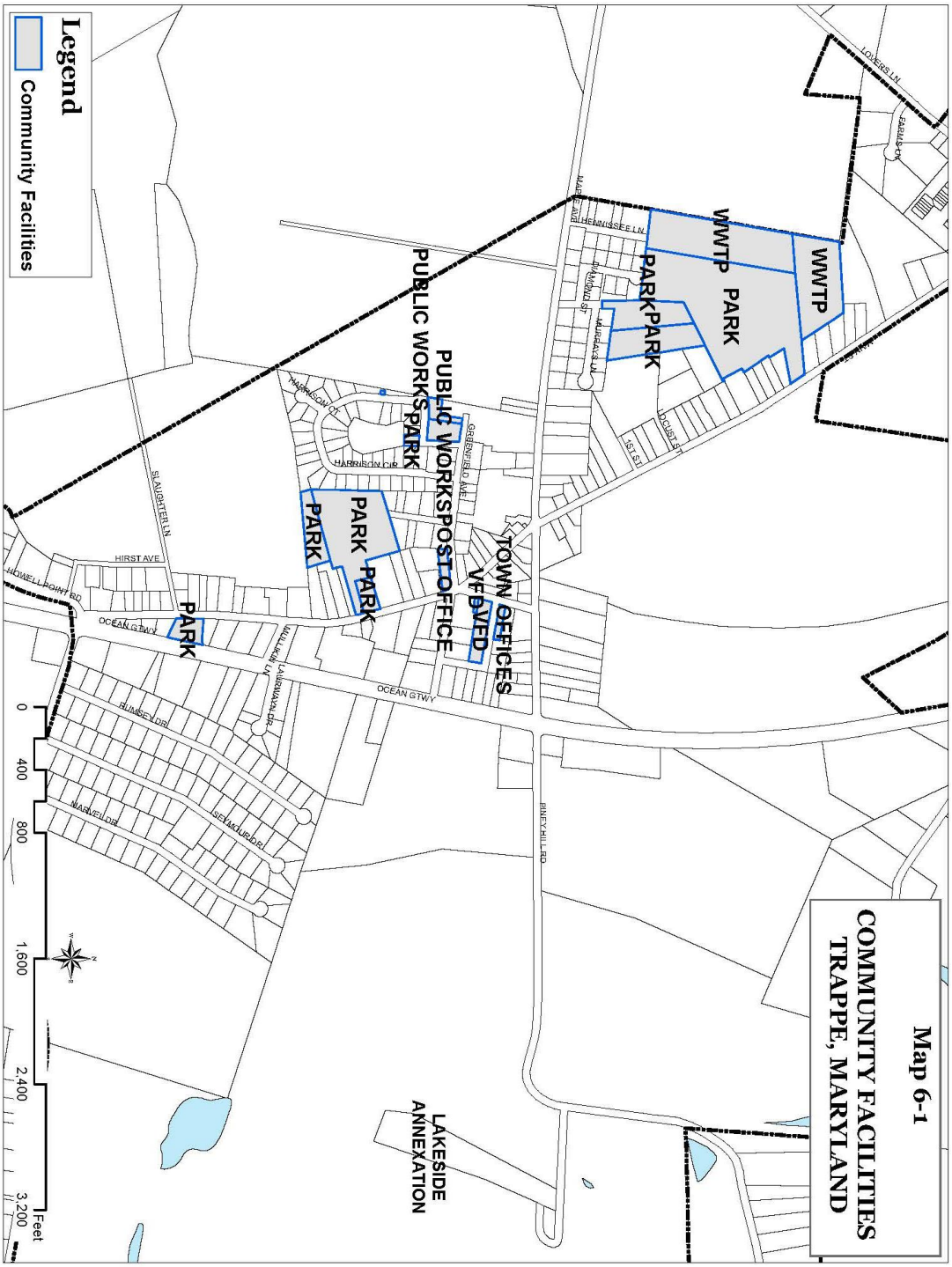
Map 6-1 Community Facilities



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Water System

A substantial water system improvement program was completed in 2001. This project extended over four years at the cost of over $3 million. A $1.2 million grant from the United States Department of Agriculture (USDA) offset this cost. Included was a new storage tank with a 250,000-gallon capacity vastly improving detention time and fire suppression reserve, replacement and increased the size for most of the distribution system, improved looping, and the installation of metered billing. These improvements should serve the Town well for the next decade. No large-scale improvements are anticipated unless large scale and rapid development occur or changes in federal or state water quality standards require upgrades. Minor projects needing attention include looping the water lines at La Trappe Heights and upgrading the well building. Significant infill development, such as the White Marsh Development Area, or planned annexation areas, will require a new water supply, storage, and treatment facilities.

The initial phase of the Lakeside development (the first 200 units) could be served by the Town's existing water system and wells, provided that long-term pumping and recovery tests confirm the system's capacity. Later phases in the Lakeside PN District will require the construction of an elevated 250,000-gallon water tower and other water system improvements. Domestic water for the Lakeside District will be supplied by additional wells discussed in the Water Resources Element. All of the costs of the water improvements will be paid for by the developer and or property owners.

Growth Tiers

By resolution 09-2019 the Trappe Town Commissioners adopted a Tier Map in compliance with the requirements of Senate Bill 236. Trappe's SB 236 Tier Map indicates areas outlined in the Comprehensive Plan currently served and or planned for service with public sewer. Map 6-2 is now incorporated into this Comprehensive replacing the original map dated September 12, 2012.

Stormwater Management

The Town will continue to work to address long-standing drainage problems in cooperation with Talbot County. The Town will develop a plan in concert with Talbot County to preserve streams and improve drainage ditches in the Town and the planning area. Our storm drains consist of roadside ditches and pipe culverts that convey stormwater runoff into streams that flow to La Trappe Creek and Miles Creek. The crossings under US 50 (Ocean Gateway) have been inadequate to handle several storms, resulting in flooding of lawns and low-lying properties. That situation improved with the cleaning of the ditch on the East side of US 50. Other areas of Town are subject to periodic flooding, notably Harrison Circle.

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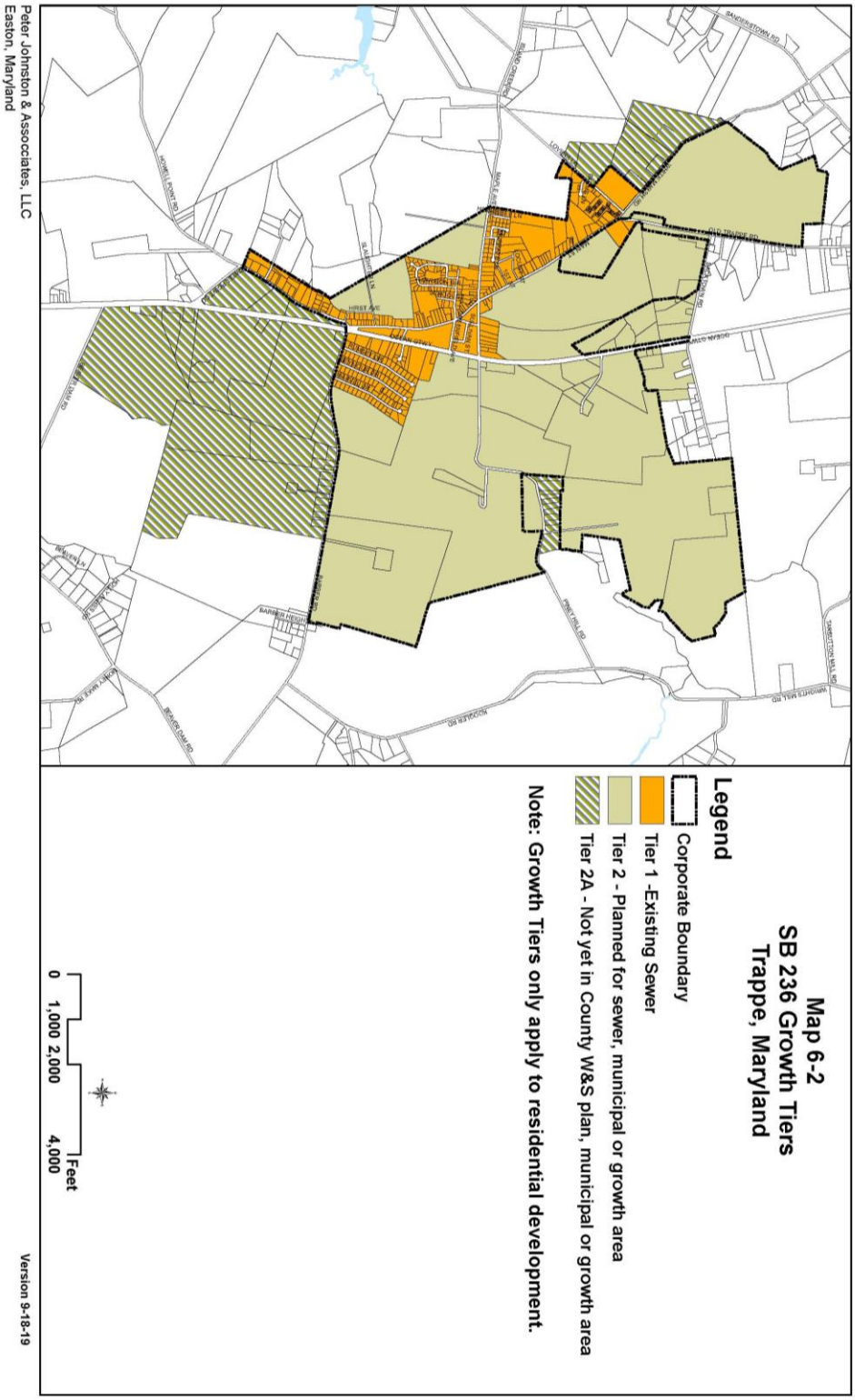
Map 6-2 SB 236 Growth Tiers



For all new development, the Town of Trappe requires all developers to pay for and implement acceptable stormwater management techniques. Further growth on more extensive vacant tracts (Greenfield development) should be designed to address stormwater management needs through the use of conservation design techniques (also known as "low impact development"). "Conservation Design" is a term that includes development design practices to achieve the following objectives:

- Conservation of significant natural resources and habitat;
- Minimization of the environmental impact resulting from the change in land use (minimum disturbance, minimum maintenance);
- Maintenance of a balanced water budget by making use of available site characteristics and natural infiltration;
- Incorporation of unique site features (natural, scenic and historic) into the configuration of the development to increase property owners' enjoyment of and access to those features;
- Preservation of the integral characteristics of the site as viewed from adjoining roads; and
- Reduction of maintenance responsibility for the number and size of structural or engineered stormwater management practices.

Conservation design is a holistic approach to development design that maximizes the preservation of key land resources, protects site hydrology, preserves natural resources, and satisfies community interest in complementary and aesthetically pleasing development.

One of the most significant challenges to reducing the impact of development is adequate control of the site hydrology. New impervious surfaces result in reduced infiltration, reduced attenuation of stormwater runoff, reduced stream base flow, and increased downstream erosion and bank destabilization. Conservation design techniques aim is to prevent these problems through alternative site design and stormwater management techniques capable of mitigating hydrologic impacts. No single approach is appropriate to all sites; instead, conservation design is a process by which to assess the appropriateness of different techniques for different sites. The key to conservation design that works is a willingness on the part of all involved to be flexible.

Community Recreation

Public parks are the Town's primary contribution to community recreation. According to the Talbot County Land Preservation, Parks and Recreation Plan 2017 municipal parks are designed to serve residents within one mile of their location. The town's existing and planned parks meet this performance measure. Development standards for master-planned communities require 1,500 square feet of recreation and open space per dwelling unit and 500 square feet of active recreation space for each dwelling unit.

The Town, via a Development Rights and Responsibilities Agreement, will receive a large public park on the east side of US 50. The PUD plan for the Lakeside District includes a large lake within the project that supports non-motorized craft. These facilities will significantly enhance the recreational opportunities for residents of all ages. These new facilities will complement the three existing parks owned by the Town, and the two County-owned parks within the Town.

New developments will be required to provide parks and park facilities to meet the recreational needs of its residents. These parks and open space will be an integral part of the community giving all residents visual and functional access to nature and recreation opportunities. The design and location of open space should reinforce the built environment and provide a variety of open space amenities that serve a range of interest and create a spatial hierarchy within the community. Finally, critical natural assets should be incorporated into the overall system of parks and open space.

Police Protection

Trappe does not have a municipal police department. The Talbot County Sheriff's Department Police provides protection services. The Town will establish a full-time police force at such time as the Town's population warrants.

Emergency Services

The Town of Trappe and the surrounding area receive fire protection from the Trappe Volunteer Fire Department. The Trappe Volunteer Fire Department owns one tanker which holds 3,500 gallons of water, three pumpers, and a brush truck for fighting brush fires, an ambulance, and a command vehicle. An integral part of the community, the fire department is staffed by seventy-five volunteers who train and respond to fires, accidents, and related incidents. Serving as a vital community facility located in a single building in the Village Overlay Center, the needs of the fire department will expand as the population increases. Funding for emergency services is addressed in DRRAs.

A portion of the fire department building is leased to Talbot County and houses a 24 hour/7 day a week paramedic team that responds to medical emergencies within the community.

Public Buildings and Facilities

Should the rate of population growth resulting from the Lakeside development exceed current projections, the Town will need increased staff and equipment. This eventuality will be addressed in the DRRA.

Cultural

Trappe is fortunate to have the Rural Life Museum located on Backtown Road. While not a Town-owned facility, the museum protects and documents the rural heritage of the community for future generations. Operated by a local Board of Directors, the non-profit is pursuing funding to execute the master plan for the development of the site to support several historic buildings in one location.

Technology Infrastructure

The Town continues to explore and encourage the provision of adequate telecommunications and data infrastructure and services to support new digital information services, including wireless communications. These services will improve the Town's ability to attract small business office uses, will support home-based businesses for Town residents, and generally contribute to the quality of life and welfare of the Town.

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CHAPTER 7 - WATER RESOURCES ELEMENT

Introduction

As part of the 2006 legislative amendments to what is now the Land Use Article, each county and municipality having planning and zoning authority is required to incorporate a water resources element into their Comprehensive Plan.

The purpose of the water resources element is to ensure any future development plans within the Town of Trappe takes into account and is sensitive to the local water resources. It is required to address the availability and adequacy of water supply sources and the capability of water bodies to assimilate wastewater and stormwater. This element takes into account the following documents to ensure that Trappe's planning is consistent with County policies:

- the Town's Water and Sewerage Subsidiary Plan;
- the Talbot County Comprehensive Water and Sewer Plan, as amended from time to time; and
- the 2016 Talbot County Comprehensive Plan.

Goals and Objectives

The goals and objectives of the water resources element are to:

- Protect the health, safety, and welfare of the people of the Town of Trappe and Talbot County by improving and/or maintaining sanitary conditions of water resources.
- Maintain an adequate water supply for the Town of Trappe to serve not only current water demands but future water needs resulting from population growth and development, including both residential and commercial capacity.
- Continue to provide qualified management of water resources to control and diminish water pollution and to preserve and maintain the necessary quality standard of streams, estuaries, wetlands, and groundwater for residential, industrial, commercial, recreational, and conservational use.
- Protect the local wellheads from contamination through regulation and

development review.

- Require that any new development provide adequate water, wastewater, and stormwater systems. Costs for new or expanded facilities should be borne and proportionately shared by those who will use such systems.

- Use stormwater best management practices (BMP's) to treat stormwater runoff. When undertaking such work, care should be taken to improve, where possible, stormwater drainage from streets and private lots.

- Work with Talbot County to ensure that the County addresses stormwater problems and concerns along County roads and on properties outside of the Town that impact the Town and its citizens.

- Protect the water quality of the Chesapeake Bay and its tributaries and establish objectives to assure no degradation of current water quality by upgrading existing wastewater treatment facilities with the best available biological nutrient removal technologies as the sewer service areas of these facilities expand.

- Continue working with Talbot County and the other municipalities within the County to encourage and direct growth in and around concentrated population centers that presently have adequate or potentially adequate water and sewer services.

General Background

Topography and Geology

The landmass of the Town of Trappe is mostly within the Wicomico Terrace (See Figure 7-1). Geologically, the region consists primarily of clay, peat, marl, sand, gravel, and boulders associated with the Pliocene and Pleistocene age (circa 5 million years old to circa 10,000 years old) geologic processes. The Pliocene and Pleistocene age sediments are buried by a mantel of Holocene age (circa 10,000 years old to present) deposits of varying thickness. Earlier Miocene age Choptank formation deposits (circa 18 million years old to circa 12 million years old) have been documented along Miles Creek, Bolingbroke Creek, and La Trappe Creek (see Cleaves et al. 1968). Slightly older Miocene age Calvert formation deposits (circa 24 million years old to circa 18 million years old) have been documented northwest of the planning area near the headwaters of Trippe Creek and the Tred Avon River. Elevation above sea level in Trappe ranges from slightly more than sixty feet to 0 feet. The vast majority of the corporate area sits at elevation 40 or higher.

