2010 Comprehensive Plan Town of Secretary



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Introduction

The 2010 Secretary Comprehensive Plan is a long-range, policy document for governing the future physical development within the corporate limits of Secretary and its immediate surrounding area. The plan is an official statement of local officials and concerned citizens as to how they would like to see the Secretary area develop in the coming years.

The Comprehensive Plan is intended to serve as the Town's growth and development blueprint through 2030. The primary goal of this Plan is to set a framework for the Town's desired future which can be implemented over the next several years. This Plan replaces the Town's previous comprehensive plan prepared in 1997. Under Maryland law, jurisdictions exercising planning and zoning authority must prepare comprehensive plans which must be amended at regular six year intervals. Secretary's planning and zoning authority comes from Article 66B of the Annotated Code of Maryland.

The Comprehensive Plan does not restrict anyone in the use or development of their property as does the zoning ordinance, but simply indicates to all concerned how the Planning Commission and the Mayor and Town Commissioners believe the Town should develop in the coming years. The Secretary Comprehensive Plan is the official policy statement of the Mayor and Town Commissioners and the Planning Commission regarding the future growth and development of Secretary.

The Plan will assist the Planning Commission when revising the zoning code and official map as part of the comprehensive rezoning process following adoption of this document, as well as in making zoning recommendations to the Mayor and Town Commissioners and in reviewing subdivision applications. The Plan will help the Board of Appeals in evaluating requests for special exceptions and variances. Town officials will use the Plan to program for capital improvements such as streets and parks. The private sector, including property owners, developers, businesses and industries, will use the plan to gauge whether and how their activities and plans can be accommodated by the Town.

The 2010 Secretary Comprehensive Plan is divided into two sections. The first section is the "Background for Planning," which provides the basic framework for the development of a Comprehensive Plan. The Background for Planning sections include a brief summary and description of the physical features of the planning area and a detailed analysis of the social and economic characteristics of the people of the community.

The second section is the Comprehensive Plan. The Comprehensive Plan sets forth the basic development policies which should be implemented to assure the orderly growth and development of the Secretary area over the next twenty years. The Comprehensive Plan is comprised of nine basic elements: (1) Goals and Objectives; (2) Land Use; (3) Community Facilities; (4) Municipal Growth Element; (5) Water Resources Element; (6) Transportation; (7) Sensitive Areas; (8) Interjurisdictional Coordination; and (9) Implementation

In each of these major elements, the existing conditions relating to each particular element are described, existing potential problem areas are identified, and various strategies and policies are recommended to help alleviate these existing problem areas and to adequately meet the demands of the future population of Secretary.

Background for Planning

In order to prepare an effective Comprehensive Development Plan governing the future physical development of Secretary and its immediate surrounding area, it is first necessary to fully understand the nature of the community, its people and its problems. By a careful and thorough analysis of existing conditions, it is possible to identify development issues confronting the community and to suggest alternative courses of action to address these concerns.

The Background section of the Secretary Comprehensive Plan presents an overview of the Town's physical, demographic and economic conditions as well as a brief history of the Town. This Background section provides the foundation for the Plan by:

- Identifying the Town's regional setting;
- Describing the natural features in and around Town;
- Summarizing demographic data and making population projections, and;
- Summarizing housing and economic conditions.

Descriptive information about present conditions and expected trends provides a context for planning. It not only describes present issues, opportunities and problems, but it also suggests a likely future if current planning practice prevail.

Location

The Town of Secretary is located at the convergence of the north and south branches of the Warwick River in the northern part of Dorchester County. More specifically, it is located approximately eight miles east of the City of Cambridge, which is the county seat. (See Figure 1 - Vicinity Map.) It is bounded on the west, north and south by the Warwick River, and the neighboring Town of East New Market is located approximately one mile to the east.

Figure 1: Vicinity Map

The Town of Secretary is located in northern Dorchester County, on the Eastern Shore of Maryland.



History

The history of the Town of Secretary dates back to the Proprietary Governorship of Maryland. In 1661, the Second Lord Baltimore, Cecilius Calvert, commissioned the Honorable Henry Sewall as Chief Justice, Principal Officer and Secretary of the Province of Maryland and granted him approximately 5000 acres of land along the Choptank River from Jenkins Creek, west of Cambridge, to Cabin Creek, north of Secretary. Lord Sewall was a prominent figure in Maryland, holding the third highest office in the colony. It was in honor of Lord Henry Sewall, Secretary of the Province of the Province of Maryland, that the Town was given the name of Secretary. It is believed that the land may have been called "the Secretary's land" originally and was later shortened to Secretary. In 1662, Lord Sewall built a colonial mansion, known as "My Lady Sewall's Manor" on a creek leading inland from the Choptank River. This creek was known as Sewall's Creek, later as Secretary Creek and today it is the Warwick River.

About 1740, My Lady Sewall's Manor became part of Henry Trippe's large tract of land called "Carthagenia." This manor had a number of different owners over the years. In 1876, Joseph Cook bought the estate which contained approximately 260 acres. In 1882, Mr. Cook and his son-in-law, Joseph Conkle, sold several small farms off this tract, and the remaining land was surveyed and laid out in lots and streets very much as they are today. The first surveyed lot was sold in 1883, and this was the beginning of the present Town of Secretary.

A few small houses began to spring up along the shoreline and the people began oystering to make a living. In a few years, Joseph Cook and John Potter opened an oyster packing house which was very successful and was later expanded to pack peaches, corn, apples, string beans, peas and blackberries. County residents began to move to Secretary for work. The population increased and in 1900 the Town was incorporated.

In the early part of the 1900's, a steamboat wharf was the focus of activity in the Town since Secretary was a major port of call for the various steamboat lines from Baltimore. During this period, Secretary wharf was responsible for sending more vegetables to Baltimore than from any other point on the peninsula.

During the mid-1900's (1940 – 1970), the Town's population remained relatively stable at a level of approximately 350 people. During the latter part of this period, Secretary was perhaps the most noted for the large amount of fish which were iced and shipped from Coulbourne's and Era's and the large volume of oysters shucked at Harrington's Oyster House. In 1971, the Town's wastewater collection and treatment system was completed, which led to an increase in the Town's population to 487 residents by 1980.

In the late 1980's, the Town's predominantly single family character was changed with the development of Warwick Landing, an eleven unit condominium project along the north branch of the Warwick River. In the mid 1990s, the Town experienced the construction of a new water tower, the removal of the old water tower and the extension of sewer service to the Green Point area.

Today, the Town of Secretary is a small thriving community of approximately 497 residents, which offers a complete array of municipal services while maintaining a small rural town atmosphere.

Natural Features

There are numerous natural features within the Town including streams and stream buffers, wetlands, floodplain areas, and habitats of threatened and endangered species. Following is a brief description of each of these areas. More detailed descriptions as well as protective policies and programs are included in the Sensitive Areas Element.

Soils/Topography

According to the Dorchester Soil Survey, the majority of the soils in the Town and the immediate surrounding area to the north, south and west fall into the Sassafras category. These soils drain well and are generally suitable for individual septic systems. The area to the east of Town along the MD Route 14 corridor to East New Market is generally characterized by the presence of Woodstown and Fallsington soils, which are moderately to poorly drained soils that are unsuitable for individual septic systems.

The slope in the majority of the Town and the immediate surrounding area is less than 5%. However, there are a few small areas adjacent to the north and south branches of the Warwick River which have slopes between 5% and 15%.

Streams

The Town of Secretary is within the Warwick River watershed (See Map 8 - Watershed). Two unnamed streams are located off of the south branch of the Warwick River in the southern part of Town where some urban runoff occurs. One of the unnamed streams is located between Gordon Street and South Street, while the other unnamed stream serves as the southern boundary of the Town.

Forests

There are two relatively large forested stands within the Town of Secretary. The largest forest stand, which consists of approximately thirty acres, is located in the northeastern corner of town between Warwick Elementary School and the north branch of the Warwick River. The other major forest stand is located on the north side of the unnamed stream between Academy Street and Wes Street. This undeveloped seven acre wooded tract is surrounded by single family homes to the east, south and west. There are also some areas of forested riparian buffers along the river and streams.

Chesapeake Bay Critical Area

Approximately 133 acres or roughly 81% of the Town is within the Chesapeake Bay Critical Area. Any new development within the Town's designated Critical Area must comply with the provisions of the Town of Secretary's Critical Area Program, which was based on the State Critical Area Criteria and Regulations.

Tidal and Non-Tidal Wetlands

According to the State Wetland Maps, there are tidal wetlands within the town along the north and south branches of the Warwick River and along unnamed tributaries previously mentioned. As Map 5 indicates, the headwaters of the North and South Branches of the Warwick tend to meander through wetland areas before reaching the main stem of the river. These wetland areas are included in the Town's Critical Area, as well as the 100-year floodplain, and are generally protected through the Town's Critical Area program and the Town's Floodplain Ordinance.

According to the Department of Natural Resources' Nontidal Wetlands Guidance Map, there are nontidal wetlands located along Secretary's current southern boundary. These wetlands are associated with the unnamed tributary stream which forms the southern boundary.

Floodplain

Due to the Town's location on the Warwick River, there are several areas within Secretary in the 100-year tidal floodplain. These areas are characterized by relatively flat topography and soil types that were laid down during past inundations by flood waters.

Population

Population Growth Trends

Since its incorporation in 1900, Secretary's population has increased approximately 22.7% from 410 to 503 in 2000. (See Table 1.) However, during the 100 year period, there were well-defined periods of population gain and loss. From 1900 – 1940, the population of Secretary steadily declined from 410 to 344 or a decrease of roughly 16%. After remaining relatively stable between 1940 and 1970, the Town experienced a 38.4% increase in its population between 1970 and 1980. This significant increase, which represented the highest percentage increase in the Town's history for a ten-year period, can be attributed to the completion of the town's wastewater collection and treatment system in 1971. This growth continued through the 1980's with the Town's population increasing by over 8%. However, the town once again experienced a decrease in population between 1990 and 2000 by 4.7%.

Table 1
Population Growth Trends
Town of Secretary
1900 – 2000

Year	Population	Change Over Previo	ous Decade <u>Percent</u>
1900	410		
1910	409	- 1	2%
1920	398	-11	-2.7%
1930	361	-37	-9.3%
1940	344	-17	-4.7%
1950	344	0	0.0%
1960	351	7	2.0%
1970	352	1	.3%
1980	487	135	38.4%
1990	528	41	8.4%
2000	503	-25	-4.7%

Source: U. S. Census, 1900 - 2000

Population Distribution by Age

The population of Secretary was characterized by a slightly younger population than that of Dorchester County or the State of Maryland as a whole in 2000. The median age of all residents within the town of Secretary in 2000 was 38.3 years of age as compared to 41.0 years for Dorchester County and 36.0 years for the State of Maryland. In addition, 23.5% of the town's population was under the age of 18 as compared to 23.3% for Dorchester County and 25.6% for the State. (See Table 2.)

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Secretary's elderly population (65 and over) which accounted for 12.5% of the Town's population, was slightly higher than the State's percentage of 11.3%, but considerably lower than the county's figure of 17.7%.

140 120 100 Number of Persons 80 60 40 20 0 <5 years 5 - 17 18 - 24 25 - 34 35 - 44 44 - 54 55 - 64 65 - 84 85+ ■ 1990 38 101 42 115 74 48 47 58 5 ■ 2000 31 87 35 70 88 68 61 58 5

Figure 2: Population Change by Age Group 1990-2000

Source: 2000 Census

Table 2: Percent of Population by Age Cohort by Municipality 2000 Dorchester County, Maryland

Town/City	<5	5-17	18-24	25-44	45-64	65+	Median Age
Secretary	6.2	17.3	7.0	31.4	25.6	12.5	38.3
Brookview	7.7	14.2	7.2	26.2	23.1	21.5	41.3
Cambridge	5.9	18.5	7.9	26.6	22.3	18.7	40.8
Church Creek	2.3	15.0	7.4	29.4	21.2	24.7	42.5
East New Market	5.9	12.3	6.5	26.9	30.5	17.9	43.8
Eldorado	6.6	16.5	10.3	23.3	28.3	15.0	41.0
Galestown	5.0	19.8	5.9	20.8	30.7	17.8	41.8
Hurlock	6.6	23.7	7.6	28.4	21.6	12.2	35.7
Vienna	4.6	18.3	5.0	24.6	24.6	22.9	43.2
Dorchester County	5.4	17.9	6.7	26.8	25.5	17.7	41.9
State of Maryland	6.7	18.9	8.5	31.4	23.1	11.3	36.0
Source: 2000 Census							

Population Distribution by Race

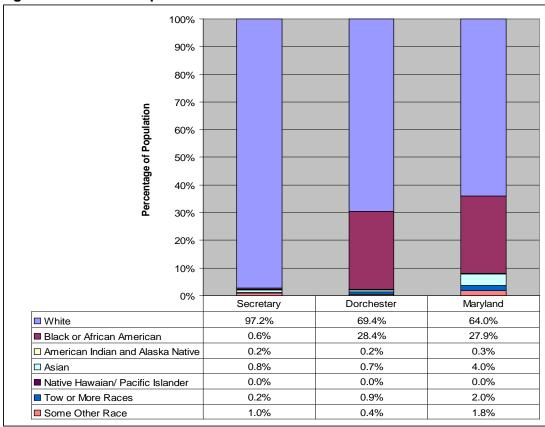
According to the 2000 Census, the white population of the Town of Secretary accounted for 489 residents or 97.2% of the Town's population. The remaining 14 residents or 2.8% of the population were classified as shown in Table 3 below.

Table 3
Population Distribution by Race – Year 2000

	Number	Percent
Total:	503	
White alone	489	97.2
Black or African American alone	3	0.6
American Indian and Alaska Native		
alone	1	0.2
Asian alone	4	0.8
Native Hawaiian and Other Pacific		
Islander alone	0	0.0
Some other race alone	5	1.0
Two or more races	1	0.2

Source: 2000 Census

Figure 3: Racial Composition - Year 2000



Source: 2000 Census

Population Distribution by Sex

The female population of the Town of Secretary slightly outnumbered the male residents in 2000. Females accounted for 257 of the Town's residents or 51.1% of the Town's population, while the males numbered 246 or roughly 48.9%. This female/male ratio of 51.1/48.9 represents a similar percentage of female/ males ratios found in Dorchester County and the State of Maryland in 2000, which was 48.3/47.3 and 51.7/48.3, respectively. (See Figure 4.)

53.0% 52.0% Percentage of Population 51.0% 50.0% 49.0% 48.0% 47.0% 46.0% 45.0% Male Female 48.9% 51.1% Secretary 47.3% 48.3% ■ Dorchester 51.7% ■ Maryland 48.3%

Figure 4
Population Distribution by Sex - 2000

Source: 2000 Census

Household and Family Characteristics

In 2000, Secretary's population was comprised of 197 households, including 147 family households and 50 non-family households. (See Table 4.) Family households accounted for approximately 80% of all households in the town as compared to only 70% in the county. Of the 147 family households, 113 were married couple families, seven were families with male heads of household and 27 were families with female heads of household. The Town's percentage of married couple families to total households of nearly 57.4% was also considerably higher than the county's ratio of roughly 52%.

Since 1990, the Town's population decreased by 4.7% and the number of households decreased by 6.4%. During this same period, the average household size decreased from 2.69 to 2.55 persons per household.

Table 4: Household Characteristics 1990-2000 Secretary, Maryland

	Secretary			Dorchester		
	1990	2000	% Change	1990	2000	% Change
Family Households	157	147	-6.4%	8,490	8,506	0.2%
Non-Family Households	39	50	28.2%	3,627	4,200	15.8%
Persons Per Household	2.69	2.54	-5.6%	2.46	2.36	-4.1%
Total Households	196	197	0.5%	12,117	12,706	4.9%

Source: 2000 Census

Education

According to the 2000 Census, 73.2% of Secretary's residents over the age of 25 were high school graduates or higher. The Town's percentage was slightly lower than the county's figure of 74.2%. In terms of post-high school education, roughly 10.8% of the town's population attained their bachelor's degree or higher, as compared to approximately 12% of the county's population. (See Table 5.)

Table 5
Educational Statistics - 2000

	Secretary		Dorchester	Maryland
SCHOOL ENROLLMENT		-		
Population 3 years and over enrolled in school	130	100%	7,043	1,475,484
Nursery school, preschool	1	0.76%	7.2%	6.5%
Kindergarten	6	4.6%	5.3%	5.1%
Elementary school (grades 1-8)	61	46.9%	49.3%	43.5%
High school (grades 9-12)	47	36.1%	23.8%	20.9%
College or graduate school	15	11.5%	14.4%	24.0%
EDUCATIONAL ATTAINMENT				
Population 25 years and over	168	100%	21,435	3,495,595
Less than 9th grade	35	10.4%	9.1%	5.1%
9th to 12th grade, no diploma	55	16.4%	16.7%	11.1%
High school graduate (includes equivalency)	137	40.9%	42.1%	26.7%
Some college, no degree	63	18.8%	16.2%	20.3%
Associate degree	9	2.7%	4.0%	5.3%
Bachelor's degree	20	6%	6.8%	18.0%
Graduate or professional degree	16	4.8%	5.2%	13.4%

Source: 2000 Census

Income

Income levels in Secretary are generally higher than those in the county, but significantly lower than the income levels in the State of Maryland as a whole. According to the U.S. Census, the median income for all households in Secretary in 1999 was \$39,063. This figure is approximately 14% greater than the county's median household income of \$34,077 but over 35% less than the State's median household income of \$52,868. (See Table 6.)

The largest percentage of Secretary's population earned between \$25,000 and \$75,000 which accounted for approximately 66.4% of all households in the Town in 1999. By way of comparison, approximately 50% of the households in the county and 48% of the households in the State fell into this income category.

According to the 2000 Census, 34.2% of the households in the Town of Secretary were receiving Social Security income in 1999 as compared to 32.8% for the County and 22.5% for the State as a whole. (See Table 7.) In terms of retirement income, only 26% of Secretary's households were receiving retirement income in 1999 as compared to approximately 20% for the county and 18.7% for the state.

Table 6
Household Income Characteristics -1999

	Secretar	y	Dorchester		
	Count	Percent	Count	Percent	
Households	193	100.0%	12,712	100.0%	
Less than \$10,000	24	12.4%	1,636	12.9%	
\$10,000 to \$14,999	9	4.7%	1,019	8.0%	
\$15,000 to \$24,999	20	10.4%	1,984	15.6%	
\$25,000 to \$34,999	34	17.6%	1,858	14.6%	
\$35,000 to \$49,999	47	24.4%	2,143	16.9%	
\$50,000 to \$74,999	47	24.4%	2,346	18.5%	
\$75,000 to \$99,999	4	2.1%	976	7.7%	
\$100,000 to \$149,999	6	3.1%	445	3.5%	
\$150,000 to \$199,999	0	0.0%	124	1.0%	
\$200,000 or more	2	1.0%	181	1.4%	
Median household income					
(\$)	39,063	(X)	34,077	(X)	

Source: 2000 U.S. Census

In terms of the poverty level, the Town of Secretary had a lower percentage of its population below the poverty level than Dorchester County, but a higher percentage than the State of Maryland. Approximately 12.7% of all persons in the Town of Secretary had incomes below the poverty level in 1999 as compared to 13.8% for Dorchester County and 8.5% for the State. A further breakdown of the poverty level statistics indicates that the town's percentage of the elderly population below the poverty level of 17.46% was higher than both the county (13.8%) and the state (8.2%).

Table 7
Selected Income Characteristics
Town of Secretary
1999

	Secretary	Dorchester County	State of Maryland
% of households with social security income Mean social security income	24.2% \$11,170	34.8% \$10,622	22.2% \$10,571
% of households with retirement income Mean retirement income	26.0% \$21,370	20.0% \$17,150	18.7% \$14,302
% of households with public assistance	1.0%	3.6%	2.4%
Mean public assistance income	\$2,728	\$2,585	\$3,850
% of population below poverty level	12.7%	13.8%	8.5%
% of families below poverty level	10.3%	10.1%	6.1%
% of elderly population below poverty level	17.46%	13.8%	8.2%

Source: 2000 Census

Employment

According to the 2000 Census, a total of 250 persons or 63.9% of all persons over the age of 16 in the Town of Secretary were in the labor force. This percentage was slightly lower than that of both the county (62.0%) and the state (63.8%). (See Table 8.) A closer look at the labor force statistics reveals that approximately 62% of males and 66% of females in the Town were in the labor force. Again, these percentages are higher than the corresponding percentages for both the county and the state.

Only 2.0% of the Town's labor force was unemployed in 2000 as compared to 3.6% for the County and 3.2% for the State.

Table 8
Labor Force Characteristics 2000

	Secretary	Percent	Dorchester	Maryland
Employment Status:				
Population 16+ years old	391	100.0	24,351	4,085,942
Employed Persons	242	61.9%	62.0%	63.8%
Unemployed Persons	8	2%	3.6%	3.2%
Not in labor force	141	36.1%	37.8%	32.2%
Armed Forces	0	0.0%	20.0%	0.8%
Industry:				
Agriculture, forestry, fisheries,				
mining	10	4.1%	4.1%	0.6%
Construction	25	10.3%	9.4%	6.9%
Manufacturing	50	20.7%	19.6%	7.3%
Wholesale trade	4	1.7%	3.9%	2.8%
Retail trade	29	12.0%	11.6%	10.5%
Transportation, warehousing, utilities	14	5.8%	5.0%	4.9%
Information	4	1.7%	1.7%	4.0%
Finance, insurance, real estate	9	3.7%	3.9%	7.1%
Professional, scientific, management, administrative, waste				
management	17	7.0%	5.2%	12.4%
Educational, health, social services	56	23.1%	19.7%	20.6%
Arts, entertainment, recreation	5	2.1%	5.8%	6.8%
Other services	14	5.8%	4.4%	5.6%
Public administration	5	2.1%	5.7%	10.5%

Source: 2000 Census

Secretary's main employment sectors for residents are in "education, health, and social services" and "manufacturing", which employ 23.1% and 20.7% of the population respectively. The rest of the labor force is mainly dedicated within "retail trade" (12.0%), "construction" (10.3%), and "professional, scientific, management, administrative, and waste management services" (7.0%) employment sectors (See Table 8). Of the Town's 250 residents in the workforce, 73.1% are within the private wage and salary worker class and 15.7% are within the government workers class which closely mirrors Dorchester County's rate (See Table 9).

Table 9 Class of Worker 2000

	Secretary	Percent	Dorchester
Employed population	242	100.0%	14,225
Private wage & salary			
workers	177	73.1%	73.3%
Government workers	38	15.7%	17.0%
Self-employed workers	27	11.2%	9.5%
Unpaid family workers	0	0.0%	0.2%

Source: 2000 Census

Housing

According to the 2000 Census, there were a total of 214 housing units in the Town of Secretary. Of this total, 197 units or approximately 91.6% were occupied. About 86.8% were owner-occupied and 13.2% were rented. The Town's percentage of owner occupied units is higher than the County (70.1%) and State as a whole (67.7%). (See Table 10.) Between 1990 and 2000, the Town's housing stock decreased from 231 units to 214 units or a decrease of approximately 7.4%.

Approximately 41.8% of Secretary's housing units were constructed prior to 1970. Between 1970 and 1990, 48.85% of the housing units were constructed, the same time period when the town experienced 50% growth. Only 18 housing units (9.1%) were built between 1990 and 2000. The majority of the housing units in 2000 were single family detached structures which accounted for a total of 177 units or approximately 90.3% of the town's housing stock. By comparison, 72.0% of the county's housing stock and only 52.7% of the state's housing units were single family attached structures. Of the remaining housing units, 3.6% were in single family attached structures; 1% was in structures with two to four units and 3.6% were mobile homes.

The median value of an owner-occupied house in Secretary in 2000 was \$70,600. This median value was approximately 23.5% lower than the county's median value of \$92,300 and 51.6% lower than the state's median value of \$146,000. Approximately 88.6% of the Town's owner-occupied housing units were valued at less than \$100,000. In terms of contract rent, the median rental payment in the town in 2000 was \$445 as compared to \$352 for the County and \$611 average for housing across the State.

Census figures have indicated that approximately 14.3% of homeowners in the Town of Secretary spent more than 35% of their income on housing in 2000. The comparable data for Dorchester County and the state are 17.6% and 16.1%, respectively. Approximately 17.6% of the renters in town spent more than 35% of their income on rent in 2000. By comparison, approximately 28% of Dorchester County renters and 27% of Maryland renters had rent costs that exceeded 35% of their income.

Table 10 **Selected Housing Characteristics 2000 Town of Secretary** Dorchester State of Secretary County Maryland Number **Percent** Percent **Percent** 86.8% **Occupancy** Owner Occupied 171 70.1% 67.7% and Tenure Renter Occupied 26 13.2% 29.9% 32.3% Units in 1-unit, detached 177 90.3% 72.0% 52.7% Structure 1-unit, attached 7 3.6% 1.8% 21% 2 to 4 units 2 1.0% 8.7% 4.6% 5 to 9 units 5.4% 3 1.5% 4% 10 or more units 0 2.9% 14.5% Mobile home, trailer, 3.6% 1.7% 7 10.5% other Value 11 3.8% Less than \$50,000 7.9% 11.3% \$50,000 to \$99,999 113 80.7% 44.3% 19.3% \$100,000 to \$149,999 13 9.3% 25.1% 29.4% \$150,000 or more 3 2.1% 19.3% 47.6% Median (dollars) \$70,600 \$92,300 \$146,000 Contract Less than \$250 0 0% 24.5% 9.1% Rent \$250 to \$499 20 58.8% 55.2% 23.9% \$500 to \$749 5 14.7% 11.2% 33.6% \$750 and over 0.0% .8% 29.2% Median (Dollars) \$352 \$611 \$445

Source: 2000 Census

COMPREHENSIVE GROWTH AND DEVELOPMENT PLAN

Goals Element

Introduction

The Comprehensive Plan is intended to capture a broad community vision of the future development of Secretary. Written statements that describe future expectations are necessary to describe that vision. These statements are intended to be easily understood and generally accepted by the residents and business interest in the town.

<u>Goals</u> and <u>objectives</u> are found in this chapter and in the subsequent chapters for each element of the Plan, e.g., land use, community facilities, sensitive areas, etc. The goals and objectives formulated by the Town have been incorporated as a basis for the goals and objectives statements in this Plan.

<u>Goals</u> are long-range, generalized statements that represent the ultimate desires of the Town. <u>Objectives</u> are a proposed series of broad policies that are more immediate and specific in nature than goals. Objectives are intended to be intermediate steps that are taken toward achieving the goals. In subsequent sections, objectives for each element will be discussed.

In the 1992 Session of the Maryland General Assembly the *Economic Development, Resource Protection, and Planning Act* was passed, now known as Article 66B. Article 66B has had two major amendments since its enactment, in 2006 and 2009.

House Bill 1141 in the 2006 session of the Maryland Assembly significantly affected comprehensive plans and annexations for local governments. HB 1141 requires municipal governments to include a Water Resources Element (WRE) and a Municipal Growth Element in comprehensive plans no later than October 1, 2009 unless extension granted by Maryland Department of Planning. House Bill 1160 during the same year required a Workforce Housing Elements to be included in Comprehensive Plans that must assess workforce housing needs and contain goals, objectives and policies that preserve or develop workforce housing. This element is necessary for a local government to qualify for participation in a Workforce Housing Grant Program.

Governor Martin O'Malley introduced the Smart, Green & Growing legislative package in the 2009 General Assembly to help protect the environment and natural resources, as well as to promote sustainable growth in Maryland. Three planning bills were passed that strengthened the fundamental tools of smart growth. These bills require local jurisdictions to report to Maryland Department of Planning on Priority Funding Areas (PFAs) and Adequate Public Facilities Ordinances (APFOs) and if APFO results in a restriction in a PFA. First of such reports are due on July 1, 2010 and subsequent reports are due every two years thereafter. The Bill also authorizes local jurisdictions to establish TDR programs within PFAs and to assist to local jurisdiction in the purchase of land or the construction of public facilities in PFAs.

The Act requires that twelve Visions be included in, and implemented through, Secretary's Comprehensive Plan. The following basic components for achieving the goals of the Planning Act have been adopted: 1) An overall Community Vision for the Future, and 2) a statement of twelve growth management Visions. The Secretary Comprehensive Plan takes these visions as a starting point from which more detailed objectives, policies, and recommendations are developed.

Secretary's Vision / Goals for the Future

The vision for the future of the Town of Secretary will fit within the overall vision for Dorchester County. The County will provide the best mix of urban and rural living in the future. For its part, the Town of Secretary will remain a family- oriented community which provides a cherished quality of life and a model for others to follow. This will be reinforced by pedestrian-oriented streetscapes, livable and affordable neighborhoods, and safe and meaningful town life.

Dorchester County and Secretary will be an increasingly united community that solves problems through full communications and community decision making. Due to their close proximity, the Town of Secretary will work closely with the Town of East New Market to implement solutions to common problems.

The following overall Vision is established for the Town of Secretary:

Secretary will thrive as a growing rural community which maintains an ideal balance between the quantity of growth and the quality of life.

This Vision will be achieved by:

- Preserving the rural, small town atmosphere of the existing community;
- Providing adequate services and facilities within the existing community;
- Promoting the development of vacant areas with Town;
- Assuring adequate services are provided to newly developed areas before, or as the development occurs;
- Providing facilities and services within the Town's financial capability; and
- Protecting and improving water quality and wildlife habitat within the Town's sensitive areas.

The Twelve Visions – Goals for the Town of Secretary

The following twelve Vision statements are based on the 1992 Planning Act, as amended over time, and are incorporated in this Comprehensive Plan as fundamental goals which will be achieved through a variety of objectives, policies, principles, recommendations, and implementation techniques.

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

.....

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

- 3. Growth Areas: Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers;
- 4. Community design: Compact, mixed-use, walkable design consistent with existing community character and located near available or planned transit options are encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archeological resources;
- 5. Infrastructure: Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient and environmentally sustainable manner;
- 6. Transportation: A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers;
- 7. Housing: A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes;
- 8. Economic development: Economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encourages;
- Environmental protection: land and water resources, including the Chesapeake and costal bays, are carefully managed to restore and maintain healthy air and water, natural systems, and living resources;
- 10. Resource conservation: Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved;
- 11. Stewardship: Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection; and
- 12. Implementation: Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure, and transportation are integrated across the Local, Regional, State and interstate levels to achieve these visions.

Land Use Element

Existing Land Use Patterns within Town

Approximately 161 acres or 96% of the land within the corporate limits of the Town of Secretary is developed. Vacant or unimproved parcels account for the remaining 4.1 acres. (See Table 11.)

The majority of the land in Secretary is used for residential purposes, which accounts for roughly 53.2% of the total acreage of the Town. The residential development is evenly distributed throughout the town. (See Map 2 – Existing Land Use.) The average residential lot is approximately ¼ of an acre. Almost all of the residential development within the Town consists of single-family detached dwellings with the exception of the Warwick Landing condominiums.

Commercial uses account for approximately eight 6.5% of the total acreage of the Town. The largest commercial property is located on Poplar Street, part of the Captain Phip's property. Most of the other commercial properties in Town are scattered along Main Street and include a convenience store, Laundromat, bank, café and jewelry store. Most of these businesses do not have off-street parking, but ample parking is available along Main Street.

Only two businesses within the Town are classified as industrial and they are both wateroriented seafood establishments located on each side of the bridge at the entrance to town. These two seafood operations, Captain Phip's and Colbourne's account for slightly more than one acre.

Public and institutional uses account for a total of 47 acres or roughly 28.7% of the Town's total acreage. This land use category includes the Warwick Elementary School, fire department, Town Hall, park and nature trail, boat ramp, water tower and the various churches throughout the community.

There are approximately 16 vacant or unimproved parcels within the Town. The unimproved parcels account for approximately 4.1 acres or 2.5% of Secretary's total acreage. The vacant parcels are scattered throughout Secretary.

Table 11 Existing Land Use				
Land Use Category	Acres	<u>Percent</u>		
Single-Family Residential	86.6	52.5%		
Multi-Family Residential	1.2	0.7%		
Commercial	10.7	6.5%		
Industrial	1.2	0.7%		
Public/Institutional	47.3	28.7%		
Vacant	4.1	2.5%		
Roads and Right-of-Ways	14	8.5%		
<u>Totals</u>	165	100.0%		

Source: Maryland Property View and Dorchester County

Adjacent Land Use Patterns

The land use pattern adjacent to the Town is also important because annexation may become part of Secretary's future. On the north and east sides of Secretary are mostly farming areas. The northern side may be somewhat limited because the North Branch of the Warwick River, which is a natural boundary, could cause water and sewer extensions to be more difficult. The eastern side does not have any physical boundary and the Town of East New Market is less than a mile away.

The southern side of the Town is bounded by a ditch leading to the South Branch of the Warwick River. On the south side of this branch is a large sand and gravel pit utilized by Shufelt Sand and Gravel. The main sewer interceptor from East New Market passes through the area south of the sand and gravel pit, so future sewer service would be possible.

The lands on the west side of town, which are west of the South Branch of the Warwick River along Route 14, Green Point Road and Sunnyside Road, are developed. The development at the west end of Green Point Road is characterized by seasonal homes on small lots. The Town of Secretary has extended sewer service to the Green Point subdivision because of failing septic systems.

Land Use Goal

Continue to encourage the growth of Secretary in a manner that will preserve the rural, small town atmosphere.

Overall Land Use Objectives

Objectives establish specific methods for guiding development activities in order to achieve the broad goal of the Town. The following objectives indicate specific aims for a wide array of public actions necessary to accomplish the stated overall Vision for the Town.

- To encourage the continued growth of Secretary in a manner that will preserve the rural, small town atmosphere by requiring proper planning and design techniques for future development.
- > To establish strong protective measures to help stabilize, protect and enhance the substantial residential development and neighborhoods in the town.
- ➤ To promote orderly growth by promoting development within the existing corporate limits before encouraging annexation.
- > To consider the natural environment in new growth areas and be more sensitive to environmental concerns.
- To provide for a variety of open space areas, recreational facilities and the protection of undevelopable natural areas of the Town for the enjoyment and betterment of all existing and future residents.

Overall Land Use Policies

The development policies proposed by this Comprehensive Plan are designed to address the above stated objectives. The following are recommended policies for overall land use.

- 1. The Comprehensive Land Use Plan represents Secretary's official policy for land use, development, and growth; and serves as the basis for the Town's Comprehensive Zoning Map and other implementation tools. (See Map 2 Existing Land Use and Map 3 Growth Areas.) The Plan also guides interjurisdictional coordination activities with the County and East New Market, particularly with respect to implementing the Town's Growth Boundary.
- The Town will work with developers to make sure development within Sensitive Areas is discouraged. Where development will occur in Sensitive Areas, the design should provide low environmental impacts, developers shall make sure the proper permits are sought out and all impacts should be mitigated as required under law.
- 3. Approvals of subdivision of land, rezoning, special exceptions, variances, and capital expenditures shall be consistent with the Land Use Plan.

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

- 5. The timing and pace of new development will be managed to be compatible with the Town's ability to provide public services.
- 6. Secretary shall encourage and support County policies that channel an appropriate level of growth to the Town and within the Town's Growth Boundary.
- 7. The Town shall establish agreements with the County regarding the phasing and funding of growth and infrastructure investments in the vicinity of the Town, consistent with the Land Use Plan and the Town's Growth Boundary.

Residential Land Use Objectives

In an effort to maintain the predominantly residential character of Secretary and to provide guidelines for future development, the following residential objectives are established:

- 1. To protect residential areas from encroachment of incompatible land uses in order to preserve the predominant single-family character of the Town.
- 2. To prevent land that is not suitable for residential development because of environmental constraints from being developed.
- To encourage residential development reflecting good design practices that will make efficient use of available land and produce attractive subdivisions and other development.

Residential Land Use Policies

The development policies proposed by this Comprehensive Plan are designed to address the above objectives. The following are recommended policies for residential development.

- 1. The density of residential development should be based on the availability of community facilities.
 - a. New development will be directed to lands served by or programmed for water and sewer service and away from sensitive areas.
 - b. Developments should be evaluated with regard to the availability of, and impact on, public facilities and town services.
 - c. Adequate recreational facilities and open space should be required as part of new residential developments where applicable.
- 2. Residential areas should be protected from incompatible land uses and be designed to insure a desirable low to medium density, rural living environment.
 - a. In-fill development and redevelopment should be encouraged where appropriate.
 - b. New development shall be compatible with the character of the Town.

c. New development abutting existing neighborhoods shall provide continuity for vehicular and pedestrian movement. Through traffic and heavy vehicles should be prevented, where possible.

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

Residential Land Use Recommendations

Residential Density Standards

An important part of guiding development is to establish appropriate guidelines addressing the intensity of development permitted within the Town. Population densities determine the level and expense of community facilities and services which are essential for protecting the health, welfare and safety of Town citizens. Facilities such as sewer, water, roads and parks are planned and constructed based upon the ultimate number of housing units and people to be served. Establishing specific density levels, therefore, becomes a basic policy decision in order to properly guide policy boards in preparing plans to meet future growth changes.

The Town is interested in keeping its average ¼ acre lots, or densities of approximately 4 units per acre. This is consistent with the Town's R-2 zoning district. The Town has a more intense district that was used for the condominiums recently developed along the river, but there are no plans to expand this zoning district elsewhere throughout the Town. The current plans are to utilize the R-2 zoning district for residential expansion in the growth area.

Based on the Town's desires to maintain its 4 units per acre density, the R-1 zoning district is not compatible with the development plans for the Town and will be recommended for removal from the Town's zoning districts. The Town plans to keep the R-3 zoning district in the situation that higher density housing would be compatible with the Town.

Commercial Land Use Objectives

The Comprehensive Plan recognizes that the need exists for several types of low intensity commercial development within the Town. The existing commercial areas are determined to be of a size and variety adequate for the existing and future needs of the Town.

In an effort to recognize existing commercial areas and provide, consistent with the Town's development, concept guidelines for their development and redevelopment, the following commercial objectives are established:

- 1. To preserve the rural, small town atmosphere of the existing community by permitting select commercial development that is compatible with the scale, character and function of the Town.
- 2. To maintain and revitalize existing commercial areas.
- 3. To emphasize safety, convenience, and attractiveness in commercial development ensuring that it is not disruptive to the surrounding neighborhood or the community as a whole.

Commercial Land Use Policies

- 1. Commercial activities requiring large sewer services should be discouraged.
- 2. Parking should be required for new or redeveloped commercial areas.
- 3. The design of new development or redevelopment should minimize direct access points on major roads, and also not create traffic visibility problems.
- 4. The scale, character, number, and location of signs shall not be detrimental to the Town's character.
- 5. The impact of intense commercial development on adjacent existing and future residential neighborhoods should be minimized.
- 6. Strip commercial development shall be avoided.
- 7. Large commercial developments shall be discouraged.
- 8. Yard setbacks, bulk standards, and height restrictions that retain or promote desirable community character shall be established.
- 9. Minimum landscaping requirements should be required for commercial development.

Commercial Land Use Recommendations

Due to the residential and rural nature of the Town, the mixed use pattern of business along Main Street should be extended across the entire Main Street corridor. Commercial businesses in the Town should focus on servicing the needs of existing residents and to provide conveniences. The Town should rezone all properties adjacent to Main Street as Village Center Commercial to accommodate and promote the mixed use environment.

<u>Village Center Commercial</u> – The purpose of the Village Center Commercial category is to provide areas along Main Street for limited business and service uses. The uses permitted in this area are intended to provide services, light retailing and groceries as a convenience to the neighborhoods within walking or short driving distance. This land use category recognizes the mixed uses that are often scattered throughout residential districts in established areas. A Village Center Commercial area would allow the continuance and reasonable expansion of those establishments that are compatible, recognizing that many of these are on smaller lots.

The zoning for Village Center Commercial area should provide for some new commercial uses in the Town. These uses could be permitted as-of-right or be permitted by special exception, a process that permits the Town to review each application on a case-by-case basis and build-in safeguards to ensure impacts to adjacent residential areas are minimized (e.g., adequate parking requirements, limits on signage and lighting, and landscape and buffer requirements). The following policies for the Village Center Commercial area are recommended:

- 1. Retail establishments locating in Village Center Commercial area should be restricted to uses that are primarily neighborhood-serving in character.
- 2. Points of access to neighborhood centers should be minimized.

3. Allow assembly uses, including churches, community theatres and other such uses where zoning requirements can be met.

4. Adequate parking, street lighting, sidewalks, and other public services and amenities should be provided.

Industrial Land Use

The Plan recognizes two industrial-type businesses located on both sides of the bridge consisting of one acre total. These two seafood packing houses are all that remains of a once thriving seafood industry.

Industrial Land Use Recommendations

In order to preserve the rural, small town atmosphere of the Town, no additional industrial land uses are being recommended within the existing Town limits or future growth areas at this time. If at some point in the future the two seafood packing houses should cease to operate, it is recommended that the land be designated as a less intensive land use category, such as light business. However, the focus of the Town is to promote the continued health of its industrial businesses and should work with the company's if opportunities for business expansion remain.

Public / Institutional

Areas devoted to use by the public, such as schools, public/institutional buildings, churches, parks and utility sites, are designated on the Land Use Plan Map as public/institutional. The distinguishing characteristic of this category is that these sites are owned by a public group or agency.

Annexation Objective

The Town has designated several properties on the eastern edge of the existing Town boundary within their future growth area. The location of these properties and the proposed land uses can be found on Maps 3 and 4, respectively. More discussion concerning development phasing and adequate facilities for the Town and its future growth areas is discussed later in the Municipal Growth and Water Resources Elements.

Annexation Policies

- 1. This plan shall guide the timing, location, and general land uses for annexed properties.
- 2. Land considered for annexation shall be adjacent to existing developed areas and within the designated growth areas.
- 3. Land to be annexed by the Town shall be developed at a density, scale, and character that is compatible with the Town.
- 4. The Town shall first study the costs and benefits provided by annexation, ensuring that all benefits arising from annexation exceed the costs of providing services to the area.

5. The Town shall work with the County to designate properties within the growth area as suitable for development as shown of the future land use map in the County's Plan so as to avoid the need for County "waivers" under the State annexation statute.

Community Facilities Element

Introduction

As the population of Secretary grows during the planning period, new and improved public facilities will be needed. The adequacy and capacity of public services and utility systems are of vital importance to the improvement of the quality of life for citizens of Secretary. Population increases will generate increasing demand for education, recreation, water and sewerage, solid waste disposal, health facilities and other important public services. These services determine, to a large degree, the potential for future growth and are vital if the Town is to realize its goal of a growing rural community which maintains an ideal balance between quantity of growth and the quality of life.

The provision of schools, parks and recreation areas, health facilities, police and fire protection, water and sewerage facilities and other public facilities and services is essential to the future growth and development of Secretary. Increases in the Town's population and the development of new growth areas will require the establishment of priorities in an effort to assure that all residents receive adequate and equal services.

The Community Facilities Element coordinates the projected growth of the community with the ability of the Town to provide services in accordance with the development pattern established by the Land Use Plan. Secretary's existing community facilities are described in the Background Element. (See Map 1 – Community Facilities.)

Goals and Objectives

The overall goal of the Community Facilities Element is to provide a system of community facilities which will assure an adequate level of public services to all residents of Secretary. To guide the upgrading and improvement of the Town's community facilities in a manner consistent with the Land Use Plan, the following objectives are established:

- > To provide for the adequate and orderly expansion of public facilities and services in a manner commensurate with local financial resources and capabilities.
- ➤ To continue to utilize services provided by the County and State, as well as to avoid duplication and reduce Town costs.
- ➤ To use grant and loan programs to improve facilities, provided the cost of applying for the funds and meeting funding criteria do no outweigh the benefits received.
- > To closely coordinate the provision of services with location and timing of new development.
- To promote development so that services can be expanded logically.
- > To assure the provision of community services and facilities in a manner which are consistent with environmental protections.

- > To develop written policies on the allocation of services to new development and the responsibility of costs.
- To encourage the efficient use of the natural resources of the area.
- > To encourage use of public lands and buildings for a variety of public purposes.

The recommendations and policies which follow are designed to achieve these objectives. As the Town population changes, these standards can be used to evaluate the adequacy of service.

Water and Sewer

Secretary currently provides both public water and sewer service to all Town residents. Included in the map suite are the current Water and Sewer Service Area Maps from the Dorchester County Water and Sewer Master Plan. The service areas are generally consistent with the Town's existing infrastructure and future growth plans.

Water System

The Town of Secretary owns and operates its own municipal water system, which is approximately 60 years old. The Town's water supply was recently upgraded because the system was antiquated and many of the system components were in a deteriorated condition, including the water storage tank. A major upgrade of the Town's water system was completed in July of 1996. This \$1.9 million renovation, which was funded by the Maryland Department of the Environment (MDE), the Maryland Department of Housing and Community Development (DHCD), and the Rural Economic and Community Development Administration (RECD), consisted of the following improvements: drilling of a new well and capping the old well; construction of a new 150,000 gallon elevated storage tank and demolition of the old 50,000 gallon tank; installation of water meters for all homes in Town; connection of both wells to the new elevated storage tank to attain the required chlorine detention time; elimination of dead end water mains by looping the water lines in two areas of Town; installation of additional fire hydrants, including two dry hydrants near the Warwick River, to upgrade fire protection capabilities; and replacement of approximately 75 – 80% of the water mains in Town.

Today, Secretary's water supply system consists of two wells drawing water from the Piney Point aquifer at depths of 580 feet and 552 feet. Additionally, two more wells access groundwater sources from the Federalsburg aquifer. The water from the two aquifers are blended to reduce overall arsenic levels to acceptable limits. Otherwise, the raw water quality is good and requires only chlorination for disinfection. The water treatment plant was also upgraded in order to reduce arsenic levels to permitted limits and has met the required treatment levels since November 2009. The existing distribution system consists of 12" pipes along Main Street with 8" and 10" lines at the intersecting streets.

The entire Town is served by public water and is designated as W-1 in the Dorchester County Water and Sewerage Plan. From 2007 through 2009, the average daily water usage is 107,000 gallons per day. Water usage has declined steadily since 2009, with the 2009 annual average at 98,000 gallons per day. During the Month of Maximum Use, approximately 149,000 gallons per day of water was being used in August 2009.

Sewer System

Secretary's sewer collection system, which was constructed in 1970, consists of approximately 14,000 linear feet of primarily eight inch gravity lines. The entire Town is served and the collection system is considered to be in good condition. Wastewater is collected in the gravity sewers and is conveyed to the Gordon Street Pumping Station. From the pumping station, the sewage is pumped through a six inch force main that crosses under the south branch of the Warwick River and discharges directly into the Twin Cities Wastewater Treatment Plant (WWTP).

The Twin Cities Wastewater Treatment Plant, which is located approximately one-half mile west of Secretary along Green Point Road, was originally constructed in 1970 to serve only the Town of Secretary. The original wastewater treatment plant consisted of two facultative lagoons of identical size and a chlorine disinfection system. The original plant was designed to treat 60,000 gallons of wastewater per day.

In 1981, the Town of East New Market abandoned its own wastewater treatment facility and entered into an agreement with the Town of Secretary to upgrade its treatment facility to serve both towns. The treatment plant was upgraded from a facultative lagoon system to an aerated lagoon system and numerous other improvements were added. The treatment capacity of the plant was upgraded to its current capacity of 280,000 which is shared equally by both towns.

The Twin Cities Wastewater Treatment Plant is currently treating an average flow of 83,000 gallons per day from the Town of Secretary from 2007 – 2009; the entire system treated approximately 135,000 gallons per day over the same period. During the Month of Maximum Use over the same period, the Twin Cities Wastewater Treatment Plant treated 107,000 gallons per day within the Town of Secretary and 168,000 gallons per day for the entire system.

Inflow and infiltration repairs were completed in October of 2008 within the Town of Secretary. Since the repairs became complete, there were drops in treated gallons per day for each month through March 2009 compared to the prior year. From April 2009 through November 2009, Secretary sent on average 10,000 gallons per day of wastewater to the WWTP greater than the same month in 2008. However, the average monthly treated effluent was 10,000 gallons per day less in 2009 then it was prior to I&I repairs taking place in 2007. At this time, based on 300 gallons per day per EDU, the Town of Secretary has approximately 183 residential hookups available.

Open Space and Recreation

The Town of Secretary offers many recreational facilities. These facilities, which are shown on *Map 1 - Community Facilities*, include:

Secretary Town Park: The Town and County have jointly established a community park, known as Secretary Town Park, along the north branch of the Warwick River near the Warwick Elementary School. This town/county park encompasses approximately 32 acres and contains two tennis courts, a multi-use field, picnic tables, grills, children's playground equipment, through the wooded section of the park. Although the park fronts on a portion of the north branch of the Warwick River, the river is too shallow to use for recreational purposes. The County uses the park for youth and adult programs for area residents throughout the year.

Veterans Park: The Town recently purchased and developed a park adjacent to Town Hall commemorating combat veterans. The newest addition to the Town's park and recreation system is a wonderful addition to the Town. For Phase II of the park project, the Town is looking to purchase a 36 foot octagonal gazebo to promote the park as a gathering space.

Warwick Elementary School: Warwick Elementary School is located adjacent to Secretary Town Park. This school site consists of approximately 15 acres and contains athletic fields for baseball, softball and soccer as well as outdoor basketball courts and children's playground equipment. The school also has a gymnasium which is used by the community for indoor recreation throughout the year.

Boat Ramp: The Town owns and maintains a boat ramp and parking lot at the end of Gordon Street. This ramp provides access to the southern branch of the Warwick River.

Open Space and Recreation Needs

Open space and recreational facilities are an essential part of every community. The type and amount of open space, parks, and facilities required for a community depends to a large degree on the needs and desires of area residents. The State's Program Open Space initiative suggests 30 acres of park facilities are adequate for every 1,000 population. Per the 2000 U.S. Census, approximately 15 acres of park space is adequate to serve the community.

The recreational and open space needs of the residents of Secretary are being adequately met with the following: the 29 acre Secretary Town Park with its tennis courts, multi-use field, picnic tables, grills, playground equipment, restrooms and parking; the 15 acre Warwick Elementary school site with its playing fields, basketball courts, children's playground equipment and gymnasium; Veterans Park and the Secretary Boat Ramp. Future recreation and open space needs through the planning period will be discussed later in the Municipal Growth Element.

Recreation and Open Space Policies

- 1. New subdivisions and developments should provide recreational areas such as tot lots, benches, and/or multi-purpose courts; and retain natural drainageways, streams or ditches as undeveloped or unpaved open areas wherever possible.
- 2. The Town should continue its cooperative relationship with the County recreation department.
- 3. Efforts should be made to assure that the Warwick River is maintained at adequate depth for the types of vessel traffic using the waterway.

Education

Existing School Facilities

Warwick Elementary School is located on a 15 acre site on the north side of Maryland Route 14, which is split by the easterly boundary of the corporate limits of the Town of Secretary. The majority of the school site is within the Town limits. This elementary school facility, which is approximately 19 years old, serves children in the Secretary-East New Market area from pre-kindergarten through grade 5th grade, including special education. This school was originally designed and functioned as an "open space" school until interior walls were added in the summer of 1996. This single story facility consists of 40,400 gross square feet of building area which includes: 12,621 square feet of available classroom space which is divided into 11 class areas; media center, state, cafeteria/kitchen; gymnasium with locker rooms; and administrative offices. The school site also includes athletic fields for baseball, softball and soccer as well as outdoor basketball courts and children's playground equipment. Warwick Elementary School is also used for a variety of community activities such as YMCA events, computer camps, dance programs and also serves as a regional migrant education center. The total enrollment at Warwick Elementary School in 2007, was 330 students.

Children in grades 6-8 in the Secretary-East New Market area attend North Dorchester Middle School, where enrollment reached 432 in 2007. Grades 9 –12 attend North Dorchester High School, which held a 2007 enrollment of 551. These two schools are located adjacent to each other on the same site in Shiloh, which is approximately four miles away.

Education Recommendations

1. The non-wooded land on the north side of Warwick Elementary School should be reserved for future school expansion opportunities, if necessary.

Fire Protection

Fire protection for the Town of Secretary and its immediate surrounding area is provided by the Secretary Volunteer Fire Company. This all volunteer force is comprised of approximately 35 active members who provide the local community with around-the-clock fire protection. The Secretary Volunteer Fire Company is located on a 3.8 acre site on the north side of Myrtle Street. The Company's firefighting equipment currently consists of two pumpers, one tank truck and one brush truck. This equipment allows the company to adequately fight fires up to two to three stories. The local fire company also provides emergency medical assistance through the use of its ambulance and trained volunteers.

Fire Protection Recommendations

1. The Town and fire company should work closely together to make sure that the fire company's need for water can be met both now and in the future. As new areas are developed, the fire company should be included in plans for additional fire hydrants, more water storage facilities and water pressure in lines.

If a business or industry using large amounts of flammable substances proposes to locate in Secretary, the fire company should be invited to comment on their ability to provide fire protection for such substances or the need of the business to provide special safety features.

 Since the present firefighting equipment (trucks and ladders) is designed to serve no greater than two-story buildings, new buildings greater than two-stories should be prohibited until the fire company acquires additional equipment or unless the buildings would be designed with special fire fighting features.

Police Protection

The Town of Secretary does not have its own police force. Police protection within the corporate limits is provided by the Dorchester County Sheriff's Office and the Maryland State Police. Regular patrols have been minimal, indicated by the need to add speed humps to reduce speeding through the Town in absence of a regular police presence. The Town will initiate discussions with the Sherriff's Office and State Police to see if increased patrols are possible.

Trash Collection

The Town collects household trash from its residential properties twice a week and the trash is dumped at the County-owned landfill at Beulah. The current trash collection system is adequate and no recommendations are suggested at this time.

Existing Medical Facilities

There are no doctor or dentist offices in Secretary. The nearest doctors or dentists are in the Town of Hurlock, which is approximately seven miles away. The nearest hospital is Dorchester General Hospital which is located approximately eleven miles away in Cambridge.

The lack of a physician or medical services is a common problem in many small Eastern Shore communities. While good facilities are nearby, the communities have a greater responsibility to provide emergency care and treatment until the patient is transported to the doctor or hospital. The Secretary Volunteer Fire Company does an excellent job of performing this service and should be encouraged and assisted in any way possible to receive the training and equipment necessary for lifesaving techniques.

Post Office

The Town of Secretary has a post office located in the Town limits at 145 Main Street. There is no mail delivery within the Town of Secretary so Town residents visit the post office to pick up their mail. There are no plans to begin mail delivery in the Town within the near future.

Clubs and Organizations

MAC, Inc., meets once a week in the in the back of Town Hall. Cub Scout Troop 169 and a Girl Scout Troop also organize in the Town. There are other civic organizations located in nearby East New Market and Hurlock for use by Secretary residents and their children.

Municipal Growth Element

Introduction

This element is:

- Based on Background Studies for Municipal Growth (prepared September 2007) and the Models and Guidelines for Preparing the Municipal Growth Element;
- Integrated with the Town's Comprehensive Plan;
- Prepared in conjunction with the Water Resources Element;
- Coordinated with the Town of East New Market and Dorchester County;

This element incorporates the Background Study by reference. The purpose of the Municipal Growth Element is to develop a plan for future territorial growth, integrate it into the Land Use Plan element, and address its impacts on water resources, public facilities and services. Under House Bill 1141 (2006), the element is to be developed with consideration of 10 items.

- 1. Future municipal growth
- 2. Past growth patterns
- 3. Municipal land capacity
- 4. Land demand that satisfies growth policy
- 5. Services needed for growth
- 6. Rural buffers and transitions
- 7. Any extra-territorial service responsibilities
- 8. Sensitive areas protections
- 9. Population growth projections
- 10. Future municipal character

Future Municipal Growth

The Town of Secretary worked with the Town of East New Market and Dorchester County to develop a "Growth Area Map" that shows "Growth Areas", "Joint Planning Areas" and "Greenbelts". This map was developed as part of the County's draft comprehensive plan process. However, these concepts were abandoned based on the passing of House Bill 1141 and the need for each municipality to plan their future boundaries based on the items listed in the prior section. The Town's Growth Area map maintains the same growth concepts to move east toward East New Market as it did in the joint growth plan developed as part of the County's draft plan.

Past Growth Patterns

In 1971, the Town of Secretary opened its wastewater collection and treatment system and its population increased from 352 to 487 by 1980 (a 38.4 percent increase). In the late 1980s, the Town of Secretary approved of Warwick Landing, a small condominium development that became the Town's first "high density" project. The Town's municipal boundaries have not changed in many years. The Town is laid out in a simple grid pattern, with Main Street (Maryland Route 14) as the main thoroughfare.

Population growth in Secretary remained relatively steady after the initial surge in the 1970s. Between 2000 and 2005, Secretary lost 1.5%, for a 2005 population of 496. Capacity issues with the wastewater treatment plant led to a moratorium on growth in 2004. Following an engineering study that clarified available capacity, the moratorium was lifted in 2007 to permit certain pipeline projects to proceed. Since that time, inflow and infiltration repairs were done and the available treatment capacity for the Town of Secretary increased sharply as wastewater loads decreased.

Municipal Land Capacity

Estimates of land capacity within current Town boundaries were provided by the Town's consulting engineers and the Maryland Department of Planning; both sources indicate a maximum amount of growth within the Town boundaries at 35 units. The Town's consultants are further planning for five EDUs of growth for commercial uses and five EDUs of growth for institutional uses. The "smart growth" policy adopted by the Town and the County calls for the Town to attract population growth at higher-than-historical rates to preclude sprawl.

Land Demand to Support the Growth Policy

According to the Maryland Department of Planning (MDP), Dorchester County will grow by 8,600 people between 2005 and 2030 (a 27% increase over 25 years). The County's current Comprehensive Plan calls for municipalities in North Dorchester County to attract 50 to 70 percent of the County's future population growth. Between 2000 and 2006, it is estimated that 56 percent of the County's growth was channeled to municipalities. In order to truly implement the joint smart growth effort, these proportions must increase with a goal to channel at least 70% of the County's growth to its urban centers.

The County contains five municipalities with the infrastructure framework to support growth: the City of Cambridge, and the Towns of Vienna, Hurlock, Secretary and East New Market. The Town of Secretary is in line with the State's guidelines to allow planning policies to be made at a local level and will exercise its own judgment about how much, if any, of the County's growth should be targeted. The Municipal Growth Element and Growth Area Map are based on the following principals:

- County population projections to the year 2030 provide an estimate of the size of the pot of growth opportunity and the Town growth plans can affect how much of the pot will be captured;
- 2. State and County land use and environmental policies discourage large lot residential growth on septic systems;
- 3. State and County land use and environmental policy encourage growth in compact walkable forms, on smaller lots, and served by central water and sewer;
- 4. The choice of whether or not to grow is determined by each local government and implemented through the Comprehensive Plan.

Population Projections

The following assumes that the Town of Secretary can attract future County growth in proportion to its size to the overall County. The analysis performed in this element will assess whether the Town has the facilities to serve future populations and will provide policy recommendations as necessary to accommodate future growth. Water and sewer infrastructure will be discussed later in the Water Resources Element.

- Dorchester County will grow by approximately 8,600 people by 2030;
- At least 70% of the growth will be directed toward the five urban centers with infrastructure available to serve the future residents, or 6,020 residents;
- The Town of Secretary is 1.6% of the County's total population and will receive a proportionate share of the growth;
- Based strictly on past growth patterns and the assumptions discussed above, the Town can expect an additional 100 residents over the planning period.
 This could vary slightly if household size decreases as MDP predicts.

It is important to note that while larger municipalities will likely receive a larger share of the County's future population, that limitations on wastewater treatment and effluent discharge, as well as other growth policies might make it unrealistic that other's can accommodate the larger shares of future growth. The Town should be prepared to accept a larger share of the County's future growth if residents can be provided the necessary services.

Growth and Land Supply Conclusions

Based on 2.5 people per household and past growth patterns, the Town will need 40 additional homes to accommodate future growth. With a maximum of 35 lots available within the current Town boundaries, nearly all of the additional homes needed could be developed within the Town limits. However, it is unrealistic to believe this will occur since little growth has occurred within the existing Town boundaries over the past 20 years – the Town has no control or ability to force existing land owners to develop homes on infill lots.

Under the "status quo", population trends suggest that the Town of Secretary will have an insignificant role in accomplishing the State Smart Growth goals. Secretary would continue to contain about 1.6% of the County's entire population. Land use planning, by definition, concerns the possibility and opportunity of changing the status quo. The goal of the Town of Secretary is to capture its fair share of County growth, and as such, past population growth projections are not being treated as a controlling factor. As happened after the Town of Secretary opened a new treatment plant in 1971, the expansion of the Twin Cities WWTP will make possible another era of growth in the Town of Secretary.

The Town will need to provide growth outside of the Town limits to provide for future populations. Moreover, commercial and institutional growth will be necessary to provide jobs and services to the Town residents. The Town will also need to work closely with the County and monitor growth over time. Additional growth areas may be necessary to accommodate County growth that cannot be served by other communities and to prevent sprawl.

MDP's Development Capacity Analysis model can be found at: http://www.mdp.state.md.us/pdf/OurWork/dev_cap/DCTF-Final.pdf. Town parcels with development capacity are indicated as vacant parcels on the attached existing land use map.

Future Municipal Character

Under the Town's long term development policy, the character, visual cohesiveness and bounded edges of the Town will stay intact. New edge development is permitted, but it must reflect traditional Town character in terms of scale, land use and design.

The eastern edge of Town, south of Main Street, is mostly developed with cul-de-sacs. Continuity between the Town and the Growth Areas, however, can be achieved by extending South Street to the east. North of Main Street, plats indicate a short right-of-way that could be possibly extended eastward to the Growth Areas. The right-of-way extension would be proximate to the school and the area is already within the Town boundaries.

Growth Area Map

The Town of Secretary has designated the growth areas as shown on Map 4 based on the following considerations:

1. Adequate acreage for the long term that allows comprehensive interjurisdictional planning for growth, as opposed to case-by-case annexation;

- Adoption of an long term plan for the Warwick River watershed that accommodates growth, preserves greenbelts and minimizes the impacts of growth on water quality;
- 3. Municipal capture of County population growth to prevent sprawl. This includes allowing for multiple growth scenarios so the Town is not tied to the plans of a single landowner for all growth potential.

Growth Areas

Based on the considerations above, the Town of Secretary has recognized and is planning for three growth areas. These areas provide the Town with multiple options to capture its fair share of County growth in order to implement the "smart growth" plan. The three different growth areas are discussed below.

Growth Area 1

Growth Area 1 (GA1) is located east of the Town boundaries on the south side of Main Street as indicated on Map 4. Concept plans were provided to the Town in the past to provide commercial services on the parcel adjacent to Main Street and to develop 40 homes on the parcel to the south. This growth area is seen as the main priority for the Town to accommodate growth expected to come via the County growth share.

Part of GA1 which is planned for residential growth is within the Critical Area as indicated on Map 6. Growth allocation would be required to build greater than 40 homes. The Town was happy with the developer's original proposal and plan to expand on the developer's original request. Moreover, reduced building area outside of the Critical Area will allow for development at or above 3.5 units an acre, which is in line with the Priority Funding Area guidelines. The Town may seek growth allocation in advance in the situation development plans change and to stay in line with the streamlining recommendations discussed later.

Growth Area 2

Growth Area 2 (GA2) is directly north of GA1 and will be developed in a similar manner if the Town decides to annex this property. Although the priority annexation area for accommodating County growth is GA1, the Town does not wish to put a complete stake in prior development proposals within GA1 coming to fruition. Moreover, if the County grows faster than expected within the 20 year horizon of this plan, the Town wants to be prepared to accept development in this area to implement its smart growth initiative.

The entire GA2 area is approximately 41 acres, of which approximately 60% of the land is within the RCA Critical Area. It is expected that approximately eight acres of the land fronting Main Street will be set aside for mixed use development to continue the traditional pattern of Main Street, leaving approximately eight acres for residential development. This will provide approximately 32 homes for future growth without growth allocation. If the Town annexes this property, they will work closely with the County to determine the need for development and the phasing of development to prevent sprawl. The Town may seek growth allocation in advance of a development proposal for GA2 and to stay in line with the streamlining recommendations discussed later.

Though it is not expected that both GA1 and GA2 will be annexed and develop within the 20 year horizon of this plan, there is the possibility this could occur if growth increases beyond historical norms. The Town is ready to serve additional County growth to prevent sprawl in identifying these two growth areas. These policies may change to limit or promote growth in these areas on a different timeline upon six-year review of this plan.

Planning Area

The designated "Planning Area" includes properties directly adjacent to GA1 and GA2, which cannot be annexed by the Town of Secretary without prior annexation of either of the growth areas. This area is a transition area similar to what was discussed in Dorchester County's plan originally shown as a "joint planning area". While it cannot be determined at this time that the Planning Area will be annexed into Secretary and developed, it is important in planning the transition of development between Secretary and East New Market. As such, the Secretary will work with the County and East New Market to help come up with future development scenarios for this area.

Though definite development scenarios for this area are incomplete, it is not expected that the Planning Area will be considered for annexation into the Town within the 20 year horizon of this plan. As such, the impact of the development of the Planning Area is not being assessed at this time. Upon annexation of GA1 or GA2, and substantial completion of the approved development for either growth area, the Town will assess whether it has the facilities and services to accommodate growth in this area.

Rural Buffer and Transition Areas

The Town has not yet determined where rural buffers and transition areas should exist. However, with previous talks between the County and East New Market, it has been recognized that a transition is necessary between the Town municipalities so they do not bleed together over time and continue to maintain their distinct sense of place. The Planning Area will play into the designation of transition areas. The Town will continue to work through these issues as the County continues their comprehensive planning process.

Growth Area Summary

The potential for infill growth and residential development in GA1 and GA2 provide opportunities for approximately 110 residential units. Based on past growth patterns in the community, it is likely that infill development will not occur at a pace that will help the Town funnel County growth into the community. The Town will work with the County to monitor growth throughout the 20 year timeline of the plan and sprