RESOLUTION 1-2010

A RESOLUTION OF THE COUNCIL OF TRAPPE ADOPTING THE COMPREHENSIVE PLAN FOR THE TOWN OF TRAPPE

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

WHEREAS, in accordance with <u>Md. Code Ann.</u> Article 66B, § 3.07(b) after duly advertised public hearings, an updated Comprehensive Plan for the Town of Trappe has been approved by the Trappe Planning Commission, duly certified and recommended to the Council of Trappe for adoption;

NOW, THEREFORE, BE IT RESOLVED by the Council of Trappe, that the Comprehensive Plan for Trappe, Maryland, dated April, 2010, a copy of which is attached hereto and incorporated by reference herein, be and is hereby adopted as the Comprehensive Plan for Trappe, Maryland.

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

ADOPTED this _____ day of _____, 2010.

Robert Croswell

Walter Chase

Norm Fegel

Rosalee Potter

Richard Dorbin

I hereby certify that the foregoing Resolution Number ______ of the Town of Trappe was duly read and enacted in accordance with the applicable provisions of the Charter of the Town of Trappe.

Attest:

Joedy Cecil, Clerk/Treasurer Town of Trappe

UNCERTIFIED

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Town of Trappe Comprehensive Plan



April 2010

THE TOWN OF TRAPPE 2010 COMPREHENSIVE PLAN

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Introduction

I. AUTHORITY

Article 66B of the Annotated Code of Maryland, entitled Zoning and Planning, delegates basic planning and land use regulatory powers to the Town of Trappe. Accordingly, this Comprehensive Plan for Trappe was prepared in compliance with Sections 3.05, 3.06, 3.07 and 3.08 of the statute. Sections 3.07 and 3.08 address procedures for the Plan's review and adoption.

II. 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 pertaining to 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, ordinance, 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 our zoning ordinance, including our zoning map. The Plan shall be used for making 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.

In order to qualify for state and federal funds, all projects must demonstrate consistency with the Comprehensive Plan, as specified in our adopted project review procedures.

In pursuit of these purposes, the Plan seeks to promote health, safety, order, convenience, prosperity, minimum taxes and the general welfare, as well as efficiency and economy in the development. Our goals include adequate provisions for light and air, traffic, utilities, and other public requirements. The Plan also promotes the 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.

III. TWELVE VISIONS

The content, focus, and thrust of the Trappe Comprehensive Plan are guided by the following twelve visions identified in Article 66B, Section 1.01, which provide the framework for growth management and sound planning within Trappe and its environs:

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 will concentrate development in suitable areas, and we will work with Talbot County to ensure growth is directed to existing population centers and that resource areas are protected.

4) We will continue to adhere to community design that embraces the core of Trappe, and ensure that new development and redevelopment is compact, includes a mixture of uses, where appropriate, and includes a walkable design consistent with the existing community character, including open spaces and recreational areas, while maintaining any 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 promote 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, and will protect our sensitive areas and ensure that our land, water and natural resources are utilized appropriately.

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 promote 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.

IV. SCOPE

The Comprehensive Plan deals with growth and development of the Trappe planning area for the next ten to fifteen 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 be undertaken at regular six-year intervals.

Our Comprehensive Plan is not intended to be a rigid set of specifications forcing specific development projects. It is intended, rather, to be a practical guide to assist development decisions and provide continuity of vision about the character, location, and types of future land uses. 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 2002. In preparing this Plan, the Town reviewed the Talbot County Comprehensive Plan, adopted in February, 2005, 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.

V. PLANNING AREA

We have established a planning area of about 710 acres. It extends beyond Town limits to include parcels that we think will have an effect on our growth management strategies and priorities (for example, lands which may be considered for future annexation and growth). Maps showing the planning areas are included in the Land Use Element. The planning area has been significantly reduced as two areas in the Trappe planned growth area – the White Marsh Village Planned Annexation Area and the Trappe East Planned Annexation Area, now known as Lakeside, have been annexed by the Town since the adoption of the 2002 Comprehensive Plan.

The planning area in the 2002 Trappe Comprehensive Plan, consisting of 2,665 acres, was established by the Town after discussions with the Maryland Office of Planning. These discussions took place after a thorough review of the Town's 1973 Comprehensive Plan and Talbot County's Comprehensive Plan. The Maryland Office of Planning and the Talbot County Planning Office both concurred in the designation of a planning area that extends beyond the town limits and with the boundaries proposed for our planning effort. Our planning area corresponds closely with the County's designated growth area for the Trappe region. Our Plan is intended to provide elaboration and specificity for the area and focus development priorities and our preferences for the future mix of land uses.

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.

1.1 Introduction

This Background Element presents an overview of our physical setting, some insight on our past, and a summary of current conditions. It includes statistical information about residents of our town and the surrounding area we have identified as our "planning area." The planning area includes parcels that have the potential to affect our growing management strategies and priorities now and in the future. Our current land use pattern, our available public services and community facilities, and our environmental constraints are also discussed. This information provides a context, or framework, for our Comprehensive Plan.

An understanding of who we are, how our town evolved, and what our strengths and opportunities are provide the people of Trappe with a foundation for a commonly shared vision of our future. 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.

1.2 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 Route 50 about six miles south of the Town of Easton, which is the 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 in nature. Neighboring communities of Easton and Cambridge have relocated their shopping districts away from US Route 50 to a designated area on their bypass or within a commercial redevelopment The typical "Gas and Go" industry supported by commuters and transients continues to area. occupy a place along the primary highway US Route 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.

1.3 Some History

1.3.1. Early Exploration

Traders from William Claiborne's fort on the southern shores of Kent Island explored the Choptank River in the 1630's. For nearly 30 years after Claiborne's traders made their initial forays, settlement of what is today known as Trappe District was blocked by politics and Indian problems. However, by 1659 large land grants were being made in the area. "After 1662, when Talbot County was established, 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 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." Dixon Preston, <u>Trappe, The Story of an Old-Fashioned Town</u>, 12-13 (Economy Printing Co. 1996) (1976).

1.3.2. Roads

"Before 1687, Trappe District had no roads except the old Indian foot paths. Nearly all travel was by water." Preston, *supra*, at 12. 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 to be 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 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 ship worms 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 at 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 17 and possible earlier. The Abott 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 1760's, 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. Some time 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 name, and the village was alternately referred to as Trap, the Trapp, Trappe, Trapton or simply Trappe.

Those early roads were expanded and improved, and new roads were added to serve 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 State Highway Administration as a Major Arterial. MD 565 (Main Street) also serves our planning area and is classified as a Secondary Collector. Barber Rd., Howell Pt. Rd., Island Creek Rd., and Piney Hill Rd. 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). Since 2002, a portion of both Barber Road and Piney Hill Road have been annexed into the Town of Trappe.

1.3.3. Steamboats/shipping

Steam boating on the Choptank was part of Trappe life beginning in 1823, when the sidewheeler 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 was built stretching 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 chief shipping center for nearly 40 years. The Kirby's Wharf Company was disbanded in 1922, when auto and truck transportation ended the long reign of the steamboats." Preston, *supra*, p. 83. Trappe Landing was used as a commercial grain shipping port until the early 1970's when Trappe Landing Grain was moved to Route 50.

1.3.4. 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.

1.3.5. Automobiles

The early 1900's saw the first automobile owned by a local 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." Preston, supra, p. 80. 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'." Id. at 118. 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 U.S. 50, with a bypass around Trappe moved forward. Route 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.

1.3.6. Sewers

Another controversy that paralleled the end of World War II was the question of a sewer system for Trappe. Favored by 17 of 19 town leaders, townspeople voted 64 to 26 against central sewers in 1949. Ten years later, Talbot Delegate Thomas Hunter Lowe was able to pass a law that enabled Talbot County towns to change their charters and issue bonds without resort to referendum. The Town Council adopted a new charter in December 1960 by simple voice vote and promptly began work on the sewer system again. A bank loan of \$30,000, a federal grant of \$65,000 and a bond issue of a little over \$125,000 financed the town's first major infrastructure project. This bond was retired in 2002.

In 2002, the treatment system was upgraded to a Biolac® treatment system with chlorination/dechlorination and sand filtration. This treatment occurs prior to discharging the treated effluent into a tributary of LaTrappe Creek. The 2002 upgrade included an influent

screen, an extended aeration basin, a clarifier, sand filters, and a sludge holding pond. The effluent screen is sized for 1000 gpm. The existing wastewater system has a design and permit limitation of 200,000 gallons per day (.2 mgd) per day average daily flow and a design capacity of 200,000 (0.2 mgd), gallons per day of domestic wastewater with a peak flow capacity of 277 gallons per minute (400,00 gallons per day rate). The plant has a reserve capacity of approximately 64,000 gpd (0.064 mgd). Sludge was removed from the primary pond in 2002. The citizens of Trappe are obligated to repay \$3.5 million of debt associated with the upgrade of the existing systems. The Town owns and operates the wastewater plant, and seven pumping stations.

1.3.7. Water

The Town of Trappe also owns and operates the existing water and sewer facilities. The County government has provided no support or services in connection with those systems, which are supported exclusively by the Town of Trappe and its citizens. The original water system and an original water tower were installed in 1927. The aquifers that underlie the Town of Trappe and Planning Area are generally the Piney Point, Aquia and Magothy aquifers. The Town of Trappe currently has two wells in the Piney Point aquifer, and a single 250,000 gallon elevated storage tank.

1.3.8. Storm Drains

Trappe's storm drains consist of roadside ditches and pipe culverts that convey storm water runoff into streams that drain to La Trappe Creek and Miles Creek. Inadequate drainage exists due to dependence on other government agencies to maintain their systems. The Town of Trappe requires all developers to pay for, and implement acceptable stormwater management techniques. The crossings under U.S. Rt. 50 have been inadequate to handle several storms, resulting in flooding of lawns and low-lying properties. That situation was improved by cleaning the ditch on the East side of Rt. 50. In addition, other areas of Town are subject to periodic flooding, especially Harrison Circle.

1.3.9. Public Facilities

The Town of Trappe offers its residents curbside trash pickup, a full time municipal police department, 24 hour/7 day a week trained ALS station, volunteer fire department, four municipal parks, a post office, town hall, and municipal water/sewer system. Children of Trappe attend Talbot County Schools, and have convenient access to White Marsh Elementary located within the town which serves pre-k through fifth grade. Enrollment at White Marsh Elementary is currently 246 students and is projected to remain constant. Additionally, residents of the area are served in part by the University of Maryland Shore Health System, and those desiring higher education are within an easy commute of Salisbury University and Chesapeake Community College. DSL, Cable, Broadband, Wi-Fi and cellular phone service is also available as is limited bus service.

1.4 Soils

The soils of Talbot County have been analyzed and described in considerable detail by the Soil Conservation Service. Soils of the Trappe Planning Area were surveyed in 1969, and the results have been published in the <u>Soil Survey of Talbot County</u>, <u>Maryland</u>, William U. Reybold, United States Department of Agriculture, Soil Conservation Service, Washington D.C. The soils maps applicable to the Trappe Planning Area are set forth on Figure 2. With respect to recent sediments, the primary soil association in the immediate Trappe area is the Sassafras-Woodstown association. These soils are generally level, deep, and well drained. 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.

1.5 Existing Land Use

The "Existing Land Use and Zoned Land Use" (Table 1(A)) summarizes the existing and zoned land uses within the Town of Trappe:

| Town of Trappe Existing Land Use and Zoned Land | | | | | | |
|---|-------------------|---------|------------|---------|--|--|
| | Existing Land Use | | Zoned Land | | | |
| Land Use | Acres | Percent | Acres | Percent | | |
| Single Family Residential | 177 | 10.8% | 365 | 22.2% | | |
| Multi-family Residential | 8 | 0.5% | 18 | 1.1% | | |
| Mixed Use ¹ | 0 | 0.0% | 998 | 60.6% | | |
| Commercial | 41 | 2.5% | 78 | 4.8% | | |
| Industrial ² | 22 | 1.3% | 42 | 2.6% | | |
| Agriculture ³ | 1,266 | 76.9% | 25 | 1.5% | | |
| Park & Open Space | 25 | 1.5% | 25 | 1.5% | | |

Table 1(A)

¹ Includes a mix of residential (e.g., single family attached and detached, townhouse, multifamily), commercial, civic, recreation and conservation uses.

² Includes industrial land uses that are located in the C-2 Zone as well as land that has recently been zoned in the Industrial ("M") District.

³912.61 acres of the agricultural land is within the Lakeside PN District.

| Public ⁴ | 25 | 1.5% | 6 | 0.3% |
|--------------------------|-------|--------|-------|--------|
| Semi-public ⁵ | 6 | 0.3% | 0 | 0.0% |
| Vacant | 17 | 1.0% | 28 | 1.7% |
| Right-of-Way | 62 | 3.8% | 62 | 3.8% |
| Total | 1,647 | 100.0% | 1,647 | 100.0% |

Like many small towns on the Eastern Shore, agriculture is the single most significant land use within our planning area. Agricultural use comprises 86% of the area next to town, and is still the single most prevalent use within town limits at 76.9%. Low-density (single family) residential use is the next most significant land use in town covering 177 acres or 10.8% of our land. Vacant land, which is unbuilt and unfarmed, includes 17 acres within town limits. There are approximately a dozen commercial or industrial businesses within the town not including home occupations. A handful of these businesses have clustered along U.S. 50 in a linear strip pattern.

1.6 Population

The land use maps of Trappe and of our planning area show the physical relationships and patterns between these land uses and provide a framework for understanding the land use proposals included in our land use and municipal growth elements. We respect the need to encourage development that is compatible with our town's character, is located in suitable and appropriate areas, and also our responsibilities to protect the environment, improve wildlife habitat, and foster the universal stewardship ethic necessary to restore the health of the Chesapeake Bay and its tributaries. We have demonstrated our commitment to responsible stewardship by adopting design guidelines and regulations for new development that protect the character of the town, encourage density in appropriate areas, and facilitate new commercial activity that enhances the lives of existing, and future residents.

1.7 Sewer System Considerations

In May, 2005, the Trappe Town Council adopted a Water and Sewerage Subsidiary Plan, which is intended to memorialize the current water and sewer planning for the Town of Trappe, and to establish 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

⁴ Includes publicly-owned lands, e.g., town, county, and county agency owned land located in a variety of zoning districts.

⁵ Includes churches, schools, town facilities, fire department and public parks and other such public and semi-public uses located in a variety of zoning districts.

Trappe. The Town, various planning agencies, its citizens, and developers should read these planning documents together in considering land use matters affecting the Town.

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). As of this writing, Trappe's sewer facility is one of the most current, up-to-date sewerage facilities in Talbot County, with one of the most stringent discharge permit limits for minor wastewater treatment plants in the Choptank River watershed. The updated sewerage plant has been in operation since the spring of 2001, and the Town has met its discharge permit parameters since the plant upgrade. The goals with respect to the current sewer facility, which operates at an average daily flow of 98,000 gallons per day.⁶

As set forth in the Water Resources Element and Community Facilities Element, the Town will continue to adhere to its long-standing policy that the existing treatment system's excess capacity be reserved, for planning purposes, 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 that are 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 (as outlined in more detail in the Water Resources Element), the Town has available capacity of 64,000 gpd (0.064 mgd) for planning purposes. With the recent changes implemented at the wastewater treatment plant, which allow the Town to use treated wastewater instead of potable water for plant operations, the Town should have an additional 30,000 gpd of capacity. This number could increase slightly when a portion of inflow and infiltration is improved.

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 easily served by the excess capacity in the existing treatment plant. No development plans have been proffered to the Town with respect to the 104 acre parcel, which is in agricultural use. Until a specific plan is presented and accepted, that property has been 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.

⁶ Computed for the period January, 2007 through December, 2009.

As set forth in more detail in the Water Resources Element, the Town has determined that it may be more beneficial from an operational and an environmental standpoint to require Lakeside to use the Town's excess capacity in the short term for the initial phase of development, followed by a phased upgrade and expansion of the current wastewater treatment plant, including replacement of adequate reserve capacity for infill development. The phased expansion would include upgrades to meet discharge criteria for land application. Treated wastewater will be applied by land application on the designated primary application area, which consists of 85 acres. An additional 22 acres immediately west of the initial area has been designated as a reserve area.

With respect to 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. As set forth in more detail in the Water Resources Element, that service in this area will require an expansion of the existing plant and approval for discharge by MDE.

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Trappe 2010 Comprehensive Plan April, 2010

CHAPTER 2 Goals and Objectives

This section supports and addresses all Twelve Visions of the Planning Act, which provides the philosophical framework for this Comprehensive Plan. Our principal goal is to manage our growth and remain a closely-knit town with primarily single family housing and commercial development.

2.1 Goals

• LAND USE

Master planning of annexation and growth areas to ensure compatibility with 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 easy 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 encouraging input from service, historic and faith organizations.

• FISCAL

Maintain a favorable balance between town revenues and the expenditures required to meet community needs. Support the infrastructure necessary to create sustainable employment opportunities.

2.2 Goals Summary

Our overall goal is to keep Trappe a town that its citizens are proud of. We will continue to encourage our close-knit and diverse community through cultural interaction and promoting various community, civic and religious relationships. We are dedicated to retaining the old-fashioned charm which has characterized Trappe from the beginning. Our aim is to keep our town a place which 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.

We recognize, however, that any of our comprehensive planning is strongly influenced by a major consideration that seems to be beyond our control. That consideration is the increasingly disruptive, dangerous, and divisive influence of US Route 50. Adequately buffering US Route 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 promote an appropriate mix of medium and low density residential opportunities with some compatible commercial development and limited high density residential units within specific locations through the application of a Planned Neighborhood (PN) District floating zone. This normal growth and development should occur as small scale developments, primarily on the west side of Route 50, to promote a cohesive development pattern, encouraging safe walking, bicycling, and general community interaction.

The Lakeside District, which is located on the east side of Route 50, will be developed over time in accordance with the PN District and associated PUD that has been applied to the property within that District. As is more fully set forth in the floating zone district and associated PUD plan for that area, this development will promote the Town's goals by ensuring that the east side of Town is developed in a series of neighborhoods in a cohesive development pattern, with good traffic patterns, promoting safe walking, bicycling, and general community interaction which contribute to making Trappe an economically viable small town.

2.3 Objectives

2.3.1. Land Use

Through the planning process and application of the PN Floating Zone District, the Town has approved a plan for future growth to ensure that the development is compatible with the existing town and uses within the town. Any new additional development should be coordinated so that new uses are compatible with each other and with existing uses. The following objectives should yield compatible and efficient land use:

- Conserve existing residential neighborhoods by protecting them from the incompatible land uses that could adversely affect property values and destabilize existing neighborhoods.
- Encourage concentrated commercial development, served by limited, safe, and convenient access to Route 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 any residential growth along the Town's borders in the Town's growth area that has not been annexed and that is not served by 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 be an impediment to future annexation and controlled growth within our planning area.
- Require annexation as a condition of extension of public services.
- Encourage new development only in areas which can be economically served by Town water and sewer and incorporated into existing Town pattern and character.
- Provide adequate open space and park areas within Town, and preserve the farms and prime agricultural soils beyond Town within our planning area giving special attention to the passage of farm machinery through Town.
- Encourage development of a high tech park to provide skilled mid level employment opportunities within Town.
- Discourage the development of mobile home sites.
- Develop workforce housing within neighborhood centers, and residential housing for elderly within walking distance of parks and commercial areas.
- Maintain the core of the Town including the post office, town office, and essential services in the area adjacent to Main Street creating a unified community.
- Review the Town's ordinances and regulations to ensure that any sexually oriented businesses are located in a manner that do not create secondary effects upon the Town or its citizens such as an increase in crime or an adverse effect on surrounding property values.

2.3.2. 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 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. 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 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 Route 50.

2.3.3. 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, police protection, 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 Health System (Memorial Hospital) at Easton. Our public services objectives focus on maintaining and improving those services we currently provide. Community groups and the faith community assist Town government in providing opportunities for cultural gatherings and diversity awareness.

For any annexations in the Town's growth area, the developers or property owners proposing annexation and/or Town growth in the annexation areas should be economically

responsible for all adequate public facilities, including public services, for those areas. For any annexations considered by the Town, the Town will consider the following public facility goals:

- Maintain adequate water, sewer and storm water systems to meet Town needs as it grows.
- Maintain an adequate level of police protection.
- 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.

2.3.4. Natural Resources

Our most important resource is land. Lands within our planning area are mainly farms and woodlands. Future use of these parcels is also important to our citizens. To preserve and enhance these resources, the following objectives are established:

- Coordinate with State, County, and other bodies on all significant actions affecting unique wildlife habitats.
- Give preference to preserving agricultural or other low intensity land uses, especially in areas of existing forest cover and on fields that contain prime agricultural soils.
- 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.

2.3.5. 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 selfsufficient and make us dependent upon other governmental bodies and agencies for some services. Accordingly, we should:

- Coordinate closely with the County in decisions affecting the use of land within our planning area, including development projects adjacent to the Town.
- Provide State Highway Administration with input regarding the future of Route 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 staffs.
- 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.

2.3.6. Aesthetics

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

- Encourage the generous use of landscaping in all new development, and the use of additional landscaping where needed 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 Route 50.
- Enhance the general appearance of Route 50 and adjacent parking areas.
- Maintain the crossroad 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.

2.3.7. Fiscal

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

- Seek outside funding sources for identified Town needs.
- Maintain full fiscal benefit from commercial and or industrial facilities.
- Maintain a balance between revenues and expenditures, including an adequate reserve for contingencies.
- Charge for capacity depletion as new connections are made 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.

2.3.8. 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 adopted 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 with regard to 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.
- 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 village character of town.
- We will explore ways to encourage citizens to reduce resource consumption, and to promote conservation, composting, and recycling.

Trappe 2010 Comprehensive Plan April, 2010

CHAPTER 3 Land Use Element

Since the adoption of the 2002 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. In fact, the Town has implemented virtually all of its goals and objectives outlined in the 2002 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, 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 1997 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.

3.1 Land Use Changes in the Town since the 2002 Comprehensive Plan

Since the last Trappe Comprehensive Plan, which was adopted on August 7, 2002, the Town of Trappe has made significant progress toward accomplishing the land use goals and objectives of that plan. The Town has undertaken two considerable annexations, and has adopted various changes to its ordinances and regulations to ensure that new and existing development conform to the Town's objectives.

3.1.1. Changes in the Town's Land Use Regulations Since 2002

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, which incorporates the State's "Smart Growth" and "Priority Places" initiatives. The PN Floating Zone District was adopted to address previous land use regulations that are 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 Route 50 pursuant to a planned unit development ("PUD") approved by the Town Council.

To ensure that new development is designed in harmony with Trappe's village character and small town feel, the Town has also adopted design standards which 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.

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

The Town has also adopted a Water and Sewerage Subsidiary Plan to address water and sewer planning and infrastructure, construction standards for water, sewer, storm drains and streets, and as well as a roads ordinance to address road improvements and access issues. The Town will continue to work with the county, as well as the state agencies to ensure that its public infrastructure is planned for and constructed in accordance with the applicable standards and regulations.

3.1.2. Annexations Since 2002

The 2002 Comprehensive Plan included two growth areas for annexation – 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. Prior to the annexation of these areas (with the exception of approximately 230 acres of the Trappe East Annexation Area, which was zoned RAC in Talbot County), both areas were zoned under the Talbot County Zoning Ordinance to permit densities of four dwelling units per acre with public sewer. These areas are also identified within the Town's growth area in the most recent Talbot County Comprehensive Plan, which was adopted on February 15, 2005.

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 U.S. Route 50. After the qualified voters of the Town of Trappe petitioned the Trappe East annexation to a referendum, the annexation was affirmed by 70% of the registered voters that participated in the election. The Trappe East annexation became legally effective on May 5, 2003. By resolution 4-2004, which was adopted on August 11, 2004, the White Marsh Development Area was annexed by the Town of Trappe. The White Marsh Development Area consists of 175.068 acres of land, which is located between White Marsh Road and Maryland Route 565.

For both the Trappe East annexation and the White Marsh annexation, the Trappe Town Council required that the property owner and contract purchaser execute an annexation agreement, 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 which vests the development rights for 2,262-2,501 residential uses and some commercial uses. The build-out of this development is forecasted to be 20 years depending upon market forces. The developer has obtained approvals for the construction of a wastewater treatment plant, although the Town is currently considering its alternatives with respect to expanding and upgrading its existing plant to accommodate the Lakeside development. Treated effluent will be disposed through land application. As part of the Development Rights and Responsibilities Agreement, the developer has agreed to provide various public facilities, including a town public works parcel with an administrative/public works building, funding for the police department, fire house improvements, a town planner, a municipal administrative building, and a per unit fee to the town's enterprise fund for the revitalization of the existing downtown.

The White Marsh Development Area does not have any development approvals at this time. Pursuant to 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, no development plans are being reviewed by the Town.

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 upon which White Marsh Elementary School is located.

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

3.1.3. Downtown Revitalization

In addition to the Town's annexation of a significant portion of its growth area, since the 2002 Comprehensive Plan, the Town has experienced unprecedented revitalization in its Village Center, including a new steakhouse restaurant, and a marketplace/deli restaurant. In the Village Redevelopment sub-area, the Town approved development plans for a 26 unit condominium consisting of a mixture of residential and commercial spaces as part of a downtown revitalization project. The Town also obtained grant funding for new playground equipment, and also obtained open space funds to acquire property along Route 50 for green space and park uses.

3.2 The Land Use Districts

The Town's Land Use Map is set forth on Map 1. The Land Use Map identifies the various land uses within the Town boundaries. The Town's growth area or planning area and greenbelt are also identified. 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
- Managing growth to ensure development of compatible new neighborhoods that complement the existing Town.

3.2.1. Village Center

The "Village Center" is the historical town center. Our historical core can be 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 may be 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.

Within the Village Center, we have attempted to protect the character of the town center by establishing a traditional town center zone (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 present opportunities for entrepreneurship, and will enhance the aesthetics of the Main Street. A partnering of housing and small commercial opportunities offers a chance to work where you live, and sustains life in the downtown area after normal commercial 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 should be designed as an integral part of plans for new residential neighborhoods in this area. New village commercial and business uses should be of an 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 neighborhoods.

Our vision also includes extending our traditional town center 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.

3.2.2. Neighborhood Conservation District

Neighborhood conservation areas encompass those existing residential enclaves located within the Old Trappe Town District; some adjacent to the village core. These neighborhoods are developed for the most part, but 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 preservation of the existing town character, infill and redevelopment and priority allocation of the existing water and sewer capacity. As set forth in the Water Resources Element, the existing water and sewerage capacity is reserved for the Town's infill lots, and 32 lots located on the perimeter of the Town that are still served by individual septic systems.

3.2.3. Planned Neighborhood District

The Planned Neighborhood District is a floating zone that can 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 District is intended to permit master planned, mixed use developments in areas designated appropriate for such development by the Comprehensive Plan and Zoning Ordinance. New development within these areas should 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 be developed as a PN Floating Zone District. 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 a rezoning as a PN District. That parcel is in agricultural use, and the Town's reserve capacity for infill development does not include development of that parcel. Until a specific development plan is presented, including a plan for the extension of water and sewerage utilities and capacity availability, that property will continue to be classified by the Town for no long range water or sewerage extensions.

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 that creates a definable village center.
- All development should be designed and located so as 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-scale 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 the rest of the Town with respect to water and sewer capacity, law enforcement, administration, maintenance services, transportation and recreation needs. The Town will require a developer and/or property owner to enter into a Development Rights and Responsibilities Agreement to ensure that all development impacts and public facilities are addressed.

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. Character is established through 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.
- Parking is accommodated through a mix of on-street and unobtrusive off-street strategies. Large-scale parking lots are avoided, and older lots are redesigned into smaller landscaped segments.

• Most important, neighborhoods and their setting convey a strong "sense of place."

3.2.4. Commercial and Industrial Areas

The Town has several distinct types of commercial/business and industrial land uses. These include village center commercial, general commercial, regional commercial, highway mixed use commercial, and light industrial. Each is characterized by its location, intensity of use, critical design considerations and the market area served.

•Village Center Commercial Districts

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 are critical in determining the appropriateness of a use. This area does not include large scale commercial activities nor highway oriented commercial activities but is a blend of localized uses typical of many main streets in rural communities.

•General Commercial Districts

The Town's general commercial districts include properties that are identified on the land use map, most of which are existing commercial uses along US Route 50. For new development in that area, the Town's commercial development guidelines are intended to ensure that commercial development improves the visual appearance along major highways and streets corridors, and improves access and circulation to and within new and existing commercial and business sites, and encourages sensitive site planning and building design.

•Regional Commercial Floating Zone District

Since the adoption of the 2002 Comprehensive Plan, 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 Route 50. Such uses must be carefully located to avoid adverse impacts to existing and future residential neighborhoods. Given the location of existing residential neighborhoods, and our emphasis on protecting their existing character, such uses will be limited to one centralized site located east of US 50. In order to ensure compatibility with future residential neighborhoods, we will only consider a regional commercial center that is 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

The 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 Route 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.

While the Town has identified eligible locations for the application of the HCM District floating zone, it has not been applied. The Town's water and sewer services presently do not extend into these areas. Prior to the development of any of such areas, water and sewer services would need to be extended into such areas, at the developer's expense, and such extensions would also be dependent upon whether the existing water and sewerage treatment plant has capacity for such development. As set forth in the Water Resources Element, the Town's reserve for infill development does not reserve capacity for subdivision potential of large vacant parcels of land with no development plans.

The Town has adopted development design standards, appropriate to regulating highway uses, to ensure aesthetic design and placement concerns are adequately addressed. Any such development will comply with the commercial development design guidelines and the designed standards that have been specifically adopted to apply in an HCM District or PRC District. We will require service roads to service commercial development in order to minimize traffic conflicts. We will require appropriate signage and landscape buffers between businesses and US 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. Consideration of improved signage and lighting in commercial areas will also be addressed when we revise our development regulations.

•Light Industrial

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. The uses permitted in the Light Industrial District are identified in the Zoning Ordinance. Land for the M District has been designated along the north side of town adjacent to Backtown Road within the existing town boundary.

We recognize and encourage the need for high tech employment opportunities for residents of our community. These uses 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 which may be using new or innovative technology to produce their service or product.

3.2.5. Greenway

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 system 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 in order 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.

3.2.6. Annexation and the Planning Areas

The Town's growth area or planning area is identified on Map 2. In order 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 pubic water and sewer facilities will not be extended beyond Town limits. Annexation will be a condition of extension of these services and the cost of extending water and sewer mains and force mains will be borne by developers seeking the extension. 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 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 which 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 municipal service provision and meet all design requirements for approval. The town will also consider annexation of additional land to accommodate 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 is 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.

UNCERTIFIED

CHAPTER 4 Municipal Growth Element

4.1 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 of areas selected for future municipal annexation and growth. 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.

Some of the information required in the municipal growth element was previously identified and discussed in the land use element and in the community facilities element of the 2002 Trappe Comprehensive Plan. Indeed, there will be some overlap between these three elements, as well as the Town of Trappe Water and Sewerage Subsidiary Plan that was adopted by the Town Council in May, 2005.

The Trappe municipal growth element will discuss and project the dynamics of the Town's 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
- Its past and future impacts on community facilities and natural features.

While in many cases, the central focus of a municipal growth element may be a municipality's growth area and potential for growth through annexation, in Trappe's case, a discussion of Trappe's future growth must include its newly annexed areas, where a considerable amount of the Town's growth will occur over the next 20 years.

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

Trappe 2010 Comprehensive Plan April, 2010

4.2 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 2000. Over this 70-year period, we have seen the dramatic increase in average annual growth rates that corresponded to the economic activity of the 1980's. These "boom" years spurred an unprecedented demand for waterfront land for second homes and retirement homes throughout Talbot County, and the economic spin-offs from the activity were also felt in the demand for additional support activities and overall growth in secondary jobs. The growth explosion of the late 1970's and early 1980's also resulted in 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 reflected 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 this 8+ year time period pursuant to 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.

Consistent with the attractiveness of the Town of Trappe to those relocating in this region, the Town of Trappe and Talbot County, in their comprehensive plans for last twenty years, identified the White Marsh Planned Growth Area, and the Trappe East Planned Growth Area, both of which have now been annexed to the Town, to provide growth areas in the County which can be efficiently served by water and sewer systems.

These local growth trends are explained through the combination of many factors including more affordable land, the construction of more affordable housing in town, the general economic strength of our population and workforce, and our physical location between the employment centers of Easton and Cambridge.

4.3 Future Growth Patterns and Build-Out Analysis

Because of the recent annexations, 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 upgrades to the wastewater treatment plant and water systems.

4.3.1. Newly Annexed Areas

Since the 2002 Comprehensive Plan, 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. Prior to the annexation of these areas

(with the exception of approximately 230 acres of the Trappe East Annexation Area, which was zoned RAC in Talbot County), both areas were zoned under the Talbot County Zoning Ordinance to permit densities of four dwelling units per acre with public sewer.

With respect to the Trappe East Annexation Area, in February, 2006, the Town of Trappe applied the PN District Floating Zone to the Property (now known as the Lakeside PN District) and approved a planned unit development (PUD) plan for 3 phases of the District. The total acreage included in the Lakeside PN District is 857.795 acres, which includes an 85 acre land application site and a 22 acre land application reserve area. In connection with the approval of the PN District Floating Zone, the Town and the developer also executed a Development Rights and Responsibilities Agreement which vests the development rights for 2,262 to 2,501 residential uses and some commercial uses. The developer is permitted under the Development Rights and Responsibilities Agreement to construct one-half of the entire development as age-restricted units. The build-out of this development is forecasted to be 20 years depending upon market forces. The developer has obtained approvals for the construction of a wastewater treatment plant, although the Town is currently considering its alternatives with respect to expanding and upgrading its existing plant to accommodate the Lakeside development. Treated effluent will be disposed through land application. As part of the Development Rights and Responsibilities Agreement, the developer has agreed to provide various public facilities, including a town public works parcel with an administrative/public works building, funding for the police department, fire house improvements, a town planner, a municipal administrative building, and a per unit fee to the town's enterprise fund for the revitalization of the existing downtown. The developer is also required to pay an impact fee for each unit constructed after construction of the initial 500 residential dwelling units.

As for the White Marsh Development Area, that property does not have any development approvals at this time. Pursuant to the annexation agreement, that property will be developed as a Planned Neighborhood ("PN") Floating Zone District. The PN Zone has not yet been applied to this property, and 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. The total acreage of the property is 175.068 acres. Initial development submissions and the density requirements of the Town's PN District indicate that at ultimate build-out, the property could be developed for 505 planned development units.

4.3.2. Additional Infill Areas- Build Out Analysis

Build-out numbers for the existing Town were generated by the Trappe Planning Office using Geographic Information Systems (GIS) to calculate the buildable area on existing lots. This analysis included taking inventory of lands within the Town's boundary. 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. To ensure consistency, 10,000 square foot increments were used to calculate subdivision potential for existing lots. Logical assumptions were made regarding the subdivision potential of these lots based on lot reconfiguration, degree of existing lot improvements, and the institutional knowledge of the Town staff.

The results of this research reveal the following build-out analysis. The total number of vacant parcels is 26 lots. The subdivision potential of these lots results in an estimated subdivision/redevelopment potential of approximately 90 lots. Therefore, the total number of potential lots within the Town is approximately 115 or 116 developable lots. As set forth in the Water Resources Element, the Town has reserved its sewer capacity for this infill development.

These figures do not include several substantial infill parcels adjacent to Route 50. Specifically, the Town has one substantial infill parcel of approximately 104 acres. It also has four parcels that are approximately 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 they are in agricultural use, no development plans have been proposed, any future development plans could include significant commercial uses, and the development of these parcels may 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.

In addition to the four parcels along Route 50 eligible for Highway Mixed Use development or redevelopment, in 2008, the Town annexed 41 acres of vacant property on the south side of Backtown Road, which had been 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. The Town has also reserved approximately 26 acres for a potential regional commercial district.

4.4 **Population Projections**

The following population projections for Talbot County are set forth in the Talbot County draft Water Resources Plan Element (December, 2009 draft) ("County's draft WRE"), which are based upon population projections developed by the Maryland Department of Planning:

| Table $4(A)^7$ | | | | | | | | | |
|--------------------------------------|--------|--------|--------|--------|--------|-------------------|---------|----------|--|
| Talbot County Population Projections | | | | | | | | | |
| Year | | | | | | Change, 2007-2030 | | | |
| 2007 | 2010 | 2015 | 2020 | 2025 | 2030 | Number | Percent | Annual | |
| | | | | | | | | Increase | |
| 36,193 | 37,050 | 38,600 | 40,050 | 41,250 | 42,100 | 5,907 | 16% | 0.7% | |

⁷ Reprinted from the Talbot County draft Water Resources Plan Element, dated December, 2009, which references the following sources: MDP, 2007 Estimates for Maryland's Jurisdictions and MDP, Projected Total Population for Maryland's Jurisdictions (Revisions, December, 2008).

The Maryland Department of Planning's County wide projections indicated that the County population will reach approximately 42,100 by the year 2030, an annual increase of approximately 0.7 percent per year, or 16 percent between 2007 and 2030. In the County's draft WRE, the County stated that: "The County is concerned that MDP's population projections may underestimate the development pressure and future population. The County and its municipalities have granted at least preliminary approval for more than 5,500 housing units not accounted for in MDP's 2030 projections." County's draft WRE (December, 2009).

Based upon current trends, Trappe agrees that Maryland Department of Planning population forecasts for Talbot County, which include the growth within the incorporated municipalities, are low. It is believed that these projections, which include the population of all of the incorporated towns in Talbot County, are inconsistent with the actual population growth experienced by the Town of Trappe over the past thirty years, and are similarly inconsistent with projected growth within the Town of Trappe.

Projecting population is very difficult when working with such relatively small numbers as we have. Growth rate projections, when dealing with such small numbers, are problematic at best. Most projection methodologies that claim statistical accuracy depend on populations of 100,000 and higher. Therefore, we have based our prognostications on extrapolating existing trends, as well as the development that has been approved as part of the Lakeside PN District. With respect to the infill development, population projections are dependent upon the Town's water and sewer services.

The population projections for the Town of Trappe, including the White Marsh Planned Growth Area and the Lakeside PN District, have been forecasted by the Town of Trappe Planning Office, based in part upon the number of dwelling units being planned pursuant to State smart growth principles. Table 4(B) sets forth the population projections forecasted by the Trappe Planning Office, which represents the most recent and accurate assessment of the development potential within the Town.

Table 4(B)*

| Population Projections – Town of Trappe** | | | | | | | | | | | |
|--|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Year | 1970 | 1980 | 1990 | 1995 | 2000 | 2005 | 2010* | 2015* | 2020* | 2025* | 2030* |
| Total | 426 | 739 | 974 | 1,064 | 1,146 | 1,170 | 1,265 | 1,765 | 2,695 | 3,735 | 4,775 |

*Indicates Projections Only

**Assumes a household population size of 2.2 persons per dwelling unit, and in the Lakeside District, assumes a blended population rate of 1.8 persons as a result of the age restricted units.

Using the population figures set forth in Table 4(B), Trappe's average annual growth rate, calculated in 10 year increments, is as follows:

| | | | Iuo | | | | | | |
|--|-----------|---------------|-------------|-------------|-------------|-------------|--|--|--|
| Average Annual Growth Rates (Ten Year Periods) - Town of Trappe* | | | | | | | | | |
| Ten Year period | 1970-1980 | 1980- 1990 | 1990 - 2000 | 2000 - 2010 | 2010 - 2020 | 2020 - 2030 | | | |
| Average annual growth | 5.60% | 2.80% | 1.60% | 0.99% | 7.86% | 5.89% | | | |

Table 4(C)

*Average Annual Growth Rates (60 year period) – Town of Trappe – 4.11%

The Town has not simply based its population projections on "historical trends", for the following reasons:

•As set forth in Table 4(C), Trappe experienced significant growth between 1970-1980 (5.6%).

•The actual population figures for an 8+ year time period from 1995-2003, are artificially stagnant because of a building moratorium (from January 4, 1995 through March 5, 2003) during the construction of the wastewater treatment expansion.

•This stagnation continued during the lengthy time period between 2003 and 2006 during which time the Town was in the process of annexing two significant properties, engineering the necessary improvements, obtaining permits from MDE for the wastewater treatment plant and water system, undertaking a fiscal, economic and capital asset impact analysis of the proposed development on the Town, reviewing the Planned Neighborhood District and associated PUD plan for Lakeside, and negotiating the Development Rights and Responsibilities Agreement for the development of that area.

•In June, 2006, the Town approved a Development Rights and Responsibilities Agreement which vests the developer's right to construct 2,262-2,501 residential dwelling units, over a 20+ year build-out, depending on market forces. This property was identified and zoned for residential growth by Talbot County for over 50 years. This is a significant factor in recognizing that the historic trends do not reflect Trappe's population forecasts.

•Because of the recent downturn in the housing market that has affected the entire state and country, development activity has not yet commenced, and the build-out has been extended commensurate with the market conditions.

The average household size in Talbot County is expected to decrease steadily from 2.38 in 1990 to 2.21 in 2020. In the Lakeside PN District, the developer has the ability to create an age restricted community with respect to one-half of the residential units, which statistically produce smaller household sizes of approximately 1.5 persons per household which results in a blended rate of 1.8 persons per household within this project. Aside from the age-restricted portions of the Lakeside PN District, elsewhere in the Town the Trappe households tend to

Trappe 2010 Comprehensive Plan April, 2010 include more children and are generally younger than average County households. Also, we expect our location and relatively affordable land costs, as compared to other places in Talbot County, to continue to attract new families that include children.

In terms of Trappe's population forecasts in the context of Talbot County's population projections, the following factors should be considered to explain the higher rate of population growth within the Town of Trappe:

•As noted in the County's draft WRE, the Maryland Department of Planning's population forecasts appear to be understated given the development pressures on the Eastern Shore, and given the housing units that have been preliminarily approved within the various incorporated municipalities.

•As also noted in the County's draft WRE, approximately 70 percent of the new housing units will be built within the municipalities of Talbot County (Oxford, Easton, St. Michaels, and Trappe).

•Within the incorporated municipalities, Trappe is uniquely situated to accept a significant portion of the County's population growth, for the following reasons:

•Trappe has an approved development for up to 2,501 residential dwelling units, which has been zoned for residential development for more than 50 years.

•Unlike the other three municipalities, Trappe does not have any critical areas within the Town which would constrain growth.

•In its recently adopted 2010 Comprehensive Plan, the Town of Easton has stated that it intends to adopt a targeted growth rate of 1% (despite its actual trend of 3% growth).

•The Town of Oxford does not anticipate any significant growth. The Oxford draft Comprehensive Plan states that its "growth area is relatively" small and is constrained by wetlands and critical areas. Oxford forecasts a total population increase of an additional 156 persons over twenty years. Draft Oxford Comprehensive Plan (March 4, 2010).

•According to the St. Michaels 2008 Comprehensive Plan, as part of its total build-out, St. Michaels projects an additional 491 dwellings within its incorporated limits, totaling an additional 1,065 people. St. Michaels forecasts an additional 88 residential dwelling units in its growth area (or an additional 191 persons using St. Michaels' average household size).

4.5 Character of the Population

Compared to the County, a larger proportion of our housing units are occupied, and our households are more likely to include renters. Also, our households are somewhat larger which

is reflective of younger average age, including children in the home. Our housing stock is somewhat newer than the County's. In 2006, nearly 30% of our housing units were newly constructed since 1985. That was consistent with our average annual growth rates for the period.

Our population is composed of employed households with at least a high school education. We generally commute alone about 20 minutes to work suggesting that most of us work in Easton or Cambridge. We can expect additional future households that have similar characteristics. The combination of location, economics, and quality of life that Trappe offers will probably appeal to others who have similar needs and likes as well as those in the pre/early retirement years who value a slower pace of living. Consistent with the attractiveness of the Town of Trappe to those relocating in this region, the Town of Trappe and Talbot County, in their comprehensive plans for last twenty years, identified the White Marsh Development Area, and the Lakeside PN District, to provide growth areas in the County which can be efficiently served by water and sewer systems. We anticipate that these qualities along with our desire to increase sustainable employment opportunities within Trappe will lead to a substantial increase in our population.

4.6 Future Growth Needs - Growth Area

The Town's growth area is identified on Map 2. In 2005, Talbot County adopted its Comprehensive Plan. As set forth on the Talbot County Comprehensive Map 3-5 of the Trappe Growth Area (included as part of the County's 2005 Comprehensive Plan), the growth areas in the County Comprehensive Plan and the Trappe Comprehensive Plan are consistent.

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 is not seeking to undertake any additional annexations of any significant size for development in the near future. 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.

4.7 Public Services and Infrastructure Needed to Accommodate Growth Within the Town and the Growth Areas

With respect to 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 •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 July 1, 2008, is \$4,912 for a single family detached unit, and \$3,515 for other residential unit. 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 own impact study to assess the fiscal, economic and capital asset impact of the Lakeside PN District on the Town's services. The study was performed by Urban Analytics, Inc. 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.

4.7.1. Assessments of Impacts on Infrastructure and Services

The information set forth in this section discusses generally the impact of build-out conditions on existing public facilities and services in the Town of Trappe. However, additional details and information are set forth in the Community Facilities Element (Chapter 6) and the Water Resources Element (Chapter 7). To reduce redundancy, additional information is set forth in those chapters.

•Public Schools.

Trappe's school children 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). According to the Educational Facilities Master Plan for the Talbot County Schools, prepared by Vitech Consulting Services, Inc. for the Talbot County Board of Education (2009 Update) ("Educational Facilities Master Plan"), the Plan states that "changing demographics in Talbot County have resulted in stable to lower public school enrollment at the same time that total population has increased significantly." Educational Facilities Master Plan, p. 1. The Plan notes that high real estate prices in Talbot County have contributed to the development of housing that is not affordable by families with school age children.

The 2009 Educational Facilities Master Plan states that "For the next 10 years total Talbot County public school enrollment is expected to be relatively stable…". <u>Id.</u> page 1. The Educational Facilities Master Plan notes the following:

State Rated Capacity was reviewed and updated for all Talbot County schools in 2005 and for St. Michaels Elementary and St. Michaels Middle/High in 2008. The highest elementary school capacity utilization in 2008 was 112 percent at Easton Elementary-Dobson. Overall, the elementary schools are at 81 percent of capacity.

Easton Middle reached a high of 97 percent of its post-renovation capacity in 2004 and has since declined to 89 percent in 2008. The capacity utilization rate is expected to drop to 83 percent in 2010, and then rise to 105 percent by 2019. Easton High school was at 96 percent of capacity in 2006 which is the anticipated cyclical peak in high school enrollment. It is expected to fall to 80 percent of capacity in 2014 before rising to 92 percent in 2018.

The total County public school system was at 81 percent of capacity in 2008. Overall capacity utilization is expected to fluctuate in a narrow range of 81-84 percent for the next 10 years. Therefore, the Talbot County public school system has adequate existing capacity on a county wide basis to accommodate enrollment projected during the next 10 years.

Based upon current enrollment projections, there is no need for capacity additions to any school within the 10 year time frame of this Educational Facilities Master Plan. However, this may change depending on the magnitude and type of development currently planned, especially in the Easton and Trappe areas and on the final impacts of the 2009 redistricting.

<u>Id.</u> pp. 1-2.

With respect to White Marsh Elementary, which is located within the Town of Trappe, the Educational Facilities Master Plan reflected that White Marsh had a favorable 57 percent capacity utilization rate in 2009 prior to the redistricting.

As a result of enrollment shifts within Talbot County, in 2009, Talbot County Board of Education approved a county-wide redistricting, which was implemented in 2009-2010 school year. As part of the redistricting, the White Marsh Elementary School attendance zone was increased in order to decrease the Easton elementary schools enrollment.

Prior to the annexation of the Lakeside Development and the White Marsh development area, the Town met with members of the Talbot County School administrative staff to discuss any potential impacts of the annexations on the schools. As part of the White Marsh annexation, the Town required that as part of any development proposal, the developer would coordinate with the Talbot County Board of Education concerning any intersection and road improvements at the intersection of White Marsh Road and Maryland Highway No. 565 to ensure that the improvements facilitate school traffic flows, and bus travel.

As set forth in the Comprehensive Plan, the build-out of the Lakeside Development is 20+ years. The developer is permitted to develop one-half of that development as age restricted dwellings, which will have no negative impact on the schools. In fact, while the occupants of those homes will not attend the public school systems, they will be Talbot County taxpayers that support the school system through the payment of property taxes.

As set forth in the Water Resources Element, the Town has set aside reserve capacity for the potential expansion of White Marsh School.

The Trappe Police Department monitors parking lot, and provides police services both within White Marsh School and outside of the school.

The Town recognizes school enrollment in Talbot County is not static. The Town will continue its practice of meeting with Talbot County school officials when considering development proposals to ensure that any impacts are addressed.

•Libraries.

The Talbot County Public Library System operates a library in Easton, and has branch facilities in St. Michaels and in 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 within Trappe will be required to pay the county's impact fee. In addition, Trappe would be willing to discuss the possibility of locating a library site within Trappe.

•Public Safety.

As set forth below, the developer of the Lakeside District agreed to fund the Trappe Police Department, including a police vehicle, communications system, salary, etc. for five years. The Town currently employs one police officer, which is the Trappe Chief of Police. The Town recognizes that additional police officers will be necessary as the Town grows. The Town's fire protection services are set forth in the Community Facilities Element. With any significant contemplated development, the Town meets with the Trappe Volunteer Fire Department and the Talbot County Emergency Medical Services (EMS) to ensure that the development will not adversely impact these services. The Town will continue its cooperative relationships with these departments and agencies to ensure that new development pays for its impacts on these services.

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•Water and Sewer.

The Town's water and sewer information, and growth-related analysis is set forth in the Water Resources Element. Please see that chapter for a discussion of these issues.

•Recreation.

The Town currently has 25 acres of parks and open space. The State of Maryland suggests a total of 30 acres of parkland per 1,000 people. The Town's Zoning Ordinance and regulations address both active and passive open space requirements for new development. For any significant new development, opportunities for recreational activities should be considered.

•Stormwater Management Systems.

New development will comply with applicable stormwater management requirements. To reduce redundancy, further discussion of stormwater management is set forth in the Community Facilities Element and the Water Resources Element.

•Financing of Infrastructure Expansions Needed.

For all new development, the Town requires that the new development pay all costs associated with the new development, including costs related to water and sewer, stormwater management, roads, etc. State or federal funding sources should be examined for assistance for 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.

•Rural Buffers and Transitional Areas.

As set forth on Map 1, the Town has established a greenbelt to create a rural and natural buffer, which corresponds closely with the County's growth area maps in its Comprehensive Plan. As noted elsewhere in this 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.

4.7.2. Public Services and Infrastructure Required for Lakeside Development

In the case of the Lakeside PN District, the Development Rights and Responsibilities Agreement, which is recorded in the land records of Talbot County, and runs with the land, requires the following contributions to address impacts on development:

•Construction of wastewater and water facilities, including a wastewater treatment plant and water tower, which are described in more detail in the Water Resources Element. •An impact fee of \$2,761 per residential dwelling unit.

•Funding of the Trappe Police Department, including a police vehicle, communications system, salary, etc. for a period of five years.

•Funding for the Town Planner position until the issuance of the 500th residential occupancy permit.

•Conveyance of a public works parcel sufficient to accommodate water and sewer facilities, as well as a 3,000 square foot public works/administrative building, including space for a public meeting room, and public works workshop and office space, and a 900 square foot storage pad for storage of equipment and materials.

•A contribution of \$1,500 per dwelling unit toward the Town Center revitalization fund for the revitalization of the Village Overlay Zone.

•Acquisition of land suitable for the construction of a 3,000 square foot municipal building and parking, as well as the construction of the building and improvements.

•A \$250,000 contribution to the Trappe Volunteer Fire Department for improvements.

•A new street sweeper and front-end loader/backhoe.

•Construction of a 40 acre public lake.

•Dedication of 4 acres adjacent to LaTrappe Heights for use as a town park.

•An annual assessment to the Trappe Volunteer Fire Department, Inc. in the amount of \$100.00 per residential dwelling unit.

•Funding for emergency sensors at Barber Road to alter traffic light timing for safe emergency passage, as well as any new signalized roads created by the development.

The Town recognizes that as the Lakeside PN District is developed, it will be necessary to amend the Development Rights and Responsibilities Agreement to address changing market conditions, needs of the community, and changes in technology. In accordance with state law, any changes or amendments to the Agreement will require public hearings and adoption as part of a formal ordinance. By way of example, in the event that the Town determines that it is in the best interest of its citizens to require that the developer utilize its existing sewer reserve capacity for the first phase of development, followed by an upgrade and expansion of its existing wastewater treatment plant (as set forth in more detail in the Water Resources Element), such provisions and conditions will be outlined in appropriate amendments to the existing Agreement.

4.7.3. Public Services and Infrastructure Required for White Marsh Development Area

As for the White Marsh Development Area, the Town and the developer entered into an Annexation Agreement that is recorded in the land records of Talbot County and runs with the land, which provides for the minimum public facilities that will be required for the development of the property. However, as set forth in that agreement, the Town has reserved the right to obtain an impact study prior to any development approvals, to assess additional impacts upon the police department, fire department, trash collection, library facilities and other emergency services, and to require the payment of an impact fee to cover these impacts. At a minimum, the developer will be required to make the following contributions and improvements:

•All costs associated with the expansion, improvements and upgrades to the Town's wastewater treatment plan, and collection system to serve the development.

•All costs associated with the expansion, improvements and upgrades to the Town's existing water treatment storage and distribution facilities to serve the development.

•A contribution of \$1,500 per dwelling unit toward the Town Center revitalization fund for the revitalization of the Village Overlay Zone.

•Construction of off-site sidewalk and curbside improvements along State Route 565/Main Street for purposes of pedestrian access from the Town Center to the White Marsh Elementary School.

•All roadway improvements, including off-site improvement to White Marsh Road, Lover's Lane and State Route 565/Main Street, as well as the intersection of White Marsh Road and State Route 565.

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CHAPTER 5 Transportation

5.1 Transportation

Transportation and land use are directly related. 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 additional 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.

5.2 Roadway Inventory

The Federal Highway Functional Classification System is used to prioritize highway segments based on their mobility role. The function of a highway facility is related to the type and magnitude of trips accommodated on a facility, e.g., through trips versus local trips. The definitions of functional highway classifications are as follows:

Principal Arterial – Carries a high volume of traffic for interstate and intra-state travel. Flow is usually uninterrupted from origin to destination.

Intermediate Arterial – Carries a high volume of traffic for inter-county and inter-city travel. Traffic on this type of road normally has the right-of-way except in areas of high hazard, then traffic controls are used.

Minor Arterial – Carries a high volume of traffic for intra-county and inter-community travel. These roads normally serve the higher classification roads providing access to and from the arterials.

Major Collector – Serves intra-county and inter-community travel, but at a lower volume and usually connects to an arterial to provide access to the surrounding land. Access is normally not taken directly from this road but from a sub-road connected to the collector. They may also serve large community shopping areas, schools, parks and cluster developments.

Minor Collector – Serves intra-community travel at a volume below the major collector. Provides access to the land using lower order roads or may be used for direct access to property.

Local – Provides direct access to the land.

US 50 is classified as a Principal Arterial and is the responsibility of SHA. Island Creek, Barber Road, and State Route 565, including Main Street, is classified as a Minor Collector. All other roads are currently classified as Local roads.

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

5.3 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 give road type. Level of service reflects driver satisfaction with a number of factors that influence the degree of congestion, including speed and travel time, traffic interruption, freedom to maneuver, safety, driving comfort and convenience, and delays. Six levels of service are used to describe highway flow conditions. Commonly accepted definitions for each category are:

- LOS A represents a free flow where individual users are virtually unaffected by others in the traffic stream. LOS A describes a condition with low traffic volumes and high speeds with little or no delays. There is little or no restriction in maneuverability due to the presence of other vehicles. Drivers can maintain their desired speeds and can proceed through signals without having to wait unnecessarily;
- LOS B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. LOS B affords above average conditions, and is typically used for design of rural highways;
- LOS C is also in the range of stable flows, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. LOS C is normally utilized as a measure of "average conditions" for design of facilities in suburban and urban locations. It is also considered acceptable in rural locations;
- LOS D represents high density, but stable flow. Speed and freedom to maneuver are severely restricted and the driver experiences a generally poor level of comfort. Small increases in traffic flow will generally cause operational problems at this level. LOS D is considered acceptable during short periods of time and is often used in large urban areas;
- LOS E represents operating conditions at or near capacity. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns; and
- LOS F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point and queues from behind the point. LOS F is characterized by demand volumes greater

than the roadway capacity as complete congestion occurs and, in an extreme case, the volume passing a given point drops to zero. Under these conditions motorists seek other routes in order to bypass congestion, thus impacting adjacent streets.

The following Level of Service measures apply to intersection capacity analysis:

- LOS A (little or no delay) describes operations with very low delay, i.e., less that 5.0 seconds per vehicle.
- LOS B (short traffic delays) describes operations with delay in the range of 5.1 to 15.0 seconds per vehicle.
- LOS C (average traffic delays) describes operations with delay in the range of 15.1 to 25.0 seconds per vehicle.
- LOS D (long traffic delays) describes operations with delay in the range of 25.0 seconds per vehicle to 40.0 seconds per vehicle.
- LOS E (very long traffic delays) describes operations with delay in the range of 40.1 to 60.0 seconds per vehicle.
- LOS F (very long traffic delays) describes operations with delay in excess of 60.0 seconds per vehicle.

Traffic flow within our planning area functions at 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.

5.4 Transportation Policies

A good roadway and local street system is essential to the orderly functioning of our Town. We depend on our road 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 State Planning Act suggest that a proactive approach to mobility issues is needed. It is our intent to plan in a manner that defines a coordinated, evolutionary approach toward achieving less reliance on driving alone, in order 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, include 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 should be planned accordingly.
- New streets should be coordinated with and built on the existing street hierarchy.

- Design and construction of new streets should be suited to the street's primary function.
- 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 35 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.
- Parallel parking should be provided on both sides of local streets, including streets in village and commercial centers.
- We should avoid development that would result in unacceptable levels of service on roads and intersections serving the development.
- 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 includes the cost of upgrading County roads that may become part of the Town street system.
- We will work with the State Highway Administration to develop ways to reduce the barrier effect of US 50 on our community, including additional signalized intersections at key locations.
- We will coordinate future access points on Route 50 with the State Highway Administration and encourage the use of local roadways and streets within new development to provide convenient roadway access for local traffic.
- We will continue to support the efforts of local and state agencies and governmental efforts to provide public transportation on the Eastern Shore, including the Town of Trappe and Talbot County.

5.5 The Transportation Plan

The Town's Transportation Plan is outlined on Map 3. 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 neighborhoods and local activity centers. To facilitate linkage of communities on both sides of US 50, at the request of the State Highway Administration, the Town has identified three possible locations for a single overpass. These potential sites are identified on Map 4. The three sites were identified in a manner that would protect and preserve the existing village center of Town. The Town believes that it would be detrimental for an overpass to be located in the center of Town. Of the three sites identified on Map 4, the northern-most site is the least desirable, and the southern sites would appear to accomplish the State's objectives without destroying the village center.

The Town will continue to work the State Highway Administration 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 important public space, and consequently we need to ensure that new street systems are easily understood and present positive images.

5.6 Town Street Classification System

The Town's Transportation Plan is illustrated on Map 3. 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 on major collectors should be strictly limited to the intersections of other major streets, roads and local streets. Design features, such as street lighting, signage, and street tree plantings should distinguish the collector streets from lower order streets. Pedestrian and separated bicycle routes should be provided along these routes.

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 from rear access streets. Where possible, existing commercial uses should be incorporated into the commercial street system. 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 corridor. 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 northsouth travel.

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 and allow residents access to proposed greenways for recreational enjoyment. Our pedestrian circulation (existing and planned) is set forth on Map 5.

The Town will continue to explore state and local funding sources to encourage pedestrian and bicycle facilities within the Town, and to promote connectivity of such facilities with the outlying areas of the County.

5.7. Transportation Requirements Within New Development.

As part of any significant development, in connection with the development site plan review process, the Town reserves the right to require independent traffic studies and other impact studies in order to determine the impact of new development on surrounding roadways. The Town requires that the developer pay for all impacts of its development, including any impacts on existing roadways and intersections.

The Town also requires that the developer install sidewalks, and encourages bicycle paths or other pedestrian paths within any new development, and reviews the plans to ensure bicycle and pedestrian connectivity with other development and neighborhoods. All roadways within any new development are required to be constructed, and bonded for a certain period to ensure that the roadways are well-constructed in accordance with the Town's road standards and specifications. The Town requires the developer to execute a public works agreement to ensure that any new roads or streets comply with the Town's construction standards. All road systems are inspected by the Town's consulting engineers prior to the Town's acceptance of the same.

CHAPTER 6 Community Facilities

6.1 Overall Objectives

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.

Many of the Trappe Community facilities are located in the center of town at Greenfield, Main, and Powell Streets. 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 in the town center 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 town center is the Harrison Circle Park that was improved in 2008 with 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.

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" that the project is consistent with our Plan, that adequate public facilities exist or will be provided when needed to serve the proposed development and ensure that our review procedures for projects that utilize state and/or federal funds are followed. 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, etc., is coordinated with and supports the visions included in this Plan.
- Maintain and improve park facilities and amenities to promote increasing usage by all members of the community.

6.2 Sewer System Improvements

The Town owns and operates the wastewater plant, and seven pumping stations. In 2002, the treatment system was upgraded to a Biolac® treatment system with chlorination/dechlorination and sand filtration. This treatment occurs prior to discharging the treated effluent into a tributary of LaTrappe Creek. The 2002 upgrade included an influent screen, an extended aeration basin, a clarifier, sand filters, and a sludge holding pond. The effluent screen is sized for 1000 gpm. The existing wastewater system has a design and permit limitation of 200,000 gallons per day (.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 assistance in federal grants and \$545,000 in Maryland Department of the Environment (MDE) assistance. The total cost was in excess of \$2.2 million.

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 gpd less water from its wells. These changes not only contribute to the conservation of potable water, but will also result in an increase in the plant's reserve capacity.

In terms of future improvements, the Town has an inflow and infiltration (I&I) correction program. Infiltration of ground water reduces usable Waste Water Treatment Plant (WWTP) capacity, and should be periodically reviewed for improvement. Several pump stations and the existing utility buildings are in need of overhaul and stations 1 and 2 are operating at near capacity. As part of the upgrade, a reed bed was designed (but not constructed due to cost overruns) to reduce the need for costly sludge removal and should be restored as a long-term cost saving measure.

Near term 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. The Town will also consider requiring the Lakeside developer to utilize its existing wastewater reserves, and to expand and upgrade the existing wastewater treatment plant, including the replacement of reserve capacity, as opposed to constructing a separate plant.

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

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for the WWTP to La Trappe Creek. These measures will give added capacity to the existing plant thus extending its useful life.

In 2005, the Town of Trappe adopted a Water and Sewerage Subsidiary Plan that addresses water and sewerage planning within the Town. Upon adoption of this Plan, the Town intends to update the Subsidiary Plan to ensure consistency with this Plan. Any significant development, such as the Lakeside PN District, the White Marsh Development Area, or other large infill properties, will require the expansion of the WWTP, at the cost of the developers and/or property owners.

6.3 Water System Improvements

A substantial water system improvement program was completed in 2001. This project extended over a period of four years at a cost of over \$3 million. This cost was offset by a \$1.2 million grant from United States Department of Agriculture (USDA). Included was a new storage tank with a 250,000 gallon capacity vastly improving detention time and fire fighting reserve, replacement and increased 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 occurs 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. Adding a third well is a long-range requirement. Large infill development, such as the White Marsh Development Area, or planned annexation areas will be required to add water supply, storage and treatment facilities to the Town water system as needed to adequately provide service.

The initial phase of the development (the first 200 units) may be served by the Town's existing water system and wells, provided that long-term pumping and recovery tests confirm the system's capacity. As additional phases are constructed, 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.

6.4 Stormwater Management

The Town will continue to work to address long-standing drainage problems. This can only be accomplished in cooperation with Talbot County as the drainage crosses jurisdictional boundaries. The Town Council and its Public Utilities commission 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 storm water runoff into streams that drain to La Trappe Creek and Miles Creek. The crossings under U.S. Rt. 50 (Ocean Gateway) have been inadequate to handle several storms, resulting in flooding of lawns and low-lying properties. That situation was improved by cleaning the ditch on the East side of Rt. 50. In addition, other areas of Town are subject to periodic flooding, especially Harrison Circle.

For all new development, the Town of Trappe requires all developers to pay for and implement acceptable stormwater management techniques. New development on larger 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 a number of 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 complimentary and aesthetically pleasing development.

One of the greatest challenges to reducing the impact of development is to adequately control the hydrology of a site. 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; rather, conservation design is a process by which to assess the appropriateness of different techniques for different sites. The key to making conservation design work is willingness on the part of all involved to be flexible in how a particular site is developed.

6.5 Community Recreation

Public parks are the Town's primary contribution to community recreation. The Town, via a Development Rights and Responsibilities Agreement, will receive a large public park on the east side of US 50. In addition, the PUD plan for the Lakeside District includes a 40 acre lake within the project that supports non-motorized craft. These facilities will greatly enhance the

recreational opportunities for residents of all ages, and place facilities within easy reach of existing residential development in the La Trappe Heights area. These new facilities will compliment 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 should be designed as 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, important natural assets should be incorporated into the overall system of parks and open space.

6.6 **Police Protection**

Since the adoption of the 2002 Comprehensive Plan, the Town of Trappe has acquired a police department. The police department has created a significant community benefit in terms of crime prevention, public awareness and proactive safety measures. Because the police department is currently staffed with one police officer, who is the chief, and a part time clerical assistant, the Town must still obtain occasional assistance from other police agencies. The Town recently entered into a mutual aid agreement with the incorporated municipalities of the other towns in Talbot County, which allows the various police departments of the incorporated municipalities to assist one another. Presently located in leased space, the police department will relocate to the municipal office building on Powell Avenue when the new municipal office building is constructed. As the town's population grows, this valuable community benefit will need to be expanded.

6.7 Fire Protection

The Town of Trappe and surrounding area receive fire protection from the Trappe Volunteer Fire Department. The Trappe Volunteer Fire Department owns one tanker truck which holds 5,000 gallons of water, three pumpers, 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 forty volunteers who train, and respond to fire, accident 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. Continuous funding support for the fire department was negotiated by the Town Council on behalf of the fire department with the developers of the Lakeside Development.

A portion of the fire department building is leased to Talbot County and houses a 24 hour/7 day a week paramedic team who responds to medical emergencies within the community. The fire department provides additional support through its own ambulances, Paramedics, and Emergency Medical Technicians (EMT's).

6.8 Public Buildings and Facilities

The increased scale of Town public facilities has created the requirement for added staff and equipment. Expanded office space will be required within the decade. As part of the Development Rights and Responsibilities Agreement for the Lakeside District, the developer is obligated to add several public facilities, including the construction of a Town administrative building within the Village Redevelopment Sub Area on a site identified by the Town. Construction of this new facility will provide both meeting room and office space for current and future staff. The need for a garage has been identified by the public utilities department to assist with equipment storage, and housing of future staff needed to support an increased population.

6.9 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 development of the site to support several historic buildings in one location.

6.10 Technology Infrastructure

The Town should explore and encourage the provision of adequate telecommunications infrastructure and service to support modern digital information services. These services will improve the Town's ability to attract small business office uses, will help encourage telecommuting as an alternative to long daily work commutes, and will support home-based businesses for Town residents.

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Trappe 2010 Comprehensive Plan April, 2010

CHAPTER 7 Water Resources Element

7.1 Introduction

As part of the 2006 legislative amendments to Article 66B, 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 than any future development plans within the Town of Trappe take 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. In preparing this document, the Town has relied upon and considered the Talbot County Comprehensive Water and Sewer Plan, 2002 Report of the Review, which is the last comprehensive water and sewer plan undertaken by Talbot County, as well as the Talbot County Comprehensive Plan, adopted in February, 2005, to ensure that Trappe's planning is consistent with County planning.

7.2 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 in order 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 water flowing in the older parts of Town that were built before such practices were required. 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.

•Administer all matters within the Town pertaining to water resources, waste disposal, stormwater management and sediment control.

•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 are expanded.

•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.

7.3 General Background

7.3.1. Topography and Geology

The land mass of the Town of Trappe is largely within the Wicomico Terrace. <u>See</u> Figure 1, <u>infra.</u> 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.

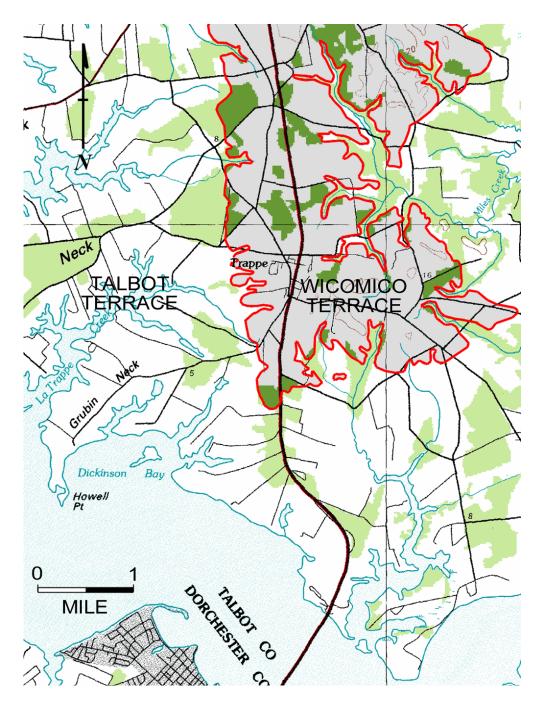


Figure 1 Town of Trappe in Relation to the Geologically Defined Terraces in Talbot County, Maryland

7.3.2. Soil Types

Soils within Trappe and its growth area were surveyed in 1969, and the results have been published in the <u>Soil Survey of Talbot County</u>, <u>Maryland</u>, William U. Reybold, United States Department of Agriculture, Soil Conservation Service, Washington D.C. The soils maps applicable to Trappe are set forth at Figure 2.

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. The soils within the Town represent a mix of Pleistocene age deposits and Holocene age deposits.

7.3.3. Drainage

The Town of Trappe lies within the Choptank River Basin Drainage. <u>See</u> Figure 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." 1992 Talbot County Comprehensive Water and Sewerage Plan, Chapter Two, D.

Drainage flows within the current incorporated boundary are generally to LaTrappe Creek or Island Creek in the west and to 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.

The La Trappe Creek, Island Creek, and the Bolingbroke Creek drain to the Lower Choptank River, while the Miles Creek drains to the Upper Choptank River. For the purpose of this plan, the drainage areas will be considered as either the Upper Choptank River or the Lower Choptank River.

The current incorporated area is 1,647 acres, of which approximately 1,229 drain to the Upper Choptank River and approximately 418 drain to the Lower Choptank River. There are four (4) areas included in the planned annexations, as shown in section Section 4, Map 2. These areas total 740 additional acres, with 507 draining to the Lower Choptank River and 233 acres draining to the Upper Choptank River.

The Town recognizes that non-point source pollutants can transcend jurisdictional boundaries and land use impacts (whether such impacts are development related, agricultural, etc) should be addressed cooperatively and consistently in an interjurisdictional manner.

MOERTHER

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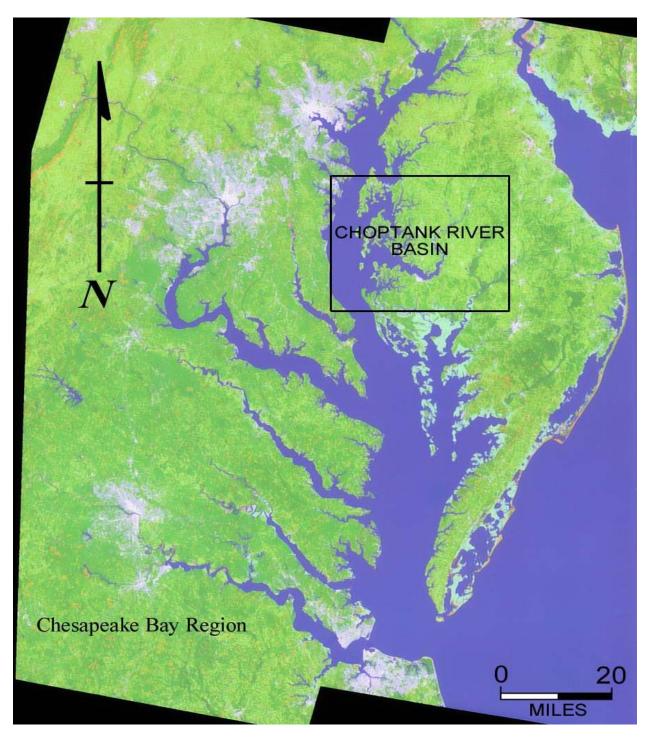


Figure 3 Chesapeake Bay Region with the general location of the Choptank River Basin

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7.4 Water Sources for the Town of Trappe

The major aquifers in Talbot County are sands in the Patapsco, Raritan, Magothy, Matawan, Aquia, Piney Point, and Calvert Formations and in 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 major aquifers has its own 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 to 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 ground water 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 manner to ensure the continued protection of the local and regional groundwater supply.

7.4.1. Piney Point Formation.

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 Foaminifera. 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 updip 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. See 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. Water quality in the Piney Point Aquifer is good throughout Talbot County. Id. Because the Piney Point is confined and does not outcrop, it is not vulnerable to contamination from surface sources. Id

7.4.2. 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 in 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. See Drummond, p. 40. The Magothy Aquifer provides copious amounts of water. Id.

7.5 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 a period of four years and cost over \$3 million. This cost was offset by a \$1.2 million grant from the United States Department of Agriculture (USDA). The water improvements included replacement and increased sizing for most of the distribution system, improved looping, and the installation of metered billing.

The Town of Trappe currently has a Water Appropriation and Use Permit, issued by the MDE, which authorizes the appropriation of 347,500 gallons per day from the Piney Point aquifer (497,000 gpd average during the month of maximum use) and 300,500 from the Matawan aquifer (456,000 gpd average during the month of maximum use).

The Town has two wells in the Piney Point Aquifer. The Town had the wells tested by Shanahan Artesian Well Company in 1995. The information for these existing wells, which is based upon testing conducted by Shanahan Artesian Wells in 1995, is summarized in Table 7(A):

| Well Number | Aquifer | Depth | Diameter | Max. | Flow | Water Quality |
|----------------|---------|-------|----------|-------|--------|---------------|
| | | Feet | Inches | Safe | Rate | |
| | | | | Yield | | |
| Well | Piney | 410' | 6" | 180 | 169gpm | Good |
| Permit No. | Point | | | gpm | | |
| TA1979G006(03) | | | | | | |
| Well No. | Piney | 421' | 8" | 180 | 169gpm | Good |
| Permit No. | Point | | | gpm | | |
| TA1979G006(03) | | | | | | |

| Table | 7(A) |
|-------|------|
|-------|------|

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 operating head, and monitor running amps for each pump. The results of the tests revealed that each well can 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 1970's.

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, which was built in 1997.

In January, 2007, Davis, Bowen & Friedel prepared a Water Supply Capacity Management Plan for the Town of Trappe. As part of the development of this Water Resources Element, the existing water demands were updated to include 2007 and 2008. As set forth in detail in the Town's Water Supply Capacity Management Plan, the greatest Annual Average Daily Demand for the period from 2004 through 2008 was as follows:

| | Table 7 (B) | | | | |
|------|--|--|--|--|--|
| | Town of Trappe Existing Water Demand | | | | |
| Year | Peak Annual Average Daily Demand (gpd) | | | | |
| 2008 | 109,895 | | | | |
| 2007 | 111,086 | | | | |
| 2006 | 86,992 | | | | |
| 2005 | 89,808 | | | | |
| 2004 | 100,383 | | | | |

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 or apartments buildings are required to pay additional water availability fees for each additional unit.

The Town bills all accounts monthly based upon water meter readings. All sewer customers are served by the water system. 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 publishing several articles on water conservation in the Town's monthly newsletter, which is mailed to the Town residents. The Town's increased water rates have also contributed to awareness of individual consumption levels.

7.6 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. Trappe has outlined its long range water planning

area on Map 6 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 set forth in the Talbot County Comprehensive Plan, 2002 Report of the Review.

7.6.1. Old Town (Existing Service Area)

To analyze future water use associated with new development, the Town has used an average of 205 gpd per connection, which is an average for the period from 2004-2008. The Town has reserved capacity for infill development potential (including subdivision potential) for an additional 115 lots. Using these figures, Trappe calculates an estimated water demand for future infill development at 23,575 gpd (205 gpd per household based on actual usage averaged from 2004-2008). The Town projects that the reserve allocation may be used as follows:

| Town of Trappe Future Old-Town Water Demand Forecasts | | | | | |
|---|--|--|--|--|--|
| Year | Anticipated Requests for Allocations for | | | | |
| | Infill Development (gpd) | | | | |
| 2010 | 5 EDU's @ 205 gpd = 1,025 | | | | |
| 2015 | 23 EDU's @ 205 gpd=4,715 | | | | |
| 2020 | 14 EDU's @ 205 gpd=2,870 | | | | |
| 2025 | 14 EDU's @ 205 gpd=2,870 | | | | |
| 2030 | 14 EDU's @205 gpd=2,870 | | | | |

| | Table | 7(C) |
|--|-------|------|
|--|-------|------|

Should the Town's infill development be built-out, the water usage would increase from 111,086 gpd to 134,661, which is well within the limits of the Water Appropriation and Use Permit. The Town currently has capacity to address its infill development. If, when, and as infill properties are developed, the current Water Appropriation Permit will require review and expansion.

For all unimproved properties located in the Old Town, where no water extension exists, the Town's ordinances require the property owner pay for costs associated with the extension of water services, including all construction, engineering, and professional costs. 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.

Prior to 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 subdivision. In addition to the finding of adequate public facilities, prior to the recordation of any final plat, the applicant is required to execute a public works agreement, approved by the Town Council, which sets forth the necessary public improvements required, including financial guarantees (bonds, letters of credit, etc.) which are required prior to the issuance of a building permit for development.

7.6.2 Lakeside PN District – Water Services

The Lakeside PN District and associated PUD plan has been approved for 2,501 residential units and a commercial component. The Lakeside PN District is currently 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 20 years, based upon current absorption trends.

For the ultimate build-out of the project, domestic water for the Lakeside PN District will be supplied by six wells, three in the Piney Point aquifer and three in the Matawan aquifer. The Town has obtained groundwater appropriation permits for these wells from the MDE. The average annual daily water demand at build-out is expected to be 458,000 gallons per day (gpd) which will be satisfied in full by the new water facilities to be constructed within the Lakeside PN District. The Maryland Department of the Environment's Water Supply Program uses a per unit value of 183 gpd/unit for Talbot County to estimate the annual average water demand. This estimate is based on the average of the smaller household size (1.8 persons) associated with age restricted communities at 80 gpd per person. The current groundwater allocation is based on the maximum number of residential units permitted in the Lakeside PN District. If the Lakeside PN District is completely developed and includes the maximum permitted residential units and commercial component, the total number of EDU's will exceed the maximum EDU's used as a basis for the currently permitted groundwater allocation for the 6 Lakeside PN District wells. The allocation assumes an average daily water demand per EDU of 183 gallons per day. Actual demands will be monitored throughout the development period. The total number of residential units and commercial improvements will be limited based on the actual water demands and the confirmed capacity of the permitted wells.

The initial phase of the development (the first 200 units) may be served by the Town's existing water system and wells, provided that long-term pumping and recovery tests confirm the system's capacity. After the initial phase of development, 300,500 gallons per day is the permitted allocation from the Matawan aquifer wells. The balance of the water required to serve the Lakeside PN District will be drawn from the Piney Point Wells. The fluoride content of the water from the Matawan aquifer is higher than MDE standards. The MDE allocation permitted for the Matawan and Piney Point wells has been established to allow for optimal blending of the water from both aquifers to provide the best quality of drinking water to the user.

The Town has required the Lakeside developer to design and build a water treatment, storage, and distribution system to serve the Lakeside PN district. The Lakeside PN District water system will be connected 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 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. The developer's financial obligations related to construction and operation of the Lakeside District water system will be secured through the provision of performance bond(s) and/or other surety acceptable to the Town and its legal counsel prior to construction of the water system. The financing for the water system may be provided through the issuance and sale of special obligation revenue bonds, the costs of which would be collected through a special tax district applicable to the Lakeside PN District.

7.6.3. White Marsh Development Area – Future Water Services

The White Marsh Development Area, which was 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) for decades, and includes Priority Funding Areas. The White Marsh Development Area was 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 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. No expenses will be imposed upon the Town and its current residents.

7.7 Town of Trappe Existing Sewerage System and Service Area

The Trappe long range planning sewer services areas are set forth on Map 7. In 2002, the treatment system was upgraded to a Biolac® treatment system with chlorination/dechlorination

and sand filtration. This treatment occurs prior to discharging the treated effluent into a tributary of LaTrappe Creek. The 2002 upgrade included an influent screen, an extended aeration basic, a clarifier, sand filters, and a sludge holding pond. The system was designed to achieve the following discharge criteria:

| Table 7(D) | | | | |
|--|----------------------------|--|--|--|
| Trappe Existing Wastewater Treatment Plant | | | | |
| Design Discharge Criteria | | | | |
| Parameter | Monthly Average Limit | | | |
| BOD ₅ | ≤10 mg/l (May-Sept) | | | |
| | \leq 30 mg/l (Oct-Apr) | | | |
| TSS | \leq 30 mg/l | | | |
| NH ₃ | \leq 2.2 mg/l (May-Sept) | | | |
| | \leq 4.4 mg/l (Oct-Apr) | | | |
| Total P | \leq 0.3 mg/l | | | |

The influent screen is sized for 1000 gpm. The existing wastewater system has a design and permit limitation of 200,000 gallons (0.2 mgd) per day, average daily flow and a design capacity of 200,000 (0.2 mgd) gallons per day of domestic wastewater with a peak flow capacity of 277 gallons per minute (400,000 gallons per day rate). Sludge was removed from the primary pond in 2002. The citizens of Trappe are obligated to repay \$3.5 million of debt associated with the upgrade of the existing systems.

Table 7(E)Existing Trappe Sewage Treatment Plant

| Owner/ | Туре | Occupied | Vacant | Point of | Existing | Flows** |
|-----------|------------|----------|--------|-----------|----------|---------|
| Operating | Treatment | Acres | Acres | Discharge | Capacity | Average |
| Agency | | | | | (mgd) | (mgd) |
| Town of | Biolac | 8.75 | 0 | Unnamed | 0.200 | 0.098 |
| Trappe | Activated | | | Tributary | | |
| | Sludge | | | of | | |
| | Treatment | | | LaTrappe | | |
| | Plant with | | | Creek | | |
| | Tertiary | | | | | |
| | Filtration | | | | | |

**Three year average (January 2007 through December, 2009)

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 set forth 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..

In regard to performance of the existing WWTP, the following information has been taken from the Chesapeake Bay Program Data Hub:

| Parameter | NPDES Permit | Average |
|------------------------|--------------|---------|
| | Limitation | _ |
| BOD (mg/l) | 10 | 2.05 |
| TSS (mg/l) | 30 | 3.6 |
| Ammonia Nitrogen | 1.7 | 0.26 |
| (mg/l) | | |
| Phosphorus (mg/l) | 0.3 | 0.197 |
| BOD Load (lbs/Day) | 17 | 2.1 |
| TSS Load (lbs/Day) | 50 | 3.6 |
| Ammonia Load (lbs/Day) | 3.7 | 0.25 |
| Phosphorus Load | 0.5 | 0.20 |
| (lbs/Day) | | |
| Phosphorus Load | 183 | 74 |
| (lbs/Year) | | |

Table 7(F)

As set forth above, the averages are far below the permit conditions. If the plant continues to achieve lower than required levels, the loads will not be exceeded, even at the maximum flow rate of 200,000 GPD.

The Town recognizes that all minor wastewater treatment plans within the State are limited to a Chesapeake Bay Tributary Strategy point source cap of 6,100 pounds of Nitrogen. The Town will work with MDE to ensure compliance with the Tributary Strategy point source cap. Any expansion of the existing wastewater treatment plant may require MDE to approve a revised discharge permit, which may be limited by the TMDL's and the Tributary Strategy point source cap.

The existing plant handles waste biosolids by long-term storage in the middle lagoon. The south lagoon, which may be seen on recent aerial photos, 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 build up of biosolids in that lagoon requiring removal about every ten years. Twenty-four hours of emergency storage is also accommodated in a portion of the middle lagoon and a portion of the northern lagoon. The monthly average daily flow is shown below:

| Town of Trappe Wastewater Treatment Plant Flows (MGD) | | | | |
|--|-------|-------|-------|--|
| | Year | | _ , | |
| Month | 2007 | 2008 | 2009* | |
| January | 0.131 | 0.061 | 0.079 | |
| February | 0.097 | 0.064 | 0.077 | |
| March | 0.108 | 0.097 | 0.081 | |
| April | 0.151 | 0.074 | 0.136 | |
| May | 0.110 | 0.098 | 0.135 | |
| June | 0.079 | 0.090 | 0.156 | |
| July | 0.077 | 0.088 | 0.094 | |
| August | 0.077 | 0.096 | 0.084 | |
| September | 0.069 | 0.090 | 0.094 | |
| October | 0.076 | 0.088 | 0.079 | |
| November | 0.083 | 0.083 | 0.157 | |
| December | 0.079 | 0.080 | 0.237 | |
| Average | 0.095 | 0.084 | 0.118 | |
| 3-year average: 0.098 MGD | | | | |

Table 7(G)

*Total precipitation for 2009 was 62.96 inches, the second highest precipitation since 1948 (Source: Royal Oak Precipitation Data)

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. During the course of the water audit, it was discovered that the Town's wastewater treatment plant was using approximately 35,000 gallons of potable water per day, all of which was included in the effluent of the plant. This potable water use was related to a chlorine induction unit that was not working, and the use of potable 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, the chlorine induction unit was replaced. These water reuse measures were fully implemented by November, 2009. Before the corrections were completely on-line, the average daily flows for the month of October, 2009 were 79,000 gallons

per day, during which month 7 inches of rain was reported at Royal Oak (the second wettest October in 33 years). In addition, 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 less gallons of potable water use. The higher flows in November, 2009 and December, 2009 are attributable to the high rainfalls (the November and December precipitations were the third highest and second highest rainfalls, respectively, since 1948).

The Town's water reuse plans at the wastewater treatment plant should increase the available capacity by at least 30,000 gallons per day. Although these modifications have only been in place for a short time, the Town expects to see lower averages in 2010.

The Town has allocated 38,000 gpd for infill development (based upon 115 lots at 250 gpd each) and the school (38 EDU's at 250 gpd). The sum of the 3-year average and the allocation for infill development and the school, is 136,000 gpd (0.136 mgd), and the available capacity is 64,000 gpd (0.064 mgd).

The existing Town collection system is primarily gravity with seven publicly maintained pump stations. The existing system is in need of minor repairs and replacements to eliminate a portion of the extraneous flow that enters through inflow and infiltration.

| Inventory and Summary of Existing Pump Stations | | | | |
|---|---|--|--|--|
| Location: | Description | | | |
| 1. South Main St. & Route | Two pumps each 3 hp, 88 gpm and a 4" force main, equipped | | | |
| 50 | 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, 2 hp and 3 hp, 96 gpm, and a 4" force main | | | | |
| 4. Lakeview (Harrison | Two pumps each 1.5 hp and a 4" force main, equipped with an | | | |
| Circle) | emergency generator | | | |
| 5. Rumsey Drive | Two grinder pumps, each 1 hp | | | |
| 6. Marvel Drive South | Two grinder pumps, each 2 hp | | | |
| 7. Marvel Drive North | Two grinder pumps, each 2 hp | | | |

Table 7(H)

Trappe has been addressing 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. This means that I&I is somewhat lower than in the past. In 2003, the average flow during the month of 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 rain fall of 8.52 inches. This indicates a major 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 that are served by individual septic systems. While the Town provides water sewer to a few properties located outside the Town, the Town does not provide any sewer services to properties located outside its corporate limits. The Town requires that property be annexed 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 pay for costs associated with the extension of sewer services, including all construction, engineering, and all professional costs. 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.

The number of building permits issued by the Town that required new water and sewer connections for the past six years, are as follows:

| Year: | Number of Connections: |
|-------|------------------------|
| | |
| 2009 | 0 |
| 2008 | 2 |
| 2007 | 2 |
| 2006 | 3 |
| 2005 | 2 |
| 2004 | 10 |
| 2003 | 9 |
| | |

As set forth above, the total number of new connections over the past 6 years is 28 new connections.

7.8 Future Planning for Sewer Services.

Trappe has outlined its long range sewer planning area on Map 7 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 set forth in the Talbot County Comprehensive Plan, 2002 Report of the Review.

7.8.1 Old Town (Existing Service Area)

The Town's existing service area is set forth on Map 7. Within the area served by the existing facility, there is 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 that are still served by individual septic systems.

With a design capacity of 200,000 gpd (0.2 mgd), the Town calculated its available capacity (64,000 gpd) based upon the following:

98,000 gpd (3-year average flows)
28,750 gpd (reserve capacity infill development -- 115 EDU's @ 250 gpd each)
9,500 gpd (reserve capacity for elementary school expansion - 38 EDU's at 250 gpd each)

136,250 gpd

The Town expects its available capacity to increase with the recent water re-use program at the wastewater treatment plant, which has reduced the Town's use of 30,000 gallons per day of potable water that had been used in connection with the daily operations of the wastewater treatment plant. This number could also increase slightly as inflow and infiltration is improved. The Town has not allocated or reserved capacity for the 32 properties on septic tanks, but intends to allocate it on a first-come, first serve basis provided that the property owners pay all extension and connection fees.

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

With respect to the future water and sewer demand from the annexation areas proposed on Map 2, as set forth in the Municipal Growth Element (Section 4.3), the Town has sufficient land within its boundaries for development for the foreseeable future or within the planning period of this Comprehensive Plan. The Town recognizes that any significant development of these annexation areas would require upgrades to its existing WWTP, which may be constrained by the Tributary Strategy point source cap and the applicable TMDL. Moreover, there is currently not sufficient 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.

7.8.2 Lakeside PN Development

The Lakeside PN District is currently 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.

At the Town's direction, the Lakeside treatment plant was designed for a total of 2,400 EDU's, which equates to sewer flows of 540,000 gpd (0.540 mgd). The Town has received a permit from MDE for the first phase of the treatment plant for 270,000 (0.270 mgd). The Town has also received a groundwater discharge permit for the disposal of treated wastewater by land application. In addition to the treatment plant and groundwater discharge permits, the Town has also received a construction permit for two pumping stations and a force main connecting the existing wastewater treatment plant and the new wastewater treatment plant.

The Town Council and the Town Planning Commission have recently begun exploring its options with respect to utilizing the Town's existing wastewater treatment plant to serve the Lakeside development. This decision has been based upon many factors. The Town's citizens are obligated to pay \$3.5 million of debt resulting from the 2001 upgrade of the water and sewer infrastructure. Since the 2001 upgrades were completed, the Town has not experienced significant new demand for water and sewer services. In fact, there have only been 28 new connections in the past 6 years. The only means available to the Town to pay the debt service associated with the initial upgrade (while still maintaining appropriate capital reserves and operating expenses) is to either increase the water and sewer rates charged to its current users, or to add new users. Other than the Lakeside development, the Town has not received development plans for any other significant infill development that would require water and sewer services.

The Town has sufficient reserve capacity to serve the first 200 homes in Lakeside. The maximum wastewater treatment and disposal demands for Lakeside will not be realized all at once since the housing market, to a large degree, will determine phase-in needs. Therefore, the capacity required for the full build-out of the project will not be required for 20 years. Since much of that capacity will not be required initially, expansions to the Town's plant can be constructed in distinct phases as development proceeds so that the wastewater flow more closely matches treatment capacity and the treatment processes can operate more efficiently.

While the initial phase of the Lakeside development can be served by the Town's current capacity and the parameters of the existing discharge permit, as additional phases of the development are constructed, the wastewater treatment plant can be upgraded to achieve the discharge criteria necessary for land application. The treated wastewater will be applied by land application on the designated primary land application area (85 acres). The Town has also designated an additional 22 acres as a reserve area. Additional land application areas may be added to the disposal area subject to approval by MDE and the Town of Trappe.

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. Utilizing a split or

dual discharge permit, the Town would have the flexibility to either discharge into the stream within the parameters of its discharge permit, or to send the treated effluent 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, which is recorded in the land records for Talbot County and which binds and runs with the land, requires the developer/landowner to fund 100% of the design and construction costs of the sanitary sewer system at no expense to the Town. If the Town determines that it is in the Town's interest to require that the developer utilize the existing wastewater treatment plant, the developer will be required to pay all of the wastewater connection and capital charges related to its use, and to pay for all necessary upgrades and expansion to provide the necessary capacity for the development. All of these obligations will require amendments to the Development Rights and Responsibilities Agreement.

The developer's financial obligations related to infrastructure and expansion will be secured through the provision of performance bond(s) and/or other surety acceptable to the Town and its legal counsel prior to 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 a special tax district applicable to the Lakeside PN District.

7.8.3. White Marsh Development Area

As previously stated, the White Marsh Development Area was annexed by the Town in August, 2004. It has been zoned Town Residential (TR) under the County zoning ordinance (which permits four dwelling units per acre with public sewer) for at least twenty years, and is located within the State's Priority Funding Area. The White Marsh Development Area was 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 which will be necessitated as the result of the development of the White Marsh Development Area. While no development plan is currently being considered for this area, the annexation agreement, which is recorded and runs with the land, 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. In addition, 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.

7.9 **Point Source Nutrient Loads**

The existing and projected wastewater flows are shown in Table 7(I) and the resultant Nutrient Loads are shown in Table7(J).

| Trappe Current and Projected Future Wastewater Flow (all data in GPD) | | | | | | | | |
|---|----------|--------|---------|---------|----------|----------|--|--|
| Description | 3-years | 2010 | 2015 | 2020 | 2025 | 2030 | | |
| _ | ending | | C | | | | | |
| | 12/31/09 | | | | | | | |
| Residential Infill Development | 62,711 | 63,211 | 68,211 | 71,211 | 74,211 | 77,211 | | |
| Commercial/Industrial Development | 4,500 | 4,500 | 4,500 | 4,800 | 5,100 | 5,600 | | |
| EDUs | | | | | | | | |
| Institutional Development (EDUs) | 2,700 | 2,700 | 2,700 | 2,700 | 2,700 | 2,700 | | |
| Process Water at Treatment Plant | 28,839 | 838 | 838 | 838 | 838 | 838 | | |
| Mixed Uses (Lakeside District) | 0 | 9,000 | 54,000 | 144,000 | 234,000 | 324,000 | | |
| Mixed Uses (White Marsh | 0 | 0 | 0 | 0 | 11,000 | 22,000 | | |
| Development Area) | | | | | | | | |
| Disposed by Land Application | | | | -90,000 | -191,000 | -292,000 | | |
| Total Stream Discharge | 98,750 | 80,249 | 130,249 | 133,549 | 136,849 | 140,349 | | |
| Table (J) | | | | | | | | |

Table 7(I)

| Table | (J) |
|-------|-------------|
| Lanc | (U) |

| Trappe Current and Projected Future Point Source Loading | | | | | | |
|--|----------|--------|---------|---------|---------|---------|
| | 3-years | 2010 | 2015 | 2020 | 2025 | 2030 |
| | end | | | | | |
| | 12/31/09 | | | | | |
| Total Stream Discharge (GPD) | 98,750 | 80,249 | 130,249 | 133,549 | 136,849 | 140,349 |
| Concentration of Total Nitrogen (mg/l) | 20.9 | 25.8 | 25.8 | 8 | 8 | 8 |
| Concentration of Total Phosphorous | 0.197 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| (mg/l) | | | | | | |
| Annual loading of Nitrogen (lbs per | 6,283 | 6,303 | 10,229 | 3,252 | 3,333 | 3,418 |
| year) | | | | | | |
| Annual Loading of Phosphorous (lbs | 59 | 61 | 99 | 102 | 104 | 107 |
| per year) | | | | | | |

With regard to the assimilative capacity of the receiving stream, a TMDL has been established for the Unnamed Tributary of La Trappe Creek. The TMDL limits the annual discharge of phosphorous from the plant to no more than 183 pounds per year. As is evident from the table, the plan for a lowering the stream discharge assures that the TMDL is not exceeded. Due to the TMDL, the Town will have to treat the phosphorous to less than 0.3 mg/l in order to discharge more than 200,000 gpd. Because of this limitation, the Town has planned to dispose of some of the wastewater by way of land application. The Tributary Strategy goal for the plant is 7,807 lbs per year for Total Nitrogen. The plant plans to limit the loading to 58% of the TMDL for Total Phosphorous and 44% of the Tributary Strategy Goal for Total Nitrogen.

7.10 Non-point Sources

The purpose of the Trappe stormwater management ordinance is to minimize damage to public and private property, reduce the effects of development on land and on the quality of water of the Chesapeake Bay, and its tributaries, control stream channel erosion, reduce local flooding, and maintain, after development, as nearly as possible, the predevelopment runoff characteristics.

The objectives of stormwater management are to:

•Design, construct, operate, and maintain stormwater management systems to control runoff from all land in accordance with the Town's stormwater management ordinance.

•Ensure the use of best stormwater management practices to the maximum extent reasonably practical.

•Ensure that privately owned stormwater management facilities are operational and wellmanaged and that the expenses of such maintenance and operations are borne by the private homeowners and not the Town's taxpayers.

•Work with Talbot County to ensure that the County performs its stormwater management responsibilities along county roads, properties along the Town's borders, and other areas within the County's jurisdiction.

As for non-point source pollutants, all development within the Town is required to comply with the stormwater management ordinance, which requires water quality measure to be implements to treat the first inch of rain, and limits the flow of water from the site to less than pre-existing conditions. A significant source of non-source pollutants flow from land uses and practices in other jurisdictions. The Town does not have resources or jurisdiction to identify and address non-point source pollutants outside of its boundaries, nor does the Town have sufficient information or resources to determine the suitability of receiving waters. The Town will work with Talbot County and MDE to continue to address, identify and analyze non-point source pollutants.

The existing and planned land uses are shown in Table 7(K):

Current and Projected Future Land Uses (By Drainage Area) (all data in Acres) Buildout Existing 2030 Upper Upper Upper Lower Lower Lower Choptank Choptank Choptank Choptank Choptank Choptank River River River River River River 163 107 136 935 419 LULC12 (Medium Density 752 Residential) LULC13 (High Density 0 8 0 12 0 12 Residential) 8 70 LULC14 (Commercial) 43 8 62 8 22 0 0 22 0 22 LULC15 (Industrial) 5 25 25 5 25 5 LULC16 (Institutional) 9 49 9 49 9 49 LULC18 (Open Urban Land) 912 424 298 391 108 LULC21 (Cropland) 107 269 239 239 269 239 269 LULC41 (Deciduous Forest 39 3 45 3 45 3 LULC50 (Water) 31 LULC80 (Transportation) 31 31 31 31 31 924 924 924 Total 1.463 1.463 1.463

Table 7(K)

MDE has provided loading factors for the various land uses in order to estimate the nonpoint nutrient loadings. The factors assume that Tributary goals will be met in the agricultural lands. Based upon these loading factors, the estimate of non-point nutrient loads is provided in Table 7(L):

Table 7(L)

| Current and Projected Future Nonpoint Source Loading (By Drainage Area) | | | | | | |
|---|----------|-------|--------|-------|--------------|-----|
| (all data in lbs/year) | Existing | | 2030 | | At Build out | |
| Drainage Area | TN | ТР | TN | ТР | TN | TP |
| Lower Choptank River | 5,749 | 500 | 5,660 | 482 | 4,583 | 328 |
| Upper Choptank River | 10,485 | 981 | 8,798 | 643 | 7,698 | 539 |
| Total | 16,234 | 1,481 | 14,458 | 1,125 | 12,281 | 867 |

7.11 Total Nutrient Loading

Existing and planned nutrient loads, from both non-point and point sources are shown in Table 7(M):

| Current and Projected Future Total Nutrient Loading (By Drainage Area) | | | | | | |
|--|----------|-------|--------|-------|--------------|-----|
| (all data in lbs/year) | Existing | | 2030 | | At Build out | |
| Source | TN | ТР | TN | ТР | TN | ТР |
| Nonpoint Sources | 16,234 | 1,481 | 14,458 | 1,125 | 12,281 | 867 |
| Point Sources | 6,283 | 59 | 3,418 | 107 | 3,418 | 107 |
| Total | 22,517 | 1,540 | 17,876 | 1,232 | 15,699 | 974 |

| Table | 7(M) |
|-------|------|
|-------|------|

MOGRAM

Trappe 2010 Comprehensive Plan April, 2010

CHAPTER 8 Sensitive Areas

8.1 **Overall Objectives**

Protection and improvement of water quality and wildlife habitat is our overall goal for managing "sensitive areas".

This element supports and addresses Vision Two:

• Sensitive areas are protected.

The four sensitive areas mandated for management and protection include:

- Steep slopes
- 100-year floodplains
- Habitats of threatened and endangered species
- Streams and their buffers

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.

8.2 Threatened and Endangered Species Habitat

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 areas of forestland are annexed in the future and these areas abut or include areas which are known fox squirrel habitat, then the landowners should be encouraged to retain existing forests and plant native, locally grown species to increase the amount of contiguous forest that may be used as habitat.

Our aerial photographs of the planning area identify forested areas within the various development districts that may be annexed in the future. We will enact legislation that rewards developers who protect habitat by clustering new construction.

8.3 Streams and Stream Buffers

We will establish 100-foot, average width, stream buffers on both sides of stream centers. These buffers will serve as wildlife corridors and also may be suitable for passive parks, bicycle, and

walking paths. We will require 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.

8.4 Nontidal Wetlands

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 will be 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.

8.5 Critical Areas

Recognizing the vulnerability of the Chesapeake Bay Tributary waters, and to further protection of same, Trappe in its 2000 Comprehensive Plan pulled back its development area border to further distance future development from Chesapeake Bay critical areas. In addition, future Planned Developments are strongly encouraged to avoid discharging treated wastewater directly into tributaries of the Chesapeake Bay. Land application of wastewater is the preferred alternative.

8.6 Agricultural Land

The Town of Trappe will continue to encourage the creation of a "Greenbelt" of protected farmland surrounding the Trappe Development Area. See Map 2. Trappe has amended its development area to not encroach upon areas south west of town that are in active agriculture, and considering preservation opportunities. The goal is to create a preservation barrier that encircles and defines the planning area in the future. Transferable Development Right Legislation will be considered that rewards developers purchasing development rights in the "Greenbelt" area.

CHAPTER 9 Mineral Resources Element

The Town of Trappe has a 52.3 acre permitted surface mine located within the corporate limits. Its location is identified on Figure 4. 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. Prior to 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 reclaimed mine will maintain a permanent pool elevation of 34' with an average depth of 6'. Lake levels and stormwater management will be achieved with an 8' permanent sharp crested weir. The recreational lake and permanent stormwater management facility resulting from the reclamation of the surface mine is included as part of the Lakeside PN District approved Master Plan. Once the mine has been completely reclaimed in accordance with the approved Reclamation Plan, there will be no more active mining and the surface mining permit will be terminated.

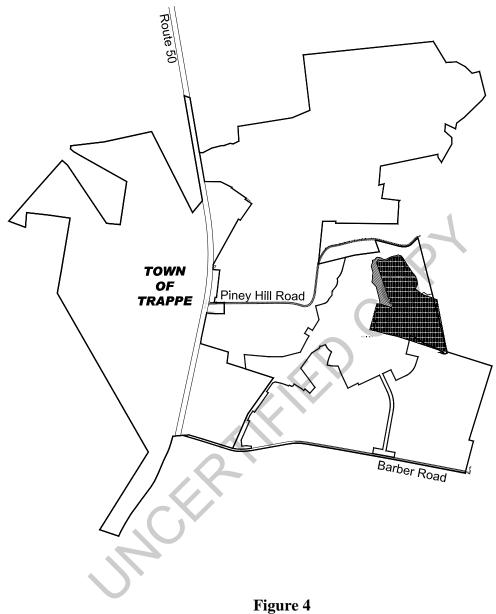


Figure 4 Surface Mine Location

Trappe 2010 Comprehensive Plan April, 2010

CHAPTER 10 Implementation

10.1 Implementation

This element supports and addresses all eight visions by setting out specific steps we have followed, and will continue to follow, to achieve them. The protection and enhancement of high quality living is an important aspect to achieving the goals of this plan and the visions of the State planning act.

After the adoption of the Town's 2002 Comprehensive Plan, the Town undertook an extensive overview and reexamination of its zoning ordinance, subdivision regulations and building codes. The Town also revised and re-codified its Town Code. A summary of the Town's implementation of its 2002 Comprehensive Plan includes the following:

- Completed the upgrades to the Town's wastewater treatment plant (BNR upgrade)
- Adoption of the Town of Trappe Water and Sewerage Subsidiary Plan
- Adoption of the Town's Water and Sewerage Capacity Management Plan
- Recodification of the Town Code in a digital format
- Digitalize the Town Charter
- Impact Fee Study and Assessment for the Lakeside District
- Adoption of a Development Rights and Responsibilities Ordinance
- Adoption of a Village Overlay and Redevelopment Zoning District to stimulate revitalization and redevelopment of the village center
- Adoption of the Planned Neighborhood Floating Zone District (which won the Maryland Department of Planning's Vision Award in 2004)
- Adoption of a Highway Commercial Floating Zone District, and Regional Commercial Floating Zone District

• Adoption of Planned Neighborhood Design Guidelines (including standards for parking, lighting, street design, sidewalks, curbs and gutters, and landscaping and environmental standards)

- Adoption of Commercial Development Design Guidelines
- Establishment of an Industrial District

• Adoption of a Town Roads Ordinance and updated construction standards for water, sewer storm drains and streets

• Adoption of the 2006 Property Maintenance Code, as well as the 2006 International Building Codes

In addition, with the establishment of the Town's Planning Department and Police Department, the Town is also in a better position in terms of enforcement.

10.2 Future Goals

The Town will continue to review and reevaluate its zoning ordinance, subdivision regulations, policies and procedures as it utilizes the newly established tools in place. As with any ordinances and regulations, there will be inevitable adjustments and revisions as the regulations are applied and utilized. We will continue to work on the following goals and objectives:

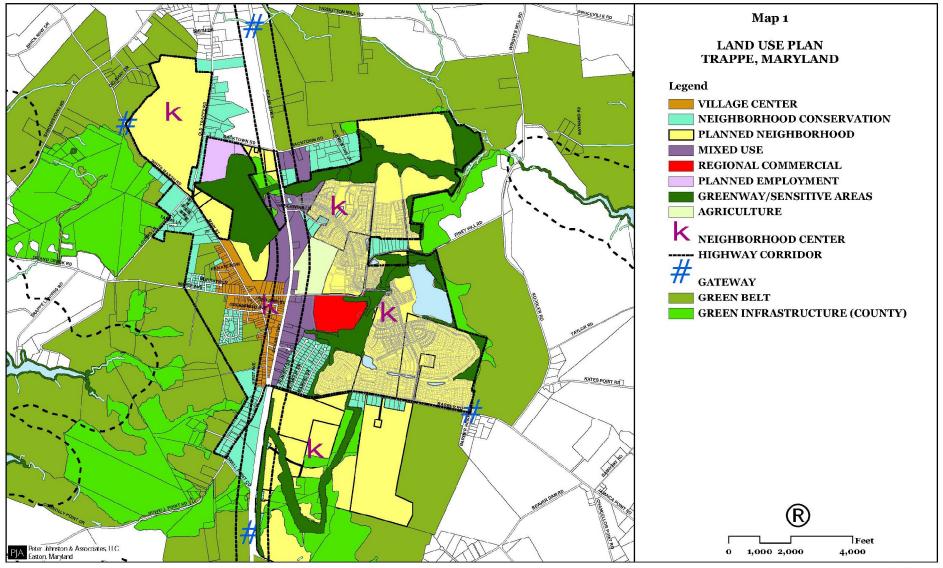
- Streamlined review of applications for development and redevelopment
- Continued review and analysis of ways to encourage revitalization and redevelopment of the existing village
- Enforcement of property maintenance codes and building codes

• Working with state, county and other agencies to encourage economic redevelopment and opportunities, including high-tech jobs and employment opportunities that do not require significant commuting

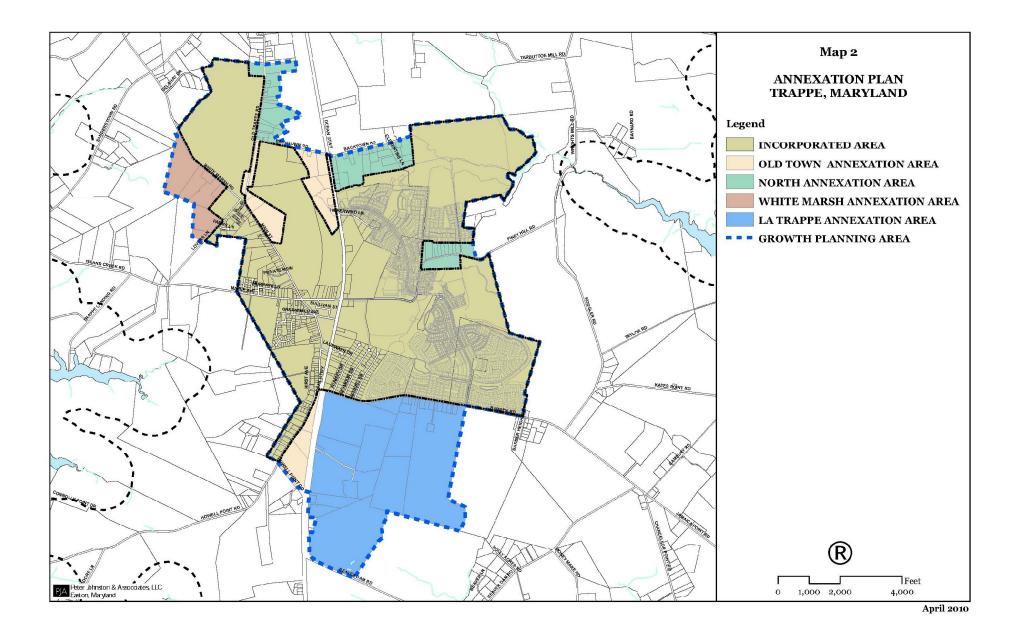
• Encourage sustainable development practices and eco-friendly approaches to living, including recycling, and alternative transportation such as bicycling and pedestrian walkways, and public transportation

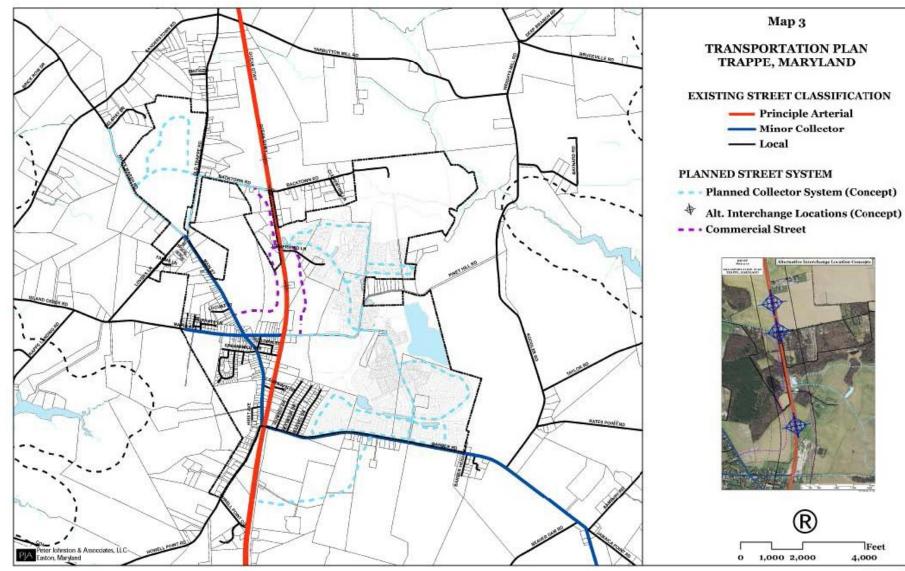
• Work with the State and County to encourage the establishment of a permanent greenbelt, including acquisition of conservation easements

• Review the Town's ordinances and regulations to ensure that any sexually oriented businesses are located in a manner that do not create secondary effects upon the Town or its citizens such as an increase in crime or an adverse effect on surrounding property values.

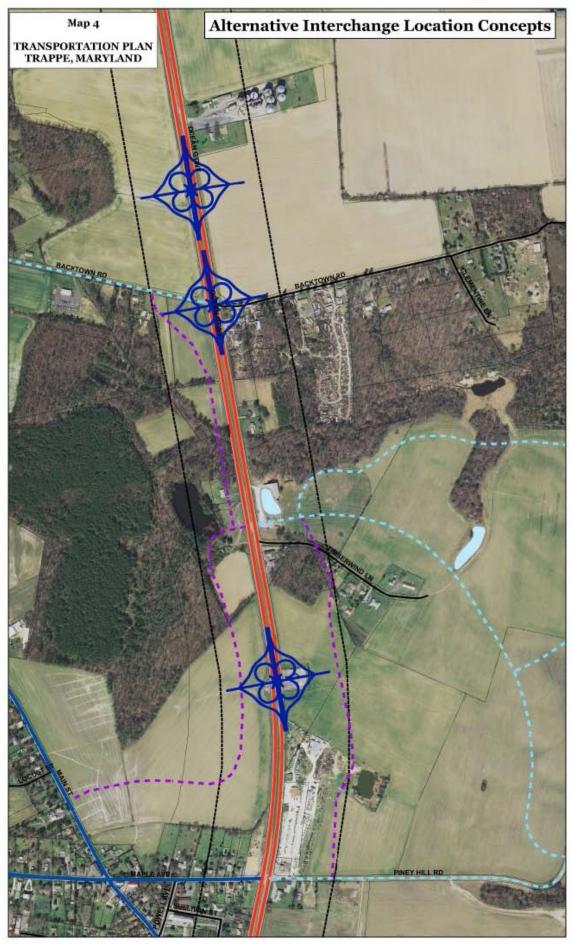


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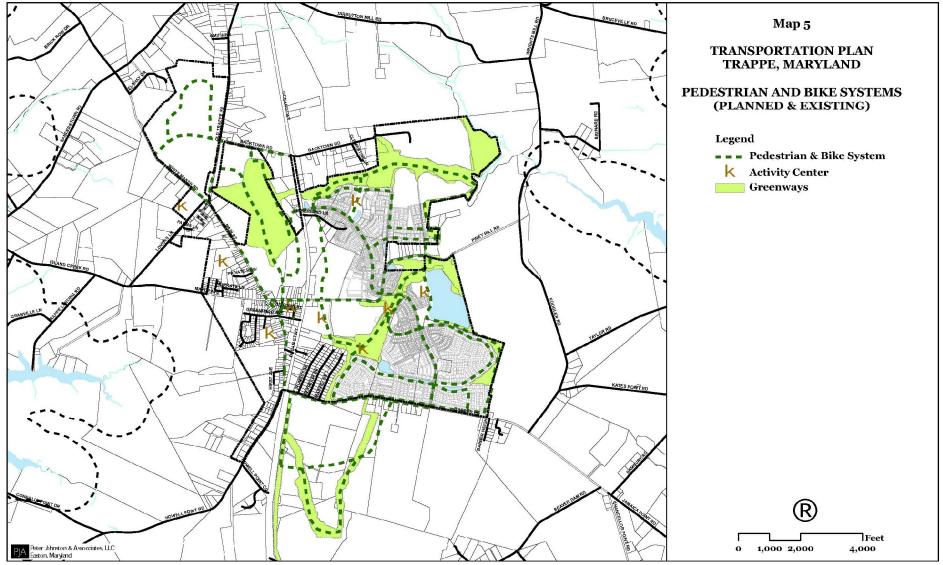




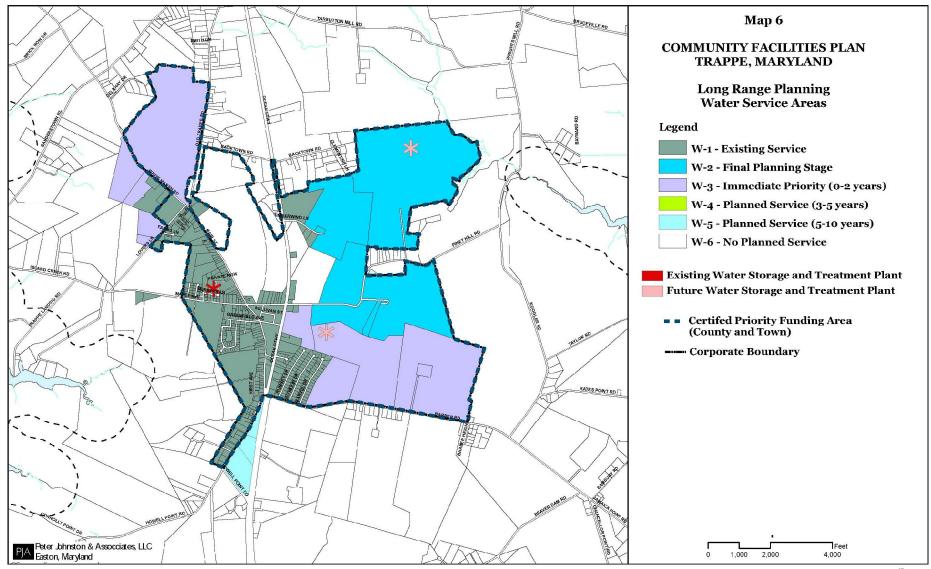
April 2010



April 2010







April 2010