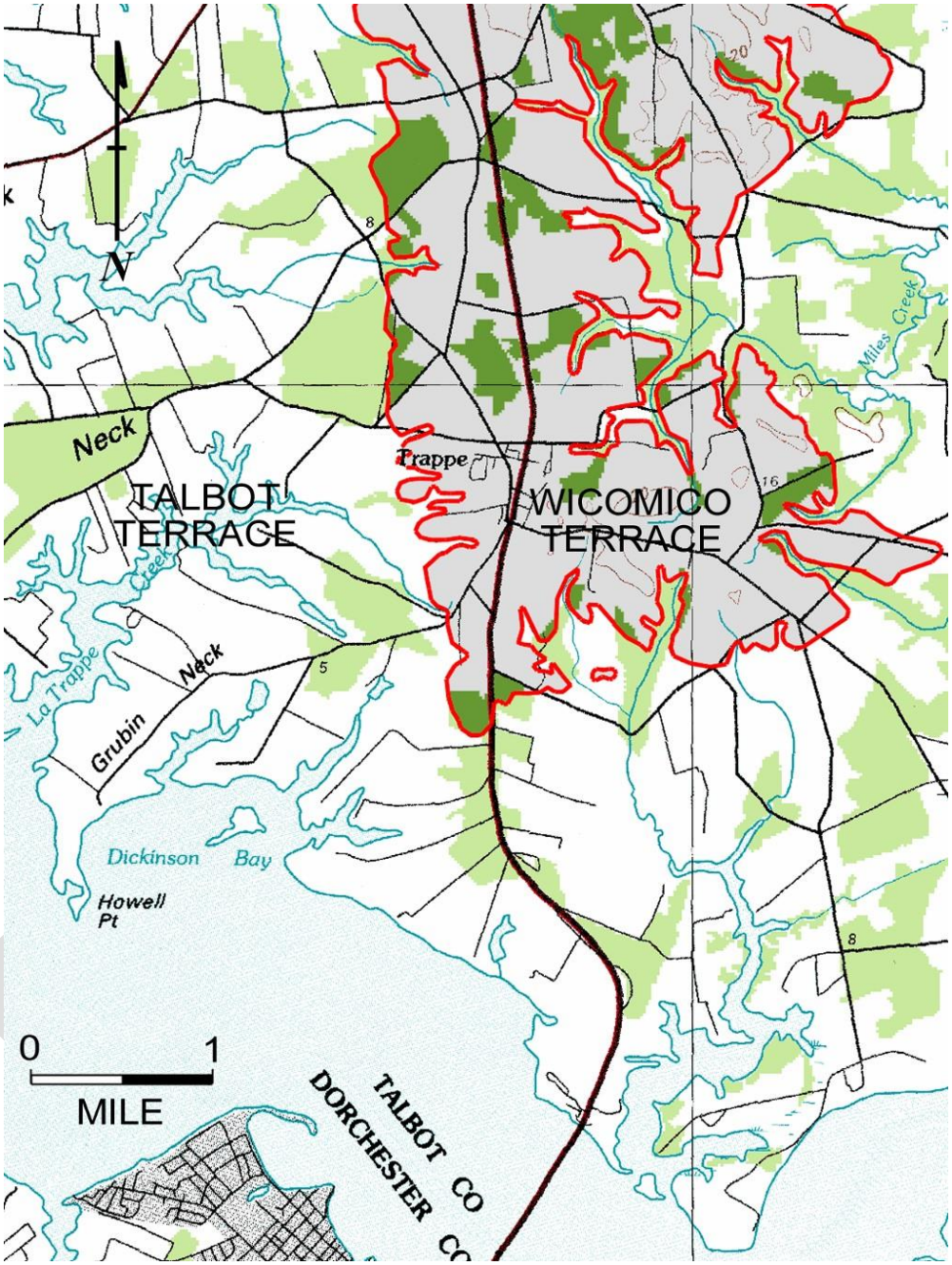

Figure 7-1 Geologically Defined Terraces in Talbot County, Maryland

Soil Types

With respect to recent sediments, the surface soils associated with the Trappe Planning Area are defined as Sassafras loam (SmA, and SmB), Sassafras sandy loam (SaB2, SaC2, SaD, and SaD3), Downer loamy sand (DoB2), Galestown loamy sand (GaC), Woodstown sandy loam (WdA, and WdB2), Woodstown loam (WoA), Elkton loam (Ek), Fallsington loam (Fg), and Keyport loam (KmA). Made land (Ma), borrow pits (Bp), and mixed alluvial soils (My) are also associated with Trappe and its growth area. The Sassafras, Downer, Galestown, and Woodstown soils are well-drained to moderately well-drained. The Elkton, Fallsington, and Keyport soils are poorly-drained to somewhat poorly-drained soils. Soils within the Town represent a mix of Pleistocene age deposits and Holocene age deposits (see Figure 7-2).

Drainage

The Town of Trappe lies within the Choptank River Basin Drainage (See Figure 7-3). As noted in the 1992 Talbot County Comprehensive Water and Sewer Plan, incorporated by reference in the 2002 Talbot County Report of the Review, "drainage is comparatively simple; owing to the simple structure of the formations and the locations….The County generally has good surface drainage."[11]

Drainage flows within the incorporated boundary are generally to LaTrappe Creek or Island Creek in the west and various tributaries of Miles Creek in the east. In the south part of town, just east of U.S. Rt. 50, some of the La Trappe Heights Subdivision flows to the Bolingbroke Creek. Within the lands planned for annexation, the proposed "White Marsh Annexation Area" flows to the La Trappe Creek, and the "La Trappe Annexation Area" flows to the Bolingbroke Creek. All other annexation areas drain to the Miles Creek (see Figure 7-4).

The La Trappe Creek, Island Creek, and the Bolingbroke Creek drain to the Lower Choptank River, while the Miles Creek flows to the Upper Choptank River. For this plan, the drainage areas are either the Upper Choptank River or the Lower Choptank River.

[11] 1992 Talbot County Comprehensive Water and Sewerage Plan, Chapter Two, D.

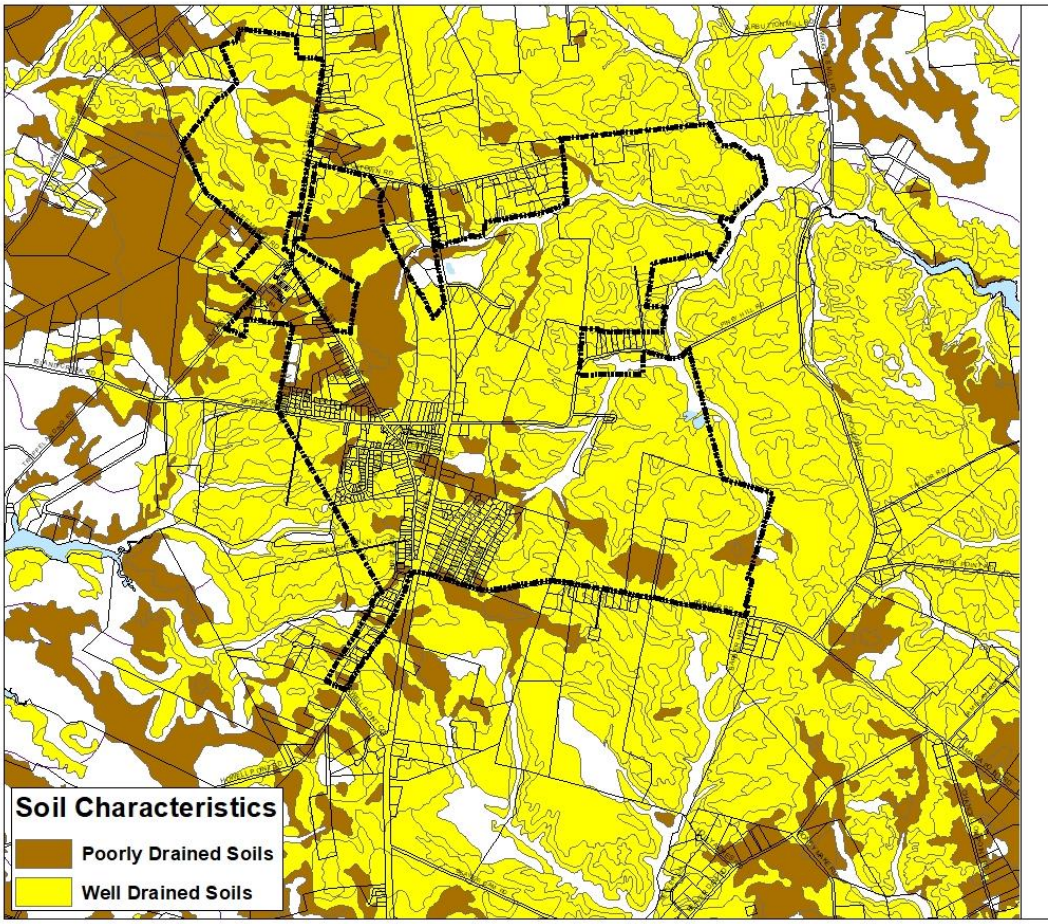

Figure 7-2 Soil Characteristics

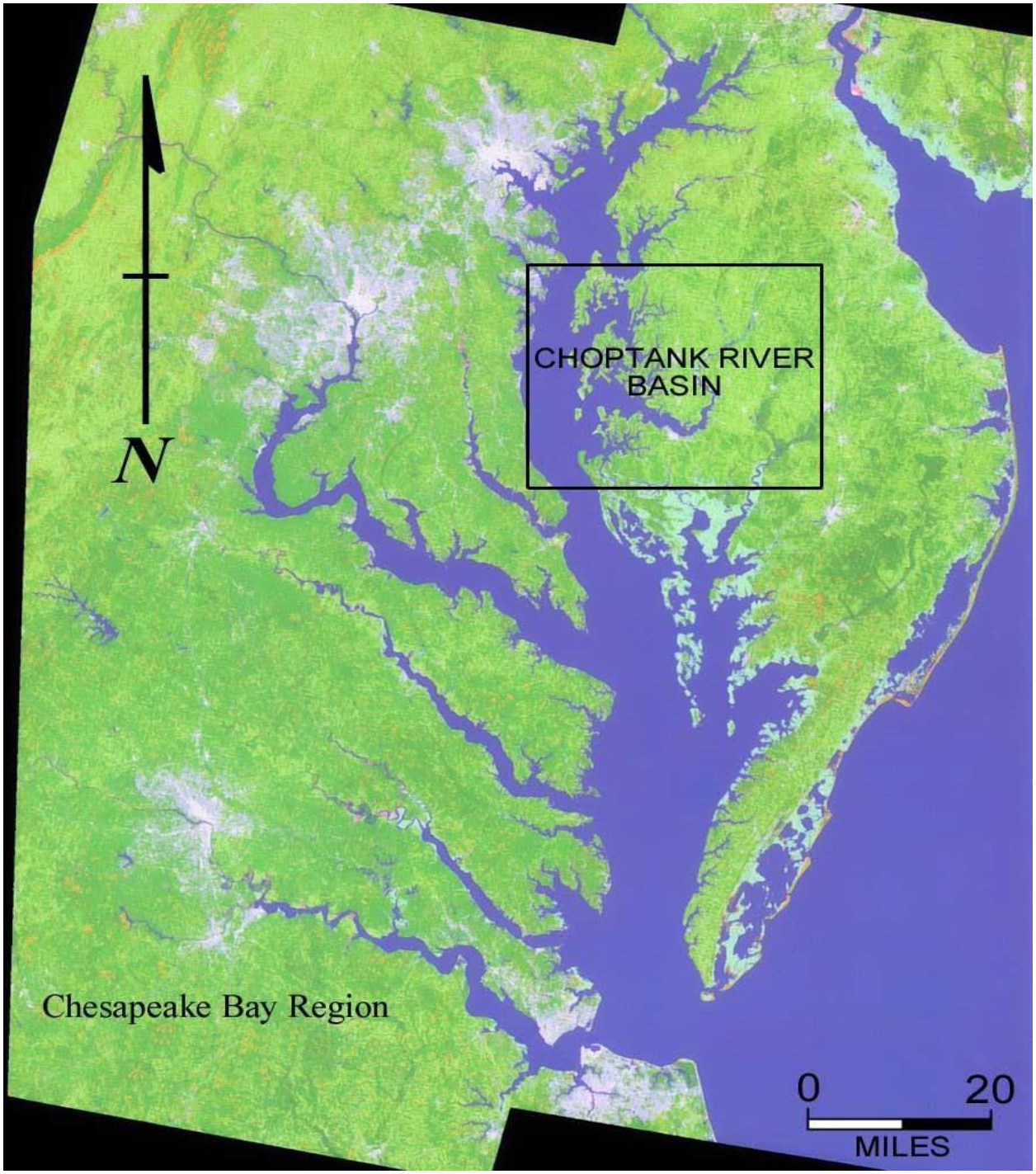

Figure 7-3 Chesapeake Bay Region/Choptank River Basin

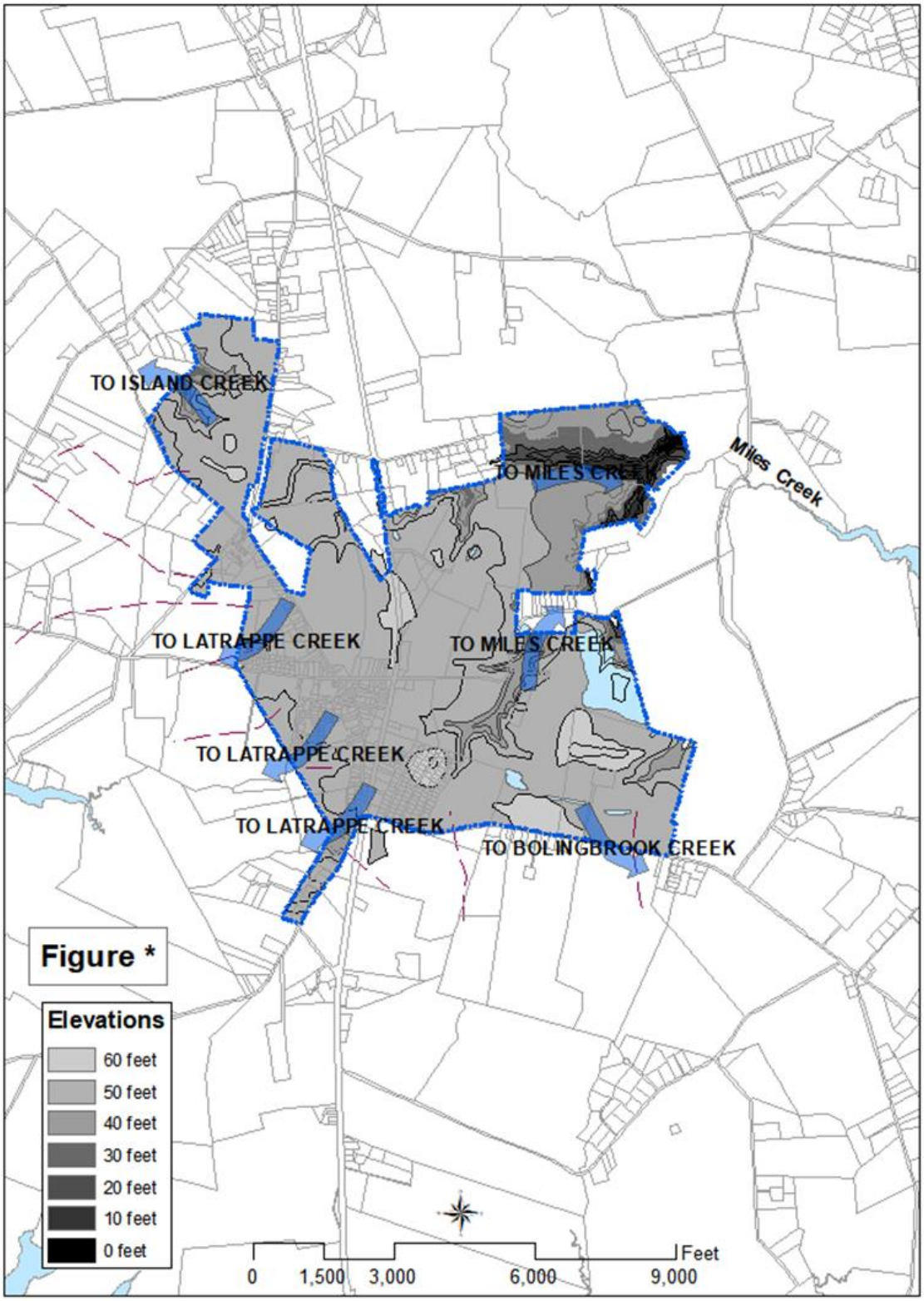

Figure 7-4 Drainage Patterns

Planning Context

Estimated increase demand for water and sewer as well as the conversion of land uses that result in increased stormwater reaching receiving streams are evaluated in this water resources element. Both the Upper and Lower Choptank River watersheds are impaired, and Total Maximum Daily Load (TMDL) limits established for nutrients, sediments, and fecal coliform. The growth scenarios discussed in the Municipal Growth Element are the basis for the estimates of potential impacts on water resources discussed herein.

Water Sources for the Town of Trappe

The principal aquifers in Talbot County are sands in the Patapsco, Raritan, Magothy, Matawan, Aquia, Piney Point, and Calvert Formations and the deposits of the Pleistocene age. Some of the water-bearing sands pinch out locally, whereas others are widely distributed and their occurrence is generally predictable. Although each of the significant aquifers has its distinctive water-bearing characteristics, the sands themselves often vary considerably from one place to another in thickness, grain size, mineral content, and permeability. The aquifers that underlie the Planning Area are generally the Piney Point, Aquia and Magothy aquifers.

The Town recognizes that the aquifers provide drinking water not only to the Town citizens but also to the county citizens and citizens beyond the county and even the State. To that end, the Town is committed to doing its part to encourage the preservation of the groundwater resources to ensure a future supply of safe and healthful drinking water. The Town will consider the adoption of a wellhead protection ordinance consistent with the Maryland Model Wellhead Protection Ordinance that has been proposed by the Maryland Department of the Environment. The Town will continue to work with the state and local agencies to ensure that any development activities near its wellheads are regulated in a manner to ensure the continued protection of the local and regional groundwater supply.

<u>Piney Point Formation</u>

The Piney Point Formation is generally an olive-green to black slightly glauconitic quartz sand and is predominantly medium-to-course grained. It contains some lenses of fine sand, silt, clay, and Foraminifera. The Piney Point aquifer does not outcrop. The source of water in the Piney Point is not known but is probably derived from both lateral and vertical leakage. In its up-dip direction, the Piney Point becomes hydrologically connected with the underlying Nanjemoy Formation, which is an aquifer on the western shore of the Chesapeake Bay. Thus, some water may move laterally into the Piney Point from the Nanjemoy.

On the Eastern Shore, the principal source of recharge is leakage from the Cheswold Aquifer. Studies by the Department of Natural Resources have established that water levels in the Cambridge/Trappe area have recovered from 90 feet below sea level in 1976 to 60 feet below sea level in 1997.[12] Water quality in the Piney Point Aquifer is good throughout Talbot

[12] Department of Natural Resources, Maryland Geological Survey, Report of Investigations No. 72, Hydrogeology of the Coastal Plain Aquifer System in Queen Anne's and Talbot Counties, Maryland, with Emphasis on Water-Supply Potential and Brackish-Water Intrusions in the Aquia Aquifer, by David Drummond, 2001, p. 24.

County.[13] Because the Piney Point is confined and does not outcrop, it is not vulnerable to contamination from surface sources.[14]

Magothy Formation

The Magothy Formation generally consists of medium-to-coarse grain sands. The confining beds in the Magothy Formation are dark gray, silty clays. The Magothy Aquifer is a sandy interval within the Upper Cretaceous Magothy Formation. It is overlain by silts and clays higher up in the Magothy Formation and the Matawan Formation. It is underlain by confining beds deeper in the Magothy Formation, and the clay layers in the Patapsco Formation. These clay layers form leaky confining units, which probably allow some leakage between the aquifers.[15]

Town of Trappe; Existing Water System and Service Area

The Town of Trappe completed a substantial water system improvement program in 2001. The project extended over four years and cost over $3 million. The water improvements included replacement and increased size for most of the distribution system, improved looping, and the installation of metered billing.

The Town has two wells in the Piney Point Aquifer. Well #4 and #5 are owned and operated by the Town of Trappe and located on Harrison Circle with the existing elevated tower. These wells were tested in 1995, the results of which are summarized in Table 7-1. The Town is in design phase of Well #6, which will draw from the Piney Point aquifer (see Figure 7-5).

Table 7-1: Well Test Results – 1995

Well Tag	Aquifer	Depth	Diameter	Max. Safe	GPM	Water
TA-67-W-99	Piney Pt.	410’	6”	180 gpm	169	Good
TA-70-0134	Piney Pt.	421’	8”	180 gpm	169	Good

Source: Town of Trappe

In addition to wells #4 and #5 a there are two offline test wells (TA-95-0471) is located on the Lakeside Planned Neighborhood

In September 2009, the Town engaged Shanahan Artesian Well Company to perform comprehensive tests on the wells, including static level, pumping level, gallons per minute delivery at the operating head, and monitor running amps for each pump. The results of the tests revealed that each well could deliver 169 gallons per minute (243,000 gallons per day) at 55 psi. Shanahan reported that the wells and pumps were performing beautifully, and no changes were recommended. Moreover, based upon the Town’s records, the water level in the aquifer has not changed significantly since the wells were installed in the 1970s.

[13] Ibid
[14] Ibid
[15] Drummond, p. 40. The Magothy Aquifer provides copious amounts of water.

The treatment method is Chlorination. A backup generator serves both wells. Current average water usage is approximately 205 gallons per day (gpd) per equivalent dwelling unit (EDU). A portion of the Town's water distribution system was upgraded in 2002. The Town currently has one elevated storage tank of 250,000 gallons, built in 1997.

In the period 2010 to 2017 average annual daily demand for water has averaged slightly less than 95,000 gpd (see Table 7-2).

Table 7-2: Average Daily Demand (1,000 gpd)

Month	2010	2011	2012	2013	2014	2015	2016	2017	2018
January	61.30	64.80	65.90	65.10	76.90	64.40	66.10	61.40	77.90
February	60.60	73.70	65.50	78.90	85.80	84.10	70.90	62.20	64.60
March	92.70	60.90	74.50	70.60	79.00	83.60	85.50	62.70	79.50
April	66.40	67.60	63.30	70.00	67.10	88.20	74.00	62.60	84.70
May	112.00	76.70	73.90	74.40	75.20	109.60	76.20	77.70	88.40
June	106.50	78.60	78.10	78.10	77.40	106.10	83.80	75.10	69.60
July	114.40	84.50	89.70	79.80	78.30	80.40	95.40	76.70	80.00
August	100.20	69.20	71.80	69.10	80.50	76.70	91.00	67.90	70.20
September	100.30	66.40	60.20	71.10	73.80	89.70	77.40	68.20	73.40
October	79.30	64.50	68.70	71.20	71.20	70.70	72.00	69.70	71.70
November	65.30	66.60	65.40	66.90	66.90	66.10	65.00	63.70	NA
December	65.90	59.00	68.90	67.00	67.00	66.00	68.20	65.10	NA
Annual Totals	1,024.90	832.50	845.90	862.20	899.10	985.60	925.50	813.00	NA

Source: Town of Trappe officials

The Town has adopted a water capacity fee and water connection charges. These fees cover the installation of one pit and one meter per property. All multi-family units are required to pay additional water availability fees.

The Town bills all accounts monthly based upon water meter readings. The water system serves all sewer customers. Accounts are read monthly, with the Town using an automated touch-pad meter reading system methodology. The Town installed new meters in 2001. For properties located within the Town of Trappe, each metered property pays a basic monthly water service availability fee and an additional monthly water usage rate based upon actual metered use.

The Town has attempted to reduce water demand through metered billing, as well as to publish several articles on water conservation in the Town's monthly newsletter mailed to the Town residents. The Town's increased water rates have also contributed to an awareness of individual consumption levels.

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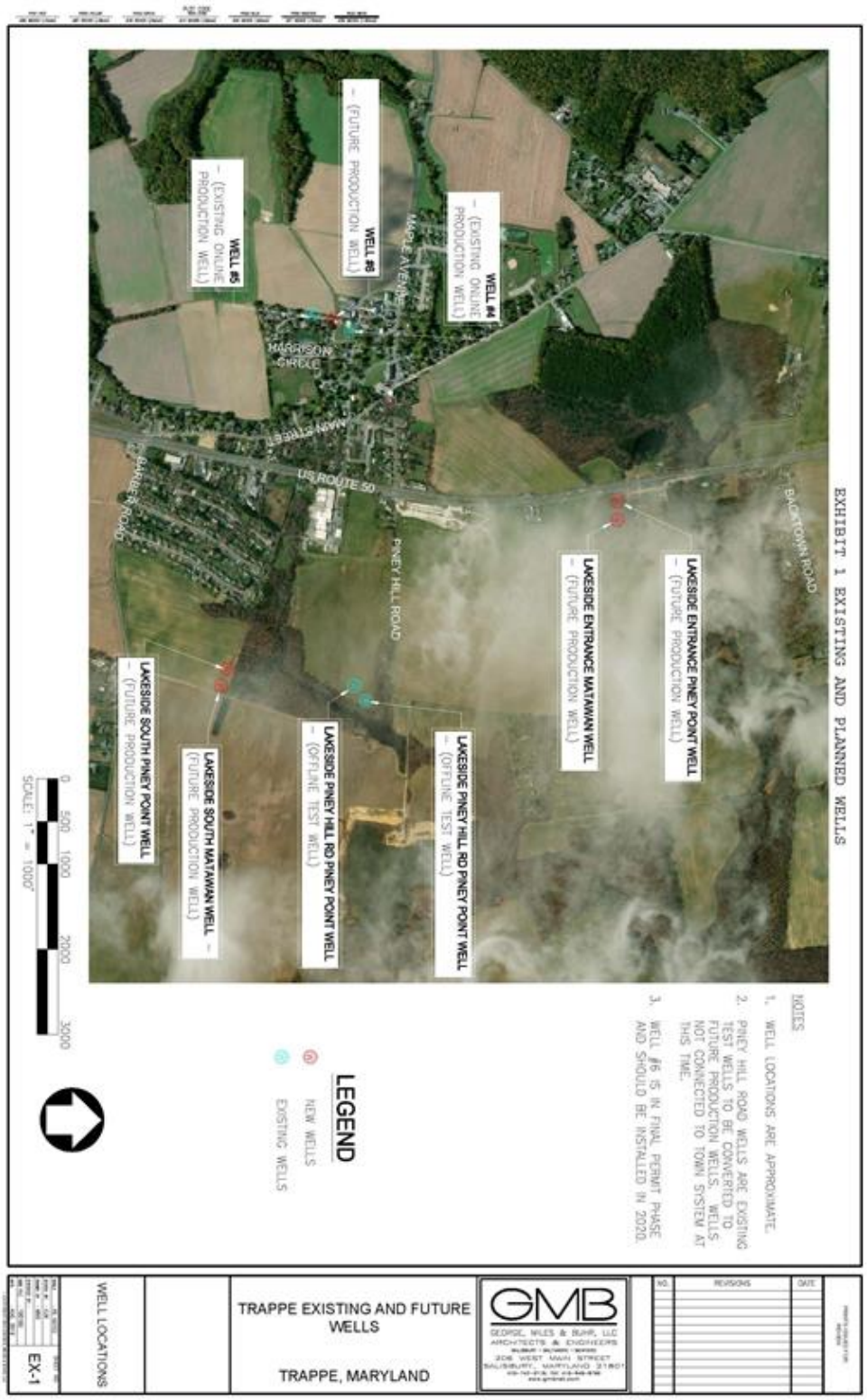
Figure 7-5 Existing and Future Wells



Future Planning for Water Services

To plan water service to meet the needs of future growth, the Town, as the water service provider, will expand its existing service area. Planning for installation of a permitted new well that will draw from the Piney Point aquifer is currently underway. This 8-inch well (Well #6) will extend to 420 feet deep and be capable of producing as the rate of 190 gallons per minute.

Trappe has outlined its long-range water planning area on Map **7-**1 using the classification system adopted by MDE as set forth in COMAR 26.03.01.04, with the W-1 classification including those areas with existing service and at the other end of the spectrum, the W-6 classification including those areas where the Town has no planned service for a least the next 10 years. These planning areas are also consistent with the Trappe planning areas outlined in the Talbot County Comprehensive Plan 2016.

Old Town (Existing Service Area)

Trappe's Water Appropriation Permit TA1979G006(04) limits the average daily withdrawal of 347,500 gallons yearly and an average daily withdrawal of 497,000 gallons for the month of maximum withdrawal from the Piney Point Formation. As can be seen in Table 7-3, the estimated demand for potable water associated with the growth scenarios evaluated in the Chapter 3 Municipal Growth is well within the current limits of the Town's water appropriations permit, as may be supplemented by water appropriations authorized for the Lakeside PN District. The table does not include total demand associated with the buildout of the Lakeside project.

Table 7-3: Projected Water Demand - 2040 Growth Scenarios

	Scenario 01 (gpd)	**Scenario 02 (gpd)**
Existing Average Daily Flows	95,000	95,000
Projected Residential Demand	18,250	62,500
Projected Nonresidential Demand	5,742	5,742
Estimated Total Demand	118,992	163,242
Existing Capacity		
-Water well capacity	347,000	347,000
- Water storage capacity	250,000	250,000
Remaining Capacity		
Water		
- Well capacity	221,008	91,008
- Storage	131,008	86,758

Source: Peter Johnston & Associates, LLC

For all unimproved properties located in the Old Town, where no water extension exists, the Town's ordinances require the property owner to pay for costs associated with the extension of water services, including all construction, engineering, and professional fees. All water extensions are constructed by the Town, or to the Town's specifications. In addition to

construction and engineering costs, the property owner is required to pay all capacity fees and connection charges in effect at the time of the extension.

Before the approval of any subdivision or site plan approval, the Planning Commission is required to review the subdivision or site plan to determine whether existing or planned public facilities are adequate to serve the needs of the development. In addition to the finding of adequate public facilities, before the recordation of any final plat, the applicant is required to execute a public works agreement, approved by the Town Council. The public works agreement specifies required public improvements, including financial guarantees (bonds, letters of credit, etc.) which are required before the issuance of a building permit for development.

Lakeside PN District –Water Services

The Lakeside PN District is classified as W-2 under the Talbot County Comprehensive Water and Sewer Plan. The County's capital improvement table in the current Talbot County Comprehensive Water and Sewer Plan recognized the Town's plan to add a water distribution system to the Trappe East Development Area (now known as the Lakeside PN District) in 2003, with an expansion in 2006. As a mixed- unit development, the Lakeside PN District will contain a commercial component as well. The anticipated build-out of the entire project is more than 20 years, based upon current absorption trends**.**

The Town has required the Lakeside developer to design and build a water treatment, storage, and distribution system to serve the Lakeside PN district. Plans are for the Lakeside PN district to be served by four new wells, two located in the Piney Point Aquifer and two located in the Matawan aquifer (see Figure 7-5). Wells will be co-located to permit the blending of the water from both aquifers because the fluoride content of the water from the Matawan aquifer is higher than MDE standards.

The Lakeside PN District water system will connect to the Old Town system with appropriate looping. This looping will enhance the water supply and water quality to the Old Town Trappe water system. The Development Rights and Responsibilities Agreement, applicable to the Lakeside PN District, requires the developer/landowner to fund 100% of the design and construction costs of the water treatment, storage, and distribution system, except that the Town will bear a proportionate share of the arsenic removal facility cost. Additionally, the developer/landowners are responsible for the funding of the first three years of operational and maintenance costs.

The Town of Trappe will own and operate the water system that services the Lakeside PN District. Although the Town will be responsible for the operation of the water system, the developer will be obligated to pay to the Town the amount necessary to offset any deficiency between the user fees collected from Lakeside PN District and the actual operation and maintenance costs (including appropriate capital reserves) for the Lakeside PN District water system.

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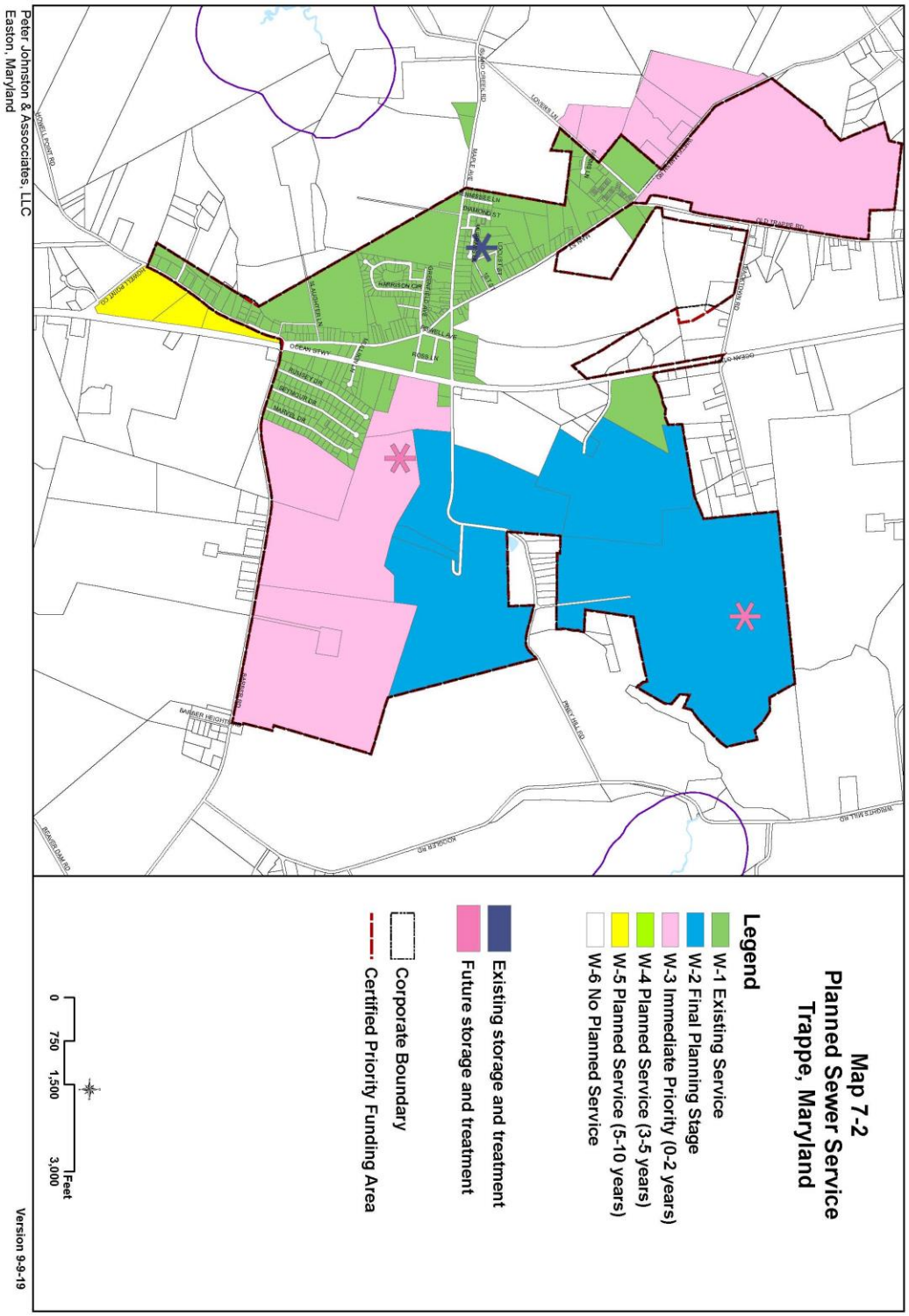
Map 7-1 Existing and Planned Water Service Areas



White Marsh Development Area – Future Water Services

The White Marsh Development Area, annexed by the Town in August 2004, has been included in County master planning as a Trappe Growth Area. It has been zoned Town Residential ("TR") under the County zoning ordinance (which permits four dwelling units per acre with public sewer) and is included in a Priority Funding Area (PFA). The White Marsh Development Area is classified as W-2 in the Talbot County Comprehensive Water and Sewer Plan (2002) Report of the Review. The capital improvement table in the current Talbot County Comprehensive Water and Sewer Plan recognized the Town's plan to add a water distribution system to the White Marsh Planned Development Area. These water and sewer system additions and improvements are in the final planning stages. Engineering analysis of the necessary improvements to the existing town water system is underway. Initial development submissions to the Town, including a Planned Unit Development (PUD) concept plan, indicate 505 planned residential dwelling units at ultimate buildout. The annexation agreement with the property owner and developer requires that any upgrades, expansions, and additions to the Town's water distribution system, as specified by the Town's consulting engineers, will be funded by the developer.

Existing Sewerage System and Service Area

Sewer System Considerations

In May 2005, the Trappe Town Council adopted a Water and Sewerage Subsidiary Plan intended to memorialize the current water and sewer planning for the Town of Trappe. It establishes a water and sewerage plan that is consistent with the boundaries of the Town of Trappe, the Comprehensive Plans of Talbot County and the Town of Trappe, and the current status of the Town's existing planned water and sewer service. The Water and Sewerage Subsidiary Plan, like the Trappe Comprehensive Plan, is a planning document of the Town of Trappe.

The current sewerage treatment facility has a permit limitation of 200,000 gallons (0.2 mgd), per day average daily flow and a design capacity of 200,000 gallons (0.2 mgd) per day of domestic wastewater with a peak flow capacity of 277 gallons per minute (400,000 gallons per day rate). A study is currently underway to evaluate the feasibility of upgrading treatment at the existing WWTP to Enhanced Nutrient Removal (ENR) standards.

The Town will continue to adhere to its long-standing policy to reserve excess system capacity for infill parcels located within the existing Town boundary. Within the area served by the existing facility, there are 26 undeveloped infill parcels, one substantial infill parcel of approximately 104 acres, and a couple of parcels that are eligible for highway mixed-use development. In addition, there are 32 lots located on the perimeter of the Town still served by individual septic systems.

With a design capacity of 200,000 gpd (0.2mgd), after deducting its reserve capacity for infill development and for White Marsh Elementary School growth the Town has an available

capacity of about 81,500 gpd for planning purposes.

It is projected that over time, most of the 26 infill lots will be improved and require sewer service. The Town will also reserve capacity for the 32 properties served by septic systems when those properties request sewer service and pay all extension and connection fees. These projected population increases can be served by the excess capacity in the existing treatment plant. No development plans have been proffered for the 104-acre parcel currently in agricultural use. Until a specific project is presented and accepted, that property remains designated by the Town in the Water and Sewerage Subsidiary Plan for no planned service in the long-range planning.

As for the Lakeside PN District, the Town has required that the Lakeside developer design and build a wastewater treatment system within the PN development area with sufficient capacity to serve the mixed uses in that PN District. The Town has secured the necessary permits from the MDE for the construction of the system and the related land application disposal.

Concerning the White Marsh Development Area, which was annexed by the Town in 2004, the Town's existing treatment plant presently has insufficient capacity to serve the proposed development of the White Marsh Development Area. Service in this area will require an expansion of the existing plant and approval for discharge by MDE.

Treatment meeting the discharge criteria summarized in Table 7-4 occurs before discharging the effluent into a tributary of LaTrappe Creek.

Table 7-4: Trappe Existing Wastewater Treatment Plant Design Discharge Criteria

Parameter	Monthly Average Limit
BOD5	≤10 mg/l (May-Sept)
	≤ 30 mg/l (Oct-Apr)
TSS	≤ 30 mg/l
NH3	≤ 2.2 mg/l (May-Sept)
	≤ 4.4 mg/l (Oct-Apr)
Total P	≤ 0.3 mg/l

Source: Town Trappe officials

The treated effluent is conveyed to the headwaters of LaTrappe Creek, which is part of the Lower Choptank Watershed. Total Maximum Daily Loads (TMDLs) have been set for the discharge stream known as "Unnamed Tributary of LaTrappe Creek." The TMDL is written to address summer-only oxygen demands and annual average phosphorus loads. From May through September, the existing WWTP would be allowed to discharge 25 pounds per day of BOD, 5 pounds per day of TKN (converted to NBOD). As outlined in the National Pollutant Discharge Elimination System (NPDES) permit for existing WWTP, the total Phosphorus is limited to 183 pounds per year, without regard to season. These equate to 15 mg/1BOD, 3 mg/l TKN and 0.3 mg/l phosphorus at a flow of 0.2 MGD. The plant discharges 74 pounds per year. As long as the concentrations remain below 0.3 mg/l, the annual load will remain below 183 lbs./yr.

The existing plant handles waste biosolids by long-term storage in the middle lagoon. The south lagoon no longer exists. It was converted to other uses during treatment plant renovations. The biosolids are slowly treated by natural bacterial decomposition in the storage lagoon. There will be a gradual buildup of biosolids in that lagoon requiring removal about every ten (10) years. Twenty-four hours of emergency storage is also accommodated in a portion of the middle lagoon and a part of the northern lagoon. Table 7-5 summarizes monthly average daily flows.

Table 7-5: Average WWTP Flows (GPD) 2015 - 2017

	Year		
Month	**2015**	**2016**	**2017**
January	0.110	0.095	0.077
February	0.124	0.153	0.089
March	0.121	0.138	0.082
April	0.108	0.121	0.077
May	0.093	0.140	0.085
June	0.087	0.098	0.068
July	0.078	0.083	0.075
August	0.077	0.078	0.077
September	0.075	0.079	0.073
October	0.108	0.089	0.053
November	0.075	0.074	0.051
December	0.080	0.072	0.053
Total	**1.136**	**1.221**	**0.858**
Average	**0.095**	**0.102**	**0.072**
Three Year Average			**0.090**

Source: Town of Trappe officials

In the summer, 2009, the Town undertook a water audit to determine, in part, the amount of potable water that the Town was using in the operations of the wastewater treatment plant. The water audit revealed the Town's wastewater treatment plant was using approximately 35,000 gallons of potable water per day, all included in the effluent passing through the plant. This potable water use was related to a chlorine induction unit that was not working, and the use of clean water for a variety of day-to-day operations such as foam control.

The Town believes that this additional 35,000 gallons per day of potable water use artificially inflated the monthly discharge monitoring report totals, as well as the one, two and three-year averages used to calculate the plant's reserve capacity.

By the end of August 2009, the Town began implementing a water reuse program which enabled the Town to use treated wastewater instead of potable water for daily operations at the wastewater treatment plant. Additionally, they replaced the chlorine induction unit. These water reuse measures were fully implemented by November 2009. The Town's flows from its wells; immediately dropped by 30,000 gallons per day. The corresponding 30,000-gallon pumpage

from the Town's wells confirms that the water reuse measures resulted in 30,000 fewer gallons of potable water use.
The Town's water reuse plans at the wastewater treatment plant should increase the available capacity by at least 30,000 gallons per day. Since the installation of the modifications, the Town has seen a steady decrease in average daily flows.

For planning purposes, the Town has approximately 0.81 mgd of sewer capacity that can be allocated to future growth (see Table 7-6). Committed capacity includes service for 115 potential infill lots and White Marsh Elementary school (38 EDUs).

Table 7-6: Existing plus Committed Sewer Allocations in Gallons Per Day (GPD)

Average Daily Flow	90,000
Committed	28,750
Existing plus committed	118,750
Capacity	200
Remaining	81,250

The existing Town collection system is primarily gravity, with seven publicly maintained pump stations (see Table 7-7). The system needs minor repairs and replacements to eliminate a portion of the extraneous flow that enters through inflow and infiltration.

Table 7-7: Inventory and Summary of Existing Pump Stations

Location	Description
1. South Main St. & Route 50	Two pumps each 3 hp, 88 gpm and a 4" force main, equipped with an emergency generator
2. Greenfield Avenue	Two pumps each 7.5 hp, 240 gpm and a 6" force main, equipped with an emergency generator
3. White Marsh School	Two pumps, 5 hp, and 3 hp, 96 gpm, and a 4" force main
4. Lakeview (Harrison Circle)	Two pumps each 5 hp and a 4" force main, equipped with an emergency generator
5. Rumsey Drive	Two grinder pumps, each 1.5 hp
6. Marvel Drive South	Two grinder pumps, each 2 hp
7. Marvel Drive North	Two grinder pumps, each 2 hp
8. Shelby Acres	Two grinder pumps, each 1 hp

Trappe has been addressing infiltration and inflow (I&I) over the past five years, with work including a complete replacement of a section of sanitary sewers along Main Street in conjunction with the water main in 2003 and I&I is somewhat lower than in the past. In 2003, the average flow during June was 227,000 gpd (0.227 mgd), with a total rainfall of 7.28 inches. The following month, the flow was 169,000 gpd (0.169) mgd with a rainfall of 8.52 inches, indicating a significant reduction occurring at that time, and that I&I is lower than in the past.

While the Town's water system currently services 470 properties, the Town only serves 438 properties with sewer service. There are 32 houses located along the perimeter of the Town boundary served by individual septic systems. While the Town provides water service to a few

properties located outside the Town, the Town does not offer any sewer services to properties located outside its corporate limits. The Town requires that property annex as a condition to receiving town utilities.

For undeveloped properties located within Town that do not currently have sewer connections, the Town charges a sewer capacity fee and a sewer connection fee. These fees do not cover the cost or expense associated with bringing sewer services to properties where no extension exists. For all unimproved properties located in the Old Town, where no sewer extension exists, the Town's ordinances require the property owner to pay for costs associated with the extension of sewer services, including all construction, engineering, and all professional expenses. All sewer extensions are constructed by the Town, or to the Town's specifications. In addition to construction and engineering costs, the property owner is required to pay all capacity fees and connection charges in effect at the time of the extension. Table 7-8 summarizes the number of building permits issued by the Town that required new water and sewer connections for the past six years.

Table 7-8: New Water and Sewer Connections

Year	Number of Connections:
2013	0
2014	0
2015	0
2016	2
2017	2
2018	3

Source: Town staff

As set forth above, the total number of new connections over the past six years is seven new connections.

Future Planning for Sewer Services

Trappe has outlined its long-range sewer planning area on Map 7-2 using the classification system adopted by MDE as set forth in COMAR 26.03.01.04, with the S-1 classification including those areas existing service and at the other end of the spectrum, the S-6 classification including those areas where the Town has no planned service for more than 10 years. These planning areas are also consistent with the Trappe planning areas outlined in the Talbot County Comprehensive Plan 2016. Table 7-9 describes the expected demand for sewer service to support the growth scenarios evaluated in Chapter 4 through the planning period (2040). The table does not include total demand associated with the buildout of the Lakeside project. All development underlying this assessment will be located in the S-1 and S-2 areas.

Table 7-9: Projected Sewer Demand - 2040 Growth Scenarios

	Scenario 01 (gpd)	Scenario 02 (gpd)
Existing Average Daily Flows	90,000	90,000
Projected Residential Demand	18,250	62,500

Table 7-9: Projected Sewer Demand - 2040 Growth Scenarios

	Scenario 01 (gpd)	Scenario 02 (gpd)
Projected Nonresidential Demand	5,742	5,742
Estimated Total Demand	113,992	158,242
Existing Capacity	200,000	200,000
Remaining Capacity	86,008	41,758

Source: Peter Johnston & Associates, LLC

Service Old Town (Existing Service Area)

The Town's existing service area is set forth on Map 7-2. Within the area served by the existing facility, there are undeveloped parcels with the development potential of approximately 115 lots, one substantial infill parcel of approximately 104 acres, as well as a couple of larger 15-20 acre parcels along US Route 50. In addition, there are 32 lots located on the perimeter of the Town still served by individual septic systems. The Town has not allocated or reserved capacity for these 32 properties but intends to allocate it on a first-come, first-serve basis provided that the property owners pay all extension and connection fees.

There are no development plans for the 104-acre parcel, which is in agricultural use, nor have any ideas been proffered for the larger 15-20 acre parcels along US Route 50. Until a specific project is presented and accepted, it will be classified as S-6 by the Town.

The town recognizes that any significant development the annexation areas shown on Map 4-2 in the Municipal Growth Element would require substantial upgrades to its existing WWTP and that any upgrades will be constrained by the Tributary Strategy point source cap and the applicable TMDL. Trappe has sufficient land within its boundaries for development for the foreseeable future or within the planning period of this Comprehensive Plan. Moreover, there is currently not enough capacity in the Town's WWTP to accommodate significant development in these areas. For these reasons, any long term forecasts or analysis of water or sewer demand of these areas would be speculative.

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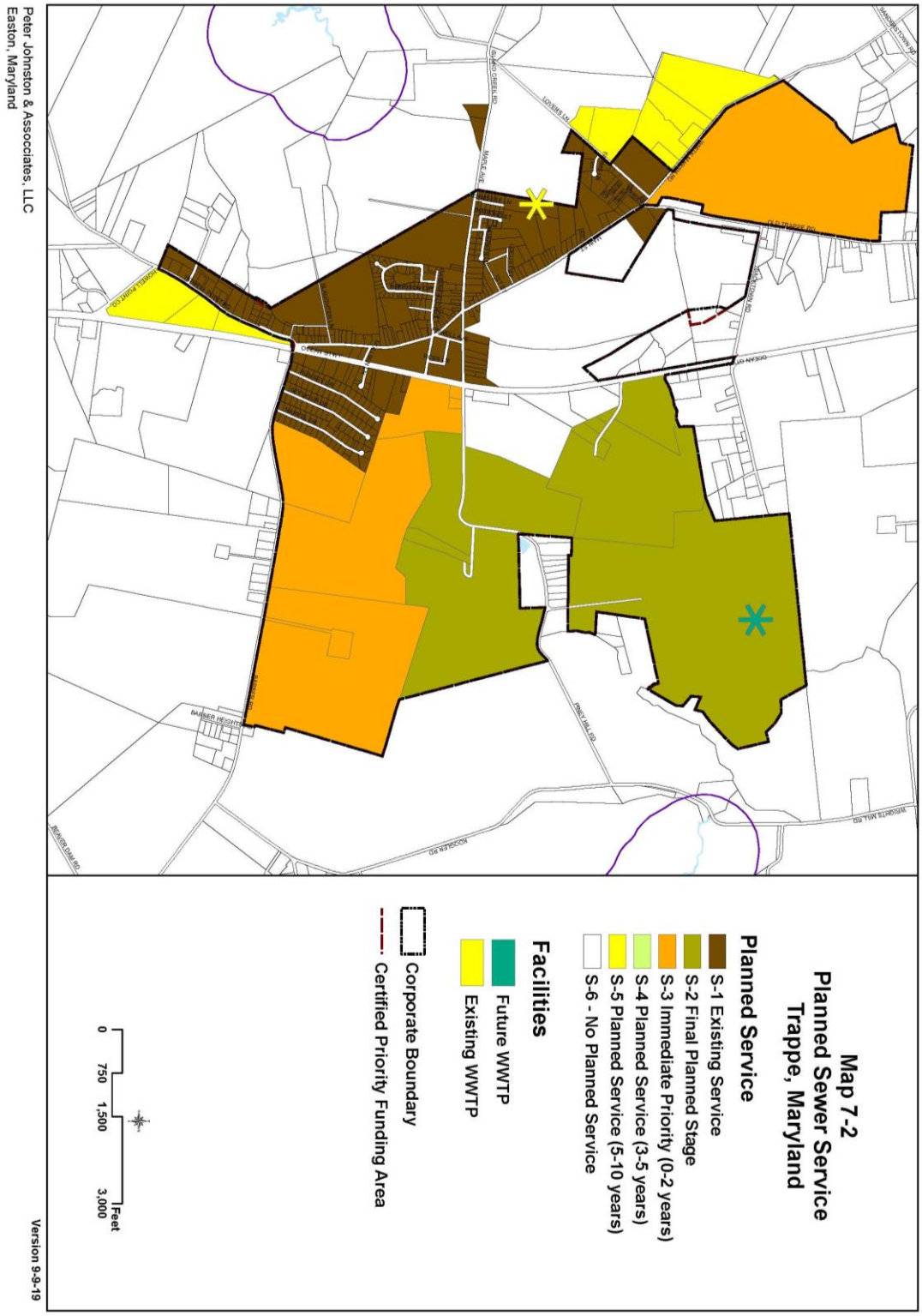
Map 7-2 Existing and Planned Sewer Service Areas



Lakeside PN Development

The Lakeside PN District is classified as S-2 under the Talbot County Comprehensive Water and Sewer Plan. The Town has required the Lakeside developer to design and build a wastewater treatment system within the Lakeside PN District with sufficient capacity to accommodate the mixed-use community. The approved PN District permits the development of 2,501 residential units and a commercial component.

The Lakeside treatment plant will be designed to accommodate the buildout of the Lakeside PN District, which is currently projected to require 2,400 to 2,500 equivalent dwelling units (EDUs). Sewer flows at build-out would be 540,000 gpd (0.540 mgd). The Town previously received a permit from MDE for the first phase of the treatment plant, 270,000 gallons (0.270 mgd). The Town also received a groundwater discharge permit for the disposal of treated wastewater by land application. The phasing of the wastewater improvements may be altered to provide for the construction of this infrastructure in smaller increments. The Town is renewing all discharge and construction permits required for infrastructure improvements to serve the Lakeside PN District.

Utilizing the latest technology to upgrade and expand the wastewater treatment plant to achieve the design criteria necessary for land application will create positive environmental benefits. Land application is the preferred method of disposal under state law. Under the terms of a split or dual discharge permit, the Town has the flexibility to discharge its effluent into the stream within the parameters of its discharge permit or discharge to the spray site.

Not only are there environmental benefits to this approach, from an operational efficiency standpoint, operating one plant will be more cost-effective. Moreover, adding users to the existing plant will spread the operational costs and expenses over more users than the current users.

The Development Rights and Responsibilities Agreement applicable to the Lakeside PN District is recorded in the land records for Talbot County, binds and runs with the land, and requires the developer/landowner to fund 100% of the design and construction costs of the sanitary sewer system at no expense to the Town.

The developer's financial obligations related to infrastructure and expansion will be secured through the provision of a performance bond(s) and/or other surety acceptable to the Town and its legal counsel before construction of the water and sewer systems. The financing for the water and wastewater systems may be provided through the issuance and sale of special obligation revenue bonds, the costs of which will be collected through an individual tax district applicable to the Lakeside PN District.

White Marsh Development Area

As previously stated, the White Marsh Development Area was annexed by the Town in August 2004. The White Marsh Development Area is classified as S-2 in the Talbot County Comprehensive Water and Sewer Plan (2002) Report of the Review. While the White Marsh

Development Area may be connected to the Town's existing sewer system, the developer or property owners would be required to finance all improvements necessary for the extension of services, including any modifications or expansion to the existing treatment plant to accommodate additional capacity.

The Town's existing treatment plant presently has insufficient capacity to serve the proposed development of the White Marsh Development Area. In 2006, the Town commenced the engineering analysis, at the developer's expense, to determine the extent of the construction, expansion, improvements, or upgrades to the Town's wastewater treatment plant and collection system necessitated as the result of the development of the White Marsh Development Area. While no development plan is currently under consideration for this area, the annexation agreement provides that the developer and/or landowner is solely responsible for all engineering, consulting, and construction and permitting costs associated with wastewater collection and distribution to and from the Town's wastewater treatment plant. Also, the Town has the right to assess and collect connection fees as are necessary to maintain an appropriate reserve fund for future maintenance, repair, and replacement of the sewer facility.

Point Source Nutrient Loads

Table 7-10 summarizes existing and projected wastewater flows and estimates of the resultant nutrient loads.

Table 7-10: Trappe Current and Projected Future Point Source Loading

	3-years end 12/31/17	2020	2025	2030	2035	2040
Total Stream Discharge (GPD)	90,000	90,000	92,500	120,000	135,625	159,000
Trappe WWTP	90,000	90,000	90,000	95,000	96,250	108,000
Lakeside WWTP	0	0	9,250	25,000	39,375	51,000
Total Stream Discharge (GPD)	90,000	90,000	99,250	120,000	135,625	159,000
Concentration of Total Nitrogen (mg/l)						
Trappe WWTP	20.9	20.9	20.9	20.9	20.9	20.9
Lakeside WWTP	4.9	4.9	4.9	4.9	4.9	4.9
Concentration of Total Phosphorous (mg/l)						
Trappe WWTP	0.1	0.1	0.1	0.1	0.1	0.1
Lakeside WWTP	0.2	0.2	0.2	0.2	0.2	0.2
Annual loading of Nitrogen (lbs. per year)						
Trappe WWTP	5,593	5,593	5,593	5,903	5,981	6,711
Lakeside WWTP	0	0	393	373	588	761
Annual loading of Phosphorus (lbs. per year)						
Trappe WWTP	27	27	68	71	75	82
Lakeside WWTP	0	0	4	22	43	62

Concerning the assimilative capacity of the receiving stream, a TMDL established for the Unnamed Tributary of La Trappe Creek limits the annual discharge of phosphorous (TP) from the WWTP plant to no more than 183 pounds per year. All minor wastewater treatment plants

within the State are limited to a Chesapeake Bay Tributary Strategy point source cap of 6,100 pounds of nitrogen (TN). The Town will work with MDE to ensure compliance with the Tributary Strategy point source cap. Assuming the WWTP continues to operate within its discharge permit parameter for TN, its discharge will not approach or exceed the Tributary Strategy cap of 6,100 lbs./yr. until 2035 under either 2040 growth scenario and phosphorus discharge will remain below the limit set under the TMDL. When stream discharge approaches the permit discharge limit of 0.20 mgd the Town may have to consider plant upgrades to meet the TN cap.]

Non-point Sources

The corporate area of Trappe is in both the Upper Choptank River watershed and Lower Choptank River watershed (see Map 7-3). The western portion of the Town (approximately 444 acres) is located in the Lower Choptank River Watershed and drains to the lower part of the Choptank River. The eastern part of the Town (approximately 1,200 acres) including the Lakeside Planned Development is situated in the Upper Choptank River Watershed and drains to the upper part of the Choptank River. Slightly more than forty percent of the land area of the watershed is in Talbot County (See Table 7-11).

Table 7-11: Choptank River Watershed

	Total (acres)	Talbot Cty. (acres)	Trappe (acres)	% of Total
Upper Choptank Watershed	163,700	37,992	1,200	0.73%
Lower Choptank Watershed	195,700	117,872	444	0.23%
Total	359,400	155,864	1,644	0.46%

Both of these watersheds are impaired, and as a result, TMDL's for nutrients (TN nitrogen and TP phosphorus), sediment and fecal coliform apply. These conditions indicate that the assimilative capacity in receiving waters is limited, and care must be taken to ensure future land uses limit the transport of polluting components to the receiving waters.

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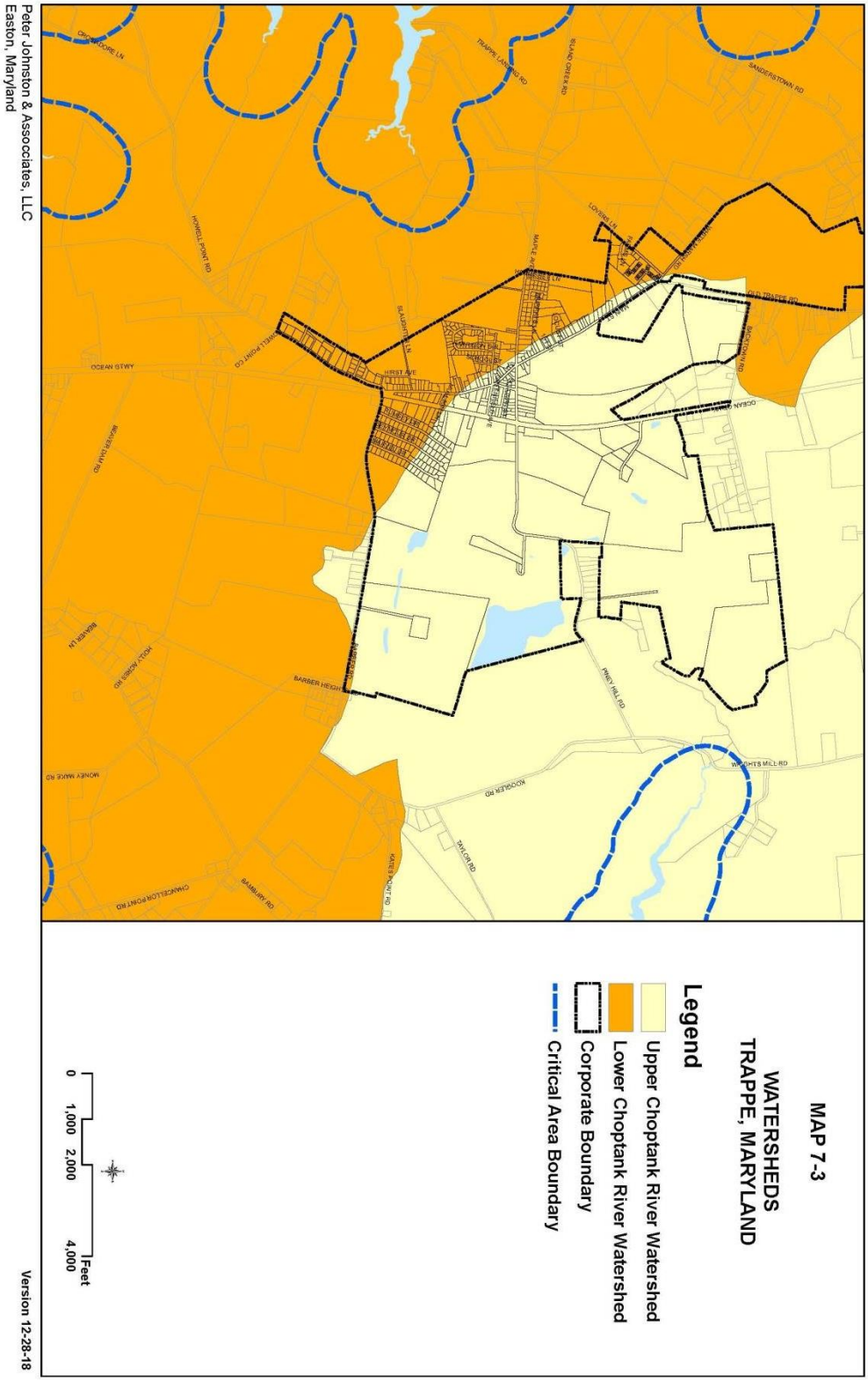
Map 7-3 Upper Choptank River Watershed and Lower Choptank River Watershed.



Point sources are identifiable inputs of waste that are discharged via pipes or drains primarily from industrial facilities and municipal treatment plants into streams, rivers, lakes, or oceans. In the case of municipalities located in the watershed, the quality of discharge from point sources is affected by the level and quality of treatment provided at the 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 groundwater. Stormwater runoff is a significant contributor to non-point source loading.

Non-Point Assessment

The evaluation of change in nonpoint source loading associated with growth with the growth scenarios was made using a Nutrient Load Analysis Spreadsheet prepared by the MDE which calculates non-point source pollution loadings based on the acres of land in various land use categories. The spreadsheet results give a general picture of non-point source pollution loading as a before-and-after assessment of nutrient loads due to proposed land-use changes. The model uses three inputs: land use acreages, number of residential septic systems, and the acreage of non-residential land served by septic systems. Also incorporated into the model is the percentage of impervious surfaces by land use and by watershed. Impervious surfaces are man-made surfaces (e.g., roads, sidewalks, and parking lots), which do not allow rainwater to enter the ground. The total amount of impervious surface in a watershed is a key indicator of water quality. According to the Center for Watershed Protection, water quality in streams tends to decline as watersheds approach ten percent impervious coverage. Water quality is extremely impacted when the percent impervious coverage in the basin approaches twenty-five.

Land use inputs to the spreadsheet for Trappe as a percentage of the watersheds are small; consequently, the Town's non-point sources pollution contribution represents a small portion of the overall loading in each of the basins and of that for Talbot County (see Table 7-12).

Table 7-12: Watershed Land Use 2002

	Talbot County (Acres)	Trappe (Acres)	Percent of Watershed
Upper Choptank Watershed			
Development	2,126	139	7.0%
Agriculture	23,330	957	1.1%
Forest	10,684	85	0.1%
Water	1,620	1	0.0%
Other	230	19	6.9%
Total Area	37,992	1,200	1.2%
Lower Choptank Watershed			
Development	11,703	150	1.3%
Agriculture	40,297	267	0.7%
Forest	63,188	12	0.0%
Water	1,783	0	0.0%
Other	902	16	1.8%

Table 7-12: Watershed Land Use 2002

	Talbot County (Acres)	Trappe (Acres)	Percent of Watershed
Total Area	117,872	444	0.4%

As can be seen from the results of the spreadsheet analysis summarized in Tables 7-13 and 7-14 for the Talbot County portion of the watersheds in the base year (2002), Trappe's land use was not a significant source of point and non-point pollution with the exception of total nitrogen (TN) and total phosphorus (TP) loadings associated with the WWTP. Trappe can make its most significant contribution to achieving Federal and State water quality objectives by ensuring that TN discharge from the WWTP remains below the cap set for insignificant plants in the Tributary Strategy and the TMDL for phosphorus set for the unnamed tributary to LaTrappe Creek.

Table 7-13: Total Nitrogen Loading (TN) 2002

	Talbot County (Acres)	Trappe (Acres)	Percent of Watershed
Upper Choptank			
Total Terrestrial Load	401,326	16,493	4.1%
Residential Septic (EDUs)	41,933	0	NA
Non-Residential Septic (EDUs)	798	0	NA
Total Septic Load	42,730	0	NA
Total NPS Nitrogen Load	444,056	16,493	3.7%
Total PS Load*	47,415	0	0.0%
Total Nitrogen Load (NPS+PS)	491,471	16,493	3.4%
Lower Choptank			
Total Terrestrial Load	830,849	5,643	0.7%
Residential Septic (EDUs)	48,361	0	NA
Non-Residential Septic (EDUs)	1,556	0	NA
Total Septic Load	49,916	0	NA
Total NPS Nitrogen Load	880,766	5,643	0.6%
Total PS Load	11,152	5,440	48.8%
Total Nitrogen Load (NPS+PS)	891,918	11,083	1.2%

Table 7-14: Total Phosphorus Loading (TP) 2002

	Talbot County (Acres)	Trappe (Acres)	Percent of Watershed
Upper Choptank			
Total Terrestrial Load	28,335	1,205	4.3%
Total PS Load	12,938	0	0.0%
Total Phosphorus Load (NPS+PS)	41,273	1,205	2.9%
Lower Choptank			
Total Terrestrial Load	59,545	474	0.80%
Total PS Load	1,858	906	48.76%
Total Phosphorus Load (NPS+PS)	61,403	1,380	2.25%

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TN and TP loading from the spreadsheet does not change significantly from the base 2002 levels when assessing the 2040 land use distribution associated with the 2040 Scenarios outlined in the Municipal Growth Chapter. Relative to the watershed base levels for 2002, TN and TP loading changes were less than 0.03 percent.

Stormwater Management

A significant consideration for managing future growth is the assimilative capacity of receiving waters for stormwater runoff associated with urban land use. 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 to receiving waters.

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

Trappe adopted a version of the State’s model Stormwater Management Ordinance in 2009. Among other requirements, the Stormwater Management Ordinance requires "environmental site design (ESD)" that is the use of small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources as outlined in State’s Design Manual.

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CHAPTER 8 NATURAL RESOURCES AND SENSITIVE AREAS ELEMENT

Introduction

"Where you find a people who believe that man and nature are indivisible and that survival and health are contingent upon an understanding of nature and her processes, these societies will be very different from ours, as will their towns, cities, and landscapes. The hydraulic civilizations, the good farmer through time, the vernacular city builders, have all displayed this acuity."[16]

The primary objectives of this Comprehensive Plan are to protect for the health, safety, and welfare of Trappe residents including managing land use in consideration of how potential changes may affect the delivery of public services, impact property values and generally make Trappe a less desirable place to live. The Town attempts to achieve these objectives by, among other things implementing capital improvements to infrastructure, providing safety services, and managing land use.

Managing land use includes regulating stormwater runoff to prevent flooding and minimize pollutants that reach receiving water in response to identified water quality issues. Best management practices, such as low impact stormwater management and stream buffers address pollution loadings that affect water and habitat quality. Implementation of these BMPs along with maintaining natural stream configuration, e.g., natural channelization, eddy and pool formation, and in-stream habitat production, is critical to protecting the quality of natural resources especially the most sensitive natural areas.

The location and physical characteristics of natural features such as streams, soils, wetlands, forests, and significant tree stands, and sensitive fish and wildlife habitats should inform management practices, for example limiting clearing of forest cover or requiring expanded stream buffers. Natural resource features of concern are not just those located in the corporate area but those outside the Town limits that are potentially at risk as a result of activities that take place in the Town. Accordingly, the Town should do all it can to balance its urban growth with the need to preserve natural resources, trees, water areas, etc., protect sensitive environmental areas, manage run-off to minimize damage to water quality and mitigate any negative impacts on land, air, water vegetation, and energy.

Three of the State's Vision statements are relevant to the discussion of natural resource conservation. These are:

- Environmental Protection – Land and water resources, including the Chesapeake Bay and Coastal Bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources.

- Resource Conservation – Waterways, forest, agricultural areas, open space, natural systems, and scenic areas are conserved.

[16] Ian McHarg, Design with Nature

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

This chapter addresses all of these visions.

Concern for the conservation of agriculture land, forest and mineral resources and protection of sensitive environmental areas transcends arbitrary boundaries. Issues such as the loss of forest, sedimentation of streams, degradation of receiving waters, and loss of wildlife habitat in the surrounding watersheds and beyond are of concern for all levels of government. Trappe and Talbot County share responsibility for conserving natural resources and protecting sensitive environmental areas and must be mindful of potential negative impacts on sensitive and critical natural features when planning for future growth.

Sensitive Areas

The *Maryland Economic Growth, Resource Protection and Planning Act of 1992* added a requirement to the Land Use Article that comprehensive plans contain a Sensitive Areas Element. In 2006 the Maryland Legislature passed House Bill 1141 expanded the list of sensitive areas to be addressed in comprehensive plans, adding wetlands, agricultural lands, and forest resource protection/conservation areas. As a result, sensitive areas now 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

Map 8-1 shows the sensitive features in the Trappe area.

There are no steep slopes equal to or greater than 15% within our planning area. There are no 100-year floodplains within our planning area.

How these features are managed affects the quality of fish and wildlife habitat, biodiversity, and water quality in the Chesapeake Bay and its tributaries. Land use and growth scenarios should be judged on their potential impacts on these areas, and development standards should require avoidance or minimization of adverse effects.

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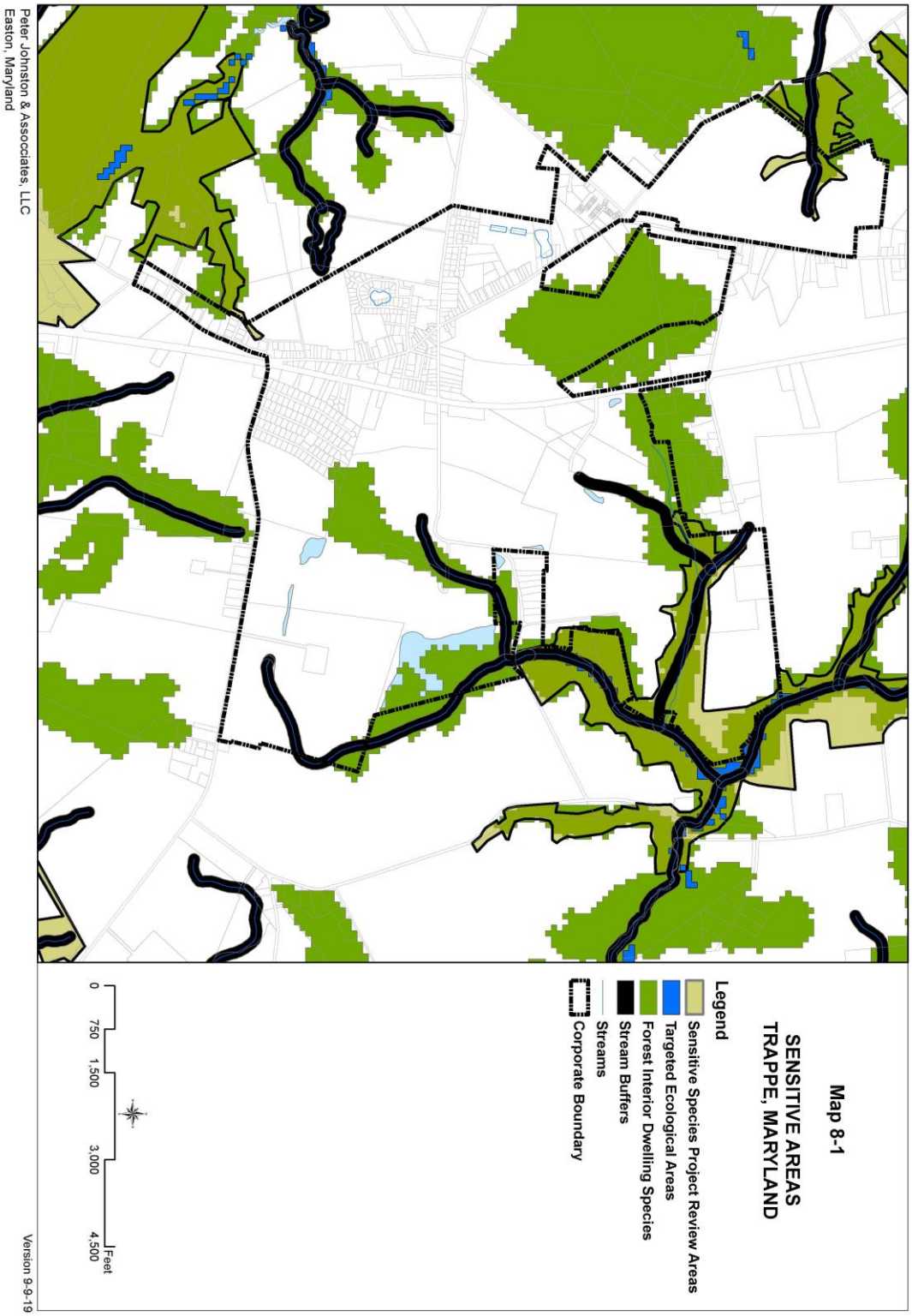
Map 8-1 Sensitive Areas



Streams and Stream Buffers

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 tributaries of Island Creek, LaTrappe Creek, Miles Creek, and Bolingbrook Creek. Where possible a 100-foot stream buffer should be required. However stream buffer regulations should be variable, with less required for the lots that cannot feasibly meet a 100-foot setback and planting requirements similar to the buffer creation standards for the Chesapeake Bay Critical Area for the rest of the stream corridors.

The Trappe zoning ordinance requires a planted buffer located on both sides of stream centers and having an average width of 100 feet. These buffers serve as wildlife corridors and also may be suitable for passive parks and bicycle and walking paths. We will require the installation of best management practices to protect the stream water quality. Appropriate wildlife corridor connections that may be independent of the State and Federal stream buffering requirements may also be required. Wildlife corridors will permit interruptions for collector roads as approved by the planning commission. Frequent crossings and crossings by local streets are to be discouraged.

Sensitive Species Project Review Areas (SSPRA)

The Maryland Department of Natural Resources (DNR) Wildlife and Heritage Division has identified Sensitive Species Project Review Areas (SSPRAs) in all Maryland jurisdictions including Trappe and surrounding area (see Map 8-1). These areas are delineated to indicate potential threats from environmental impacts due to the proximity of certain sensitive species habitat. SSPRA's are buffered areas that primarily contain habitat for rare, threatened, and endangered species and rare natural community types. Created over USGS 7.5 minute topographic quadrangle maps it generally includes but does not explicitly delineate, such regulated areas as Natural Heritage Areas, Wetlands of Special State Concern, Colonial Waterbird Colonies, and Habitat Protection Areas. This data layer was created to provide information to local jurisdictions and state agencies to assist with assessing environmental impacts and reviewing potential development projects or land-use changes.

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. Whenever any development activity is proposed in an SSPRA area, the applicant should be required to consult with DNR staff concerning appropriate management measures.

Threatened and Endangered Species - The Maryland Department of Natural Resources reported that pre-1940 records suggest the presence of Stygobvromus tenius (Potomic amphipod) and Agalinus setacea, (Three-leaved Gerardia). They said, "It is highly unlikely that these species are currently found in Trappe; therefore, there is no need to establish buffer zones or management techniques for these species." If additional forestland is annexed in the future and these areas abut or include areas which are known fox squirrel habitat, the landowners should be

encouraged to retain existing forests and plant native, locally grown species to increase the amount of contiguous forest that used as habitat.

Targeted Ecological Areas (TEAs) - In addition to the more encompassing SSPRAs, DNR has mapped Targeted Ecological Areas (TEAs) TEA's are lands and watersheds of high ecological value that have been identified as conservation priorities by the Maryland Department of Natural Resources (DNR) for natural resource protection. These areas represent the most ecologically valuable areas in the State: they are the "best of the best." TEAs are preferred locations for conservation funding through Stateside Program Open Space.

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 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). Consideration should be given to FIDS habitat when considering the environmental consequences of forest clearing.

Wetlands

Public and private (tidal) wetlands are essential 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 Corps of Engineers and the State of Maryland, Department of Natural Resources, Non-tidal Wetland Division.

According to the National Wetland Inventory (NWI), there are few areas of non-tidal wetlands within the corporate limits of Trappe. Some nontidal wetlands occur within the planning area. These wetlands are primarily located within the stream corridors and are protected by the Town's 100-foot stream buffer policy. The Town will require development to fully comply with applicable State and Federal regulations concerning wetland protection.

Forests

There are approximately 276 acres of forest within the corporate limits of Trappe and nearly 1,200 acres in the vicinity of the Town (see Map 8-3). Forests and woodlands 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 marine ecosystem from harmful temperature fluctuations by decreasing the amount of light which reaches the water's surface. The ability of woodlands to reduce 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. Tree trunks, branches, and leaves store carbon. While young, actively-growing re-growth forests take in the largest amounts of carbon dioxide from the air, older and mature forests are an essential storehouse for carbon.

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. Forest clearing is regulated by the Maryland Department of Natural Resources but implemented and administered by local governments. The intent is to maximize the benefits of forests and slow the loss of forest land while allowing development to take place.

Forest Conservation requirements are administered in Trappe by DNR. 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.

Agricultural Land

Much of the land in the lower portions of Talbot County is very productive agricultural soil. Two agricultural parcels totaling about 300 acres that extend into the west side of town have agricultural district status. An additional 2,200 acres are also in agricultural districts in the areas immediately adjacent to our planning area. Of these lands, 1,350 acres have been protected through sales of development easements. An additional 86 acres off Howell Point Road within Trappe's Planning Area are within a MALPF district but not permanently preserved at this time.

The Town of Trappe will continue to encourage the creation of a "Greenbelt" of protected farmland surrounding the Trappe Development Area (see Map 3-2). Trappe has amended its development area to not encroach upon areas southwest of town that is in active agriculture use and considering preservation opportunities. The goal is to create a preservation barrier that encircles and defines the planning area in the future.

Mineral Resources Element

The Town of Trappe has a 52.3 acre permitted surface mine located within the corporate limits and identified in Figure 8-1. The surface mine permit is reviewed and renewed annually by the Maryland Department of the Environment, Water Management Administration, Minerals, Oil and Gas Division.

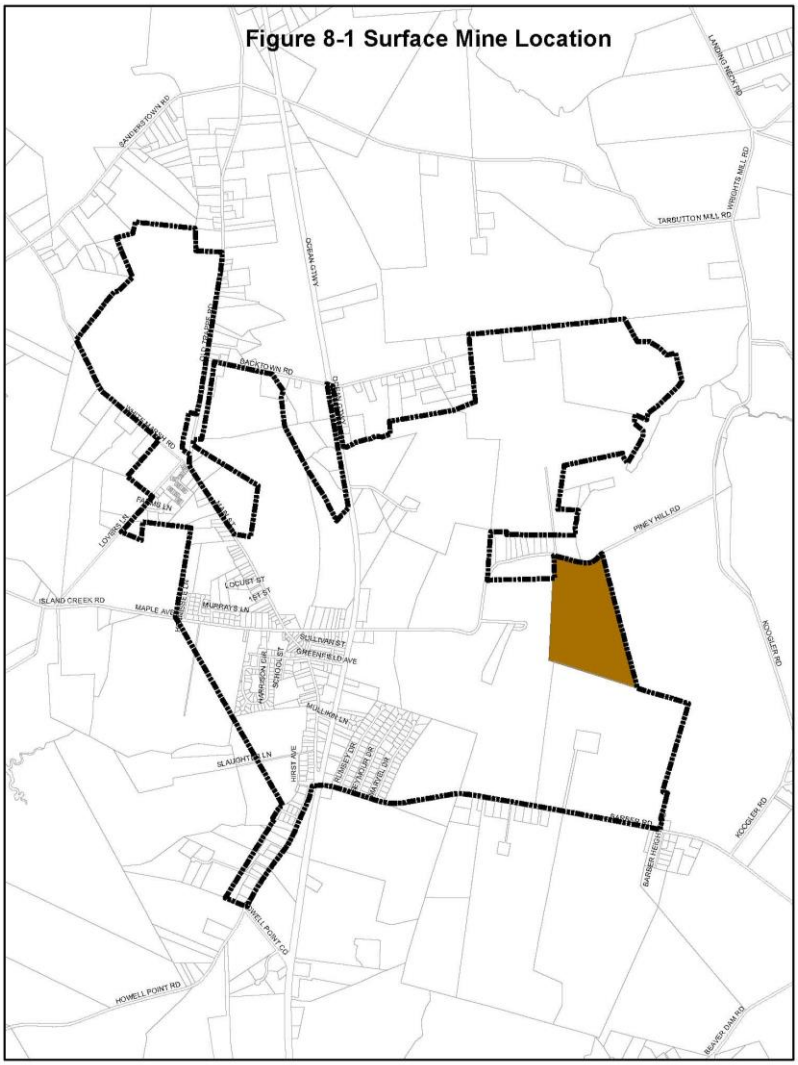
The surface mine has operated at the current location for over 20 years extracting bank run gravel and sand for construction uses. Before the annexation of the property in 2003, the pit operated as an approved surface mining activity under the authority of the Talbot County Zoning

Code. The surface mine is currently inactive and has an approved Surface Mine Reclamation Plan. The approved Reclamation Plan permits the removal of approximately 150,000 cubic feet of material to be stockpiled and reused for the construction of roadways and other structural fill applications. There are currently 26.4 acres of disturbed area. The reclaimed surface mine will be converted to a permanent recreational lake amenity and also serve as a regional stormwater management facility.

The stormwater management capabilities of the reclaimed mine will manage the 100-year design storm for both the existing land use and the permitted future land uses of the contributing drainage area. The Lakeside PN District approved Master Plan includes the recreational lake and permanent stormwater management facility resulting from the reclamation of the surface mine. Once the mine has been completely reclaimed per the approved Reclamation Plan, there will be no more active mining and the surface mining permit will be terminated.

An additional surface mining facility is located in the southeastern portion of the Town's Planning Area, outside of the corporate limits.

Figure 8-1 Surface Mine Location



CHAPTER 9 IMPLEMENTATION ELEMENT

Introduction

The implementation element supports and addresses the State's visions by setting guiding implementation principles and strategies we will continue to follow. The implementation strategies outlined in this section reflect "best estimates" of future conditions however fraught with potential errors concerning assumptions they may be. Trappe's future scenarios presented herein are nevertheless represented in the plan elements, especially the land use, municipal growth, and water resources elements. We are not so convinced by the narratives concerning possible futures for Trappe into believing they are the only way things can go. Where we see growth, there may be a decline. Where we see limited possibilities, there may be dramatic unforeseen change. What we will strive most for in our implementation strategies is to avoid being fooled by random, unexpected, and unknown events. We will emphasize asymmetrical strategies, ones that have the potential for positive upside benefits, and low negative downside impacts. We will be cautious of significant expenditures on capital improvements where the return on investment is assumed in contradiction to current market trends or where a significant, unforeseen event could leave us with stifling public debt. We will make "small" bets that even if we lose will not have a substantial effect on our community.

Critical Review

Stimulation or thwarting of private investment is affected by local development codes. Successfully balancing legitimate public health, safety, and welfare concerns with private entrepreneurial trends require, among other things, not being blind to changing consumer preferences for housing, services, economic opportunities, and community amenities. The Town will continue to review and reevaluate its zoning ordinance, subdivision regulations, policies and procedures in light of current community needs and projected market trends. As with any ordinances and regulations, there will be inevitable adjustments and revisions as we learn from their application. We will continue to work toward the following objectives:

- Simplify development codes;
- Streamline review of applications for development and redevelopment;
- Encourage revitalization and redevelopment of the existing village;
- Provide opportunities for a variety of housing types;
- Encourage economic redevelopment and opportunities, including small business development and high-tech jobs and employment opportunities that do not require significant commuting;
- Encourage sustainable development practices and eco-friendly approaches to living, including recycling, and alternative transportation such as bicycling and pedestrian walkways, and public transportation; and

- Work with the State and County to encourage the establishment of a permanent greenbelt, including the acquisition of conservation easements.

Infill and Redevelopment

We will revise regulations to encourage infill and redevelopment in places where infrastructure with sufficient capacity to support new uses already exists. We will review our current development codes to identify impediments to context-appropriate infill and renewal and to institute measures to streamline development review processes and support innovative techniques to grow our local economy. We will adopt a new attitude toward mixed uses and emphasize design versus density.

We will support appropriate context land uses that result in financially resilient, architecturally appropriate, and socially enduring neighborhoods that create the highest amount of tax revenue with the least amount of public expense over multiple life cycles. The Town will look for ways to ratchet up value in existing residential areas by encouraging context-appropriate infill and redevelopment and allowing alternative forms of residential units suited to the needs of existing and future residents.

Increase Housing Choice

Our land is the base resource from which community prosperity is built and sustained and will not be squandered. We will explore ways to expand housing opportunities for all ages and incomes through a range of allowed dwelling types. We will consider ways to create housing choices in the context of each generation's preferences, options that support age and income diversity and emphasize the design of neighborhoods for safe, independent living at all stages of life as opposed to rigid adherence to existing patterns.

Financial Solvency

Financial solvency is a prerequisite for long term prosperity. We will ensure that revenues collected cover or at least comes close to the real costs of maintaining and replacing infrastructure. Wherever possible, we will strive to reduce costs associated with land use, transportation and development, and reinvest these savings to strengthen the Town's long-term position in the region.

Smart Transportation Planning

We will view our transportation system as a means of creating prosperity in the community, not an end unto itself. We will look for roads to move traffic safely at high speeds outside of neighborhoods and urban areas. Within neighborhoods and urban areas, we require streets that equally accommodate the full range of transportation options available to residents. Capital programming for our existing streets will not be compromised by undervaluing the street's multi-modal function in favor of the perceived needs of the auto for access, speed, and parking. To make transportation systems more efficient and affordable, to create economic opportunity and

to enhance the community, the Town will consider regulations that allow mixed-use, with properly-scaled residential and commercial development.

Land Use Patterns

The value of a street comes from its ability to support land-use patterns that create a positive financial return. The street with the highest value is the one that creates the greatest amount of tax revenue with the least amount of public expense over multiple life cycles. In our review of current zoning standards, we will modify criteria to maximize value along our streets within the context of the overall objective of creating compact, walkable neighborhoods.

Economic Growth

Job creation and economic growth are the results of a healthy local economy. Our regulation should encourage and support small businesses and facilitate the creation of an economically vibrant and diverse local economy, one that allows for financially-sound business creation. Due to the nature of small business startup, some will fail. However, due to their small scale and diversity, these failures will have a minimal adverse effect on the overall economy. It is the difference between having a plant that employs hundreds of workers fail versus numerous small businesses with a few employees that fail. It's the difference between having to find a tenant to re-occupy a 100,000 square foot plus big box store on a large acreage as opposed to a tenant to re-occupy a 1,200 square foot mom and pop shop on a small lot. Where zoning and other regulations impede small business formation, we will look for ways to increase flexibility and not be afraid to try and fail on a small scale.

Sensitive Areas

We will require stormwater and sensitive area best management practices that build on and mimic natural systems. Natural designs are the most effective means of controlling flooding and protecting sensitive environmental features. Human-made solutions, like the levees in New Orleans, are a poor substitute for the protection offered by natural system features like the mitigating effect of wetlands on flooding and erosion, or the simple solution of not occupying spaces that will be periodically underwater. The unforeseen and devastating costs of the loss of human life and property to the City of New Orleans and the nation as a consequence of Hurricane Katrina illustrate the notion of the effect of the unknown event that could occur, the unprecedented and unexpected "Black Swan" event.[17]

The future of humankind may not be dependent on any particular species' survival or broad species diversity, but it may be. We don't know. Taking low-cost and straightforward precautions to protect the other forms of life that inhabit the region is a way to "hedge our bets." We benefit from high upside outcomes, like saving the human race, against low downside consequences, e.g., taking land for buffers, stormwater management, and habitat protection out of the development envelope or not allowing development in the floodplain.

[17] The black swan theory or theory of black swan events is a metaphor that describes an event that comes as a surprise, has a major effect, and is often inappropriately rationalized after the fact with the benefit of hindsight.

The Department of Natural Resources (DNR) Fishing and Boating Services Unit studies of the impacts of development on Fisheries indicate that increased development in a watershed is associated with stressors that limit healthy fish habitat. Habitat conditions that favor tidal fisheries are maintained in rural watersheds where the impervious surface is less than 5% (0-0.37 units per hectare). In basins with 5-10% (0.37-0.86 units per hectare) impervious cover, habitat begins to decline, requiring more aggressive management of fisheries to compensate for habitat losses. Fisheries management options are limited in watersheds when the impervious cover is higher than 10% (> 0.86 units per hectare). While there are many restoration options that can be applied to restore streams and stream habitat, we have no current data to suggest they effectively restore tidal fisheries habitat to support recovery of lost functions essential to supporting healthy fisheries. Therefore to date, the most successful strategy to maintain healthy fisheries is to keep the rural character (farms and forests) of watersheds. The Town should work with Talbot County and the Department of Natural Resources to project future impervious cover at build-out in the basins. Such an assessment will provide valuable insight into future habitat conditions and can be applied to reinforce the need to concentrate growth away from rural landscapes and limit present sprawl development in these areas.

Public Spaces

Another low cost but high return strategy is providing for a system of interconnected parks, greens, squares, and civic buildings that offer value to property owners within the community, enhance the public realm, create memorable landscapes and provide for spontaneous gatherings. This strategy not only has the potential to create property value but also to support public interaction and involvement in the business of being a town. We will require the design of new neighborhoods include public realm improvements that support this strategy.

Sustainable Communities

Trappe is a participating community in the Maryland Sustainable Communities program. Maryland's sustainable community is designed to encourage interagency and cross-governmental collaboration by providing designated communities with the opportunity to access an interagency revitalization toolbox of financing programs and tax credit incentives. The strategies outlined in the Trappe's sustainable community program implement many of the objectives outlined in the Comprehensive Plan. These include:

<u>Community facilities</u>

- Complete the improvements at Nace Park;
- Create a single-stream recycling program; and
- Complete implementation of a stormwater strategy to increase drainage in the most impacted sites and projects.

Economic Development

- Recruit new small businesses to town;
- Increase designated parking for business by establishing additional parking lot on empty parcel close to shops; and
- Work with MDOT/SHA and Talbot County to improve information signage along highways.

Transportation

- Create and improve pedestrian connectivity to downtown.

Cultural

- Enlist citizen workgroups to explore ways to increase the promotion of cultural activities, improve the pedestrian experience, and increase year-round activities for youth.

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APPENDIX A COMMUNITY PROFILE

A demographic and socio-economic profile of who is living in Trappe helps understanding of the town's live/work environment as compared with the surrounding areas – information that may suggest strategies local officials can employ to improve conditions or address anomalies.

Population

Population trends track a community's growth, and data on social, housing, and economic characteristics can reveal patterns that may indicate future conditions. Population growth in the surrounding area also is indicative of potentially significant trends that affect growth of the community.

While Talbot County was experiencing a positive annualized yearly growth rate of 1.12 percent during the decade 2000 to 2010, Trappe, on the other hand, was losing population at an annualized rate of nearly two percent (see Table A01).

Table A01: Population trends 2000 - 2010

	2000	2010	Chg.	% Chg
Talbot County	33,812	37,782	3,970	11.74%
Trappe	1,312	1,077	- 235	-17.91%

Source: U.S. Census Bureau

Recent estimates by the U.S. Census Bureau for Trappe and Talbot County indicate continuing population decline for Trappe as well as a downward trend in population growth for Talbot County (see Table A02).

Table A02: Annual estimates of the resident population: April 1, 2010 to July 1, 2017

	2010	2011	2012	2013	2014	2015	2016	2017
Trappe	1,077	1,062	1,053	1,042	1,021	1,017	1,003	1,002
Talbot County	37,782	37,949	37,991	37,910	37,582	37,507	37,204	37,103

Source: U.S. Census Bureau, Population Division

It also is useful to consider how Talbot County's historical population growth patterns have affected growth in Trappe. Trappe's share of Talbot County's population growth rose steadily through 2000 (see Table A03) with a significant drop off in the period 2000 to 2010. The more recent estimates in Table A02 indicate that Trappe's population continues to decline as a percentage of the County population.

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Table A03: Trappe population as a share of Talbot County

Year	Population Trappe	Population Talbot	Town as a Percentage of the County Population
1970	426	23,682	1.80%
1980	739	25,604	2.89%
1990	974	30,549	3.19%
2000	1,146	33,812	3.39%
2010	1,077	37,782	2.85%

Source: Population Division US Census

Any number of reasons could explain Trappe's declining share of County population growth including lack of land available for residential development, location relative to metropolitan centers and major employers and/or factors related to consumer preferences.

Relative to the State, Trappe and Talbot County have kept pace with or exceeded population growth rates of the State through the end of the millennium (see Table A04). Trappe and Talbot County's growth rates in the period 1970 to 1990 exceeded that of the State with significant differences between the State and Trappe extending into the 1990 to 2000 period. After 2000 Trappe's growth rate relative to the County and State dropped considerably. This dramatic shift was likely due to a general decline in housing demand on the Eastern Shore in the wake of the housing bubble burst starting in 2006.

Table A04: Population Growth Rates

Year	Trappe	Talbot County	Maryland
1970-1980	5.66%	0.78%	0.72%
1980-1990	2.80%	1.78%	1.26%
1990-2000	1.64%	1.02%	1.03%
2000-2010	-0.62%	1.12%	0.87%

Source: U.S. Census Bureau, Maryland Department of Planning, Peter Johnston & Associates, LLC

Social Characteristics

Age

The age distribution of Trapp's population differs from that of Talbot County with a higher percentage of the population in the range of 5 years to 49 years of age (see Table A05). The median age in Trapp in 2010 was considerably lower than that of the County. The fact that Trappe had a smaller percentage of the population 65 years and older may indicate that Trappe attracts less population of retirement or pre-retirement age than that of the County possibly due to the types of housing options and amenities offered.

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The age distribution of Trapp's population compared to the State in 2010 showed lower relative percentages of children 5 years to 14 years and labor force aged adults 30 years to 44 years. Trappe's median age was only slightly higher than that of the State and Talbot County.

Table A05: Age Characteristics 2010

	Trappe	Talbot County	Maryland
Total Population	1,077	37,782	5,773,552
Under 5 years	6.90%	4.90%	6.30%
5 to 9 years	5.80%	5.50%	6.40%
10 - 14 years	5.50%	5.50%	6.60%
15-19 Years	7.40%	5.60%	7.00%
20-24 years	6.10%	4.60%	6.80%
25 - 29 years	7.50%	4.80%	6.80%
30 to 34 years	5.90%	4.30%	6.40%
35- 39 years	5.50%	5.10%	6.50%
40 to 44 years	6.60%	6.10%	7.20%
45 to 49 years	8.40%	7.40%	8.00%
50 to 54 years	7.10%	7.30%	7.60%
55 to 59 years	7.10%	7.50%	6.50%
60 to 64 years	7.40%	7.70%	5.50%
65 to 69 years	5.10%	7.30%	3.90%
70 to 74 years	3.20%	5.60%	2.80%
75 to 79 years	2.40%	4.20%	2.20%
80 to 84 years	1.00%	3.20%	1.70%
85 and over	0.80%	2.20%	1.70%
Median age (years)	39.5	47.4	38

Source: U.S. Census Bureau, 2010 Census.

<u>Sex</u>

The male and female distribution of Trappe's population in 2010 was similar to that of Talbot County and Maryland (see Table A06). Trappe's male to female ratio for the population segment 18 years and over was comparable to the State and County (see Table A07) with Trappe and Talbot having a slightly higher percentage of females. In the population segment, 65 years and over Trappe had a somewhat higher rate of females than that of the County.

Table A06: Sex distribution 2010

Sex	Percent of population		
Male	48%	48%	48%
Female	52%	52%	52%

Source: U.S. Census Bureau, 2010 Census

Table A07: Select sex characteristics

	Trappe	Talbot County	Maryland
18 years and over	100%	100%	100%
Male	47%	47%	48%
Female	53%	53%	52%
65 years and over	100%	100%	100%
Male	42%	45%	42%
Female	58%	55%	58%

Source: U.S. Census Bureau, 2010 Census.

Race

The population of one race was comparable to that of the County and State (see Table A08). The percentage classified as white was lower than that of the State and much lower than that of the County. Trappe has a higher percentage of the population classified as Black or African American than that of the County and comparable to that of the State.

Table A08: Race

	Trappe	Talbot	Maryland
Total population	1,077	37,782	5,773,552
One race	98%	98%	97%
White	65%	81%	58%
Black or African American	28%	13%	29%
American Indian and Alaska Native	1%	0%	0%
American Indian, specified [1]	0%	0%	0%
Alaska Native, specified [1]	0%	0%	0%
Both American Indian and Alaska Native, specified [1]	0%	0%	0%
American Indian or Alaska Native, not specified	1%	0%	0%
Asian	1%	1%	6%
Some Other Race	2%	3%	4%
Two or More Races	2%	2%	3%
Two races without Some Other Race	2%	1%	2%

Source: U.S. Census Bureau, 2010 Census

Hispanic or Latino

The percentage of the Hispanic or Latino population in Trappe 2010 was slightly higher than that of the County and lower than that of the State (see Table A09). This characteristic may have

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been because rents were somewhat more economical and a higher percentage of housing units were available for rent in Trappe.

Table A09: Hispanic or Latino Origin

	Trappe	Talbot	Maryland
Total population	1,077	37,782	5,773,552
Hispanic or Latino (of any race)	6.3%	5.5%	8.2%
Mexican	1.9%	1.8%	1.5%
Puerto Rican	1.4%	0.4%	0.7%
Cuban	0.0%	0.1%	0.2%
Other Hispanic or Latino [2]	3.1%	3.2%	5.7%
Not Hispanic or Latino	93.7%	94.5%	91.8%

Source: U.S. Census Bureau, 2010 Census

Education

Most recent estimates indicate that a higher percentage of the population of Trappe 25 years and over have less than a 9th-grade education as compared to the County or State but a slightly higher rate that graduated high school or had attained a high school equivalency. Overall it was estimated that Trappe had a lower overall percentage of population 25 years and older that had graduated school or went on to higher education attainment (see Table A10). The percentage of the population with post-graduate degrees was half that of the County and State.

Table A10: Educational attainment

	Trappe	Talbot County	Maryland
Population 25 years and over	100%	100%	100%
Less than 9th grade	5%	4%	4%
9th to 12th grade, no diploma	7%	7%	6%
High school graduate (includes equivalency)	38%	26%	25%
Some college, no degree	24%	21%	19%
Associate's degree	8%	7%	6%
Bachelor's degree	10%	19%	21%
Graduate or professional degree	8%	17%	18%
Percent high school graduate or higher	88%	89%	90%
Percent bachelor's degree or higher	18%	36%	38%

Source: U.S. Census Bureau, 2010 Census

Households and Families

The average household size in Trappe in 2010 was higher than that of the County and lower than the State's (see Table A11). The average family size was higher than that of the Talbot County but smaller than the State figure.

Table A11: Average household and family size 2010

	Trappe	Talbot County	Maryland
Average household size	2.48	2.31	2.61
Average family size	2.91	2.80	3.15

Source: U.S. Census Bureau, 2010 Census.

Overall, Trappe's mix of family household types was comparable to that of the State but not that of the County (see Table A12). Family households were the dominant type in Trappe in 2010 and on average were larger than other households. Compared to the County, Trappe had a higher percentage of family households and male and female householders with no spouse present.

Table A12: Households and families by type 2010

	Trappe	Talbot County	Maryland
Total households	100%	100%	100%
Family households (families)	69%	66%	67%
Husband-wife family	48%	52%	48%
Male householder, no wife present, family	6%	4%	5%
Female householder, no husband present, family	15%	10%	15%
Nonfamily households	31%	34%	33%
Householder living alone	24%	28%	26%
65 years and over	2%	4%	2%

Source: U.S. Census Bureau, 2010 Census

As the County and State, Trappe's householders were more likely to have moved into their unit before 2004, a date that roughly corresponds to the slowdown of the housing market in the country (see Table A13). It also indicates that residency in the Town is more likely to have occurred in the period between 1990 and 2004.

Table A13: Year householder moved into unit

	Trappe	Talbot County	Maryland
Occupied housing units	100%	100%	100%
Moved in 2005 or later	4%	4%	5%
Moved in 2000 to 2004	35%	27%	30%
Moved in 1990 to 1999	31%	36%	33%
Moved in 1980 to 1989	12%	15%	16%
Moved in 1970 to 1979	11%	8%	8%
Moved in 1969 or earlier	8%	9%	8%

Source: U.S. Census Bureau, 2006-2010 American Community Survey

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Housing Characteristics

According to the 2010 Census, housing occupancy characteristics for Trappe showed a higher percentage of renter-occupied units than that of Talbot County or Maryland (see Table A14). More recent estimates indicate that owner-occupied units as a percentage of all occupied units have decreased to approximately 56 percent, and renter-occupied units have increased proportionately (see Table A15). In general, Trappe had lower vacancy rates than Talbot County and Maryland in both the owner-occupied and renter-occupied categories (see Table A16)

Table A14: Housing Occupancy 2010

	Trappe	Talbot County	Maryland
Occupied housing units	100%	100.0%	100%
Owner occupied	66%	72.1%	68%
Owned with a mortgage or loan	53%	48.4%	53%
Owned free and clear	13%	23.7%	14%
Renter occupied	34%	27.9%	32%

Source: U.S. Census Bureau, 2010 Census

Table A15: Housing Occupancy Estimates 2012-2016

	Trappe	Talbot County	Maryland
Occupied housing units	100%	100%	100%
Owner-occupied	56%	69%	66%
Renter-occupied	44%	31%	34%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table A16: Housing Occupancy 2012-2016

	Trappe	Talbot County	Maryland
Total housing units	100%	100%	100%
Occupied housing units	96%	82%	90%
Vacant housing units	4%	18%	10%
Homeowner vacancy rate	1.5%	2.5%	1.7%
Rental vacancy rate	1.9%	3.8%	6.3%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Like Talbot County, less so like the State, a significantly higher percentage of the housing in Trappe was classified as 1 unit detached (See Table A17). Uncharacteristic for small towns on the Eastern Shore, the portion classified as 5 to 9 apartments was much higher than that of the County and State.

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Table A17: Units in structure

	Trappe	Talbot County	Maryland
Occupied housing units	467	16,481	2,177,492
1, detached	68%	77%	53%
1, attached	4%	6%	21%
2 apartments	3%	2%	1%
3 or 4 apartments	8%	4%	2%
5 to 9 apartments	16%	5%	5%
10 or more apartments	0%	3%	16%
Mobile home or other types of housing	2%	2%	1%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

According to recent estimates, half of the housing units in Trappe had fewer rooms than that of the County and State. At the same time, Trappe housing units were more likely to have two rooms and between 4 and 5 rooms, and less likely to have more than five rooms than the recorded for Talbot County or the State (see Table A18). Units with more than five rooms are likely to be older units as Trappe did not see a great deal of new construction in the years when generally larger housing units were being built.

Table A18: Rooms in housing units

	Trappe	Talbot	Maryland
Total housing units	100%	100%	100%
1 room	0%	1%	1%
2 rooms	7%	2%	2%
3 rooms	5%	6%	7%
4 rooms	17%	11%	13%
5 rooms	18%	14%	15%
6 rooms	16%	18%	17%
7 rooms	18%	16%	14%
8 rooms	5%	13%	11%
9 rooms or more	16%	19%	20%
Median rooms	5.7	6.4	6.2

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

According to U.S Census estimates the housing stock in Trappe tends to be older than that of the County or State. Over 90 percent of housing units were built before 2000, and none were listed as being built after 2009 (see Table A19). A significant percentage of housing units were built in the period 1970 to 1999. Over 70 percent of the housing stock in 2016 was 30 years old or older.

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Table A19: Year Built

	Trappe	Talbot County	Maryland
Total housing units	100%	100%	100%
Built 2014 or later	0%	1%	0%
Built 2010 to 2013	0%	1%	2%
Built 2000 to 2009	9%	18%	12%
Built 1990 to 1999	20%	17%	14%
Built 1980 to 1989	16%	15%	16%
Built 1970 to 1979	22%	13%	14%
Built 1960 to 1969	7%	8%	12%
Built 1950 to 1959	4%	8%	12%
Built 1940 to 1949	5%	4%	6%
Built 1939 or earlier	17%	15%	12%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

The median value of owner-occupied housing in Trappe was estimated to be 43 percent less as compared to Talbot County and 23 percent less as compared to the State in the period 2012 to 2016 (see Table A20). Housing valued at less than $300,000 made up over three-quarters of owner-occupied housing in this period compared to 46 percent and 52 percent for Talbot and Maryland respectively.

Table A20: Housing values owner-occupied units

	Trappe	Talbot	Maryland
Owner-occupied units	100%	100%	100%
Less than $50,000	0%	3%	4%
$50,000 to $99,999	6%	4%	4%
$100,000 to $149,999	12%	4%	7%
$150,000 to $199,999	23%	10%	12%
$200,000 to $299,999	36%	25%	26%
$300,000 to $499,999	15%	28%	30%
$500,000 to $999,999	6%	15%	15%
$1,000,000 or more	2%	11%	3%
Median (dollars)	224,500	320,500	290,400

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Estimated median gross rents in Trappe were reasonably comparable to Talbot County and over $200 per month lower than the State median gross rent. The percentage of gross rents less than $2,000 was significantly more than that of the State and somewhat more than that of Talbot County.

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Table A21: Gross Rent

	Trappe	Talbot	Maryland
Occupied units paying rent	100%	100%	100%
Less than $500	0%	8%	8%
$500 to $999	43%	39%	22%
$1,000 to $1,499	53%	39%	37%
$1,500 to $1,999	4%	8%	21%
$2,000 to $2,499	0%	3%	8%
$2,500 to $2,999	0%	2%	2%
$3,000 or more	0%	2%	2%
Median (dollars)	1,046	1,031	1,264

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Estimates indicate that Trappe residents were more likely to pay 35 percent or more of their household income as gross rent than estimated for Maryland while at the same time having a higher percentage of residents paying less than 25 percent of household income as gross rent than calculated for Maryland (see Table A22). Comparisons to Talbot County would not be reliable given the higher percentage of occupied units paying rent not computed.

Table A22: Gross rent as a percentage of household income (GRAPI)

	Trappe	Talbot	Maryland
Occupied units paying rent*	100%	100%	100%
Less than 15.0 percent	8%	16%	11%
15.0 to 19.9 percent	3%	14%	13%
20.0 to 24.9 percent	21%	6%	14%
25.0 to 29.9 percent	12%	15%	12%
30.0 to 34.9 percent	5%	12%	9%
35.0 percent or more	51%	37%	41%
Not computed	6%	85%	6%

*excludes units where GRAPI cannot be computed
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Selected monthly owner costs are calculated from the sum of payment for mortgages, real estate taxes, various insurances, utilities, fuels, mobile home costs, and condominium fees. Estimated selected monthly owner costs for housing units with a mortgage were lower in Trappe as compared to the County and State. Conversely estimated selected monthly owner costs for housing units without a mortgage were higher in Trappe as compared to the County and State (see Table A23 and 24). An explanation may be that Trappe residents pay higher water and

sewer costs, whereas Talbot and State residents have higher valued housing and thus pay higher mortgage costs.

Table A23: Selected monthly owner costs (SMOC) housing units with a mortgage

	Trappe	Talbot	Maryland
Housing units with a mortgage	100%	100%	100%
Less than $500	0%	1%	1%
$500 to $999	13%	15%	8%
$1,000 to $1,499	23%	23%	19%
$1,500 to $1,999	31%	23%	25%
$2,000 to $2,499	23%	14%	19%
$2,500 to $2,999	6%	7%	12%
$3,000 or more	4%	16%	17%
Median (dollars)	1,645	1,710	1,938

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table A24: Selected monthly owner costs (SMOC) housing units without a mortgage

	Trappe	Talbot	Maryland
Housing units without a mortgage	100%	100%	100%
Less than $250	3%	5%	5%
$250 to $399	3%	18%	15%
$400 to $599	31%	35%	33%
$600 to $799	36%	20%	24%
$800 to $999	11%	9%	12%
$1,000 or more	15%	12%	11%
Median (dollars)	658	555	586

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Economic Characteristics

Recent Census Bureau estimates indicate a higher percentage of Trappe's population 16 years and over were in the labor force during the period 2012 through 2016. During the same period, a higher rate of Trappe's civilian labor force was unemployed (see Table A25).

Table A25: Employment Status

	Trappe	Talbot	Maryland
Population 16 years and over	100%	100%	100%
In labor force	77%	59%	68%
Civilian labor force	77%	59%	68%
Employed	71%	56%	63%
Unemployed	7%	4%	5%

Table A25: Employment Status

	Trappe	Talbot	Maryland
Armed Forces	0%	0%	1%
Not in labor force	23%	41%	32%
Civilian labor force	77%	59%	68%
Unemployment Rate	8.6%	6.0%	6.7%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

The majority, 93 percent, of the civilian labor force 16 years and over in Trappe were employed in the following industry categories (see Table A26):

- Administrative and support and waste management services;
- Educational services;
- Retail trade;
- Construction;
- Health care and social assistance;
- Professional, scientific, and management, and administrative and waste management services; and
- Educational services and health care and social assistance:

Like Talbot County and Maryland's civilian labor force, nearly a quarter was employed in the health care and social assistance industry category.

Table A26: Industry for civilian employed population over 16 years of age

	Trappe	Talbot	Maryland
Civilian employed population 16 years and over	100%	100%	100%
Agriculture, forestry, fishing and hunting, and mining:	1%	2%	1%
Construction	14%	8%	7%
Manufacturing	7%	5%	5%
Wholesale trade	1%	2%	2%
Retail trade	11%	11%	10%
Transportation and warehousing, and utilities:	4%	4%	4%
Information	1%	1%	2%
Finance and insurance, and real estate and rental and leasing:	3%	6%	6%
Professional, scientific, and management, and administrative and waste management services:	15%	13%	15%
Educational services and health care and social assistance:	26%	24%	24%
Arts, entertainment, and recreation, and accommodation and food services:	6%	12%	8%
Other services, except public administration	5%	6%	5%

Table A26: Industry for civilian employed population over 16 years of age

	Trappe	Talbot	Maryland
Public administration	4%	5%	11%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Recent estimates of Trappe's occupations of the civilian labor force 16 years and over indicate over one third are categorized as either natural resources, construction, and maintenance or production, transportation, and material moving occupations (see Table A27). A significant difference between Trappe and Talbot County and Maryland is management, business, science, and arts occupations.

More specifically for Trappe, in the management category over a third was education, legal, community service, arts, and media occupations. In the service category, nearly one-half of the professions was building and grounds cleaning and maintenance occupations. In the sales and office category, over three-quarters of the occupations were office and administrative support occupations. Construction and extraction occupations dominated the category natural resources, construction, and maintenance occupations. Production occupations and material moving occupations were over 80 percent of the production, transportation, and material moving occupations.

Table A27: Occupation For the Civilian Employed Population 16 Years and Over

	Trappe	Talbot	Maryland
Civilian employed population 16 years and over	100%	100%	100%
Management, business, science, and arts occupations	28%	42%	45%
Service occupations	23%	19%	17%
Sales and office occupations	24%	22%	22%
Natural resources, construction, and maintenance occupations	14%	11%	8%
Production, transportation, and material moving occupations	12%	7%	8%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

The majority of the civilian labor force 16 years and overworked in Talbot County and less than the average for the County or State worked outside the State (see Table A28). The percentage that worked in their place of residence also was generally lower than that of the County or State (see Table A29)

Table A28: Workplace of workers 16 years and over

	Trappe	Talbot	Maryland
Worked in state of residence	99%	94%	83%
Worked in county of residence	80%	70%	54%
Worked outside county of residence	19%	24%	30%
Worked outside state of residence	1%	6%	17%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table A29: Workplace of workers 16 years and over

	Trappe	Talbot	Maryland
Living in a place	100%	57%	83%
Worked in place of residence	11%	28%	17%
Worked outside place of residence	90%	29%	66%
Not living in a place	0%	43%	17%

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Trappe exhibited lower values for most estimates of household and family income, including average household and family income and per capita income as compared to Talbot County and Maryland (see Tables A30 and A31).

Table A30: Household Income and benefits (in 2016 inflation-adjusted dollars)

	Trappe	Talbot	Maryland
Total households	100%	100%	100%
Less than $10,000	5%	6%	5%
$10,000 to $14,999	5%	4%	3%
$15,000 to $24,999	11%	10%	7%
$25,000 to $34,999	8%	9%	7%
$35,000 to $49,999	13%	13%	10%
$50,000 to $74,999	24%	18%	17%
$75,000 to $99,999	21%	12%	13%
$100,000 to $149,999	9%	16%	18%
$150,000 to $199,999	2%	5%	9%
$200,000 or more	1%	8%	10%
Median household income (dollars)	62,853	61,395	76,067
Mean household income (dollars)	62,440	91,003	100,071

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Table A31: Family income and benefits (in 2016 inflation-adjusted dollars)

	Trappe	Talbot Cty.	Maryland
Families	100%	100%	100%
Less than $10,000	0%	3%	3%
$10,000 to $14,999	3%	2%	2%
$15,000 to $24,999	9%	6%	4%
$25,000 to $34,999	4%	7%	6%
$35,000 to $49,999	13%	12%	9%
$50,000 to $74,999	30%	20%	16%
$75,000 to $99,999	25%	14%	14%
$100,000 to $149,999	13%	19%	21%

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Table A31: Family income and benefits (in 2016 inflation-adjusted dollars)

	Trappe	Talbot Cty.	Maryland
$150,000 to $199,999	2%	6%	12%
$200,000 or more	1%	10%	13%
Median family income (dollars)	67,212	75,315	92,049
Mean family income (dollars)	71,349	107,477	116,461
Per capita income (dollars)	23,797	40,533	37,756

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

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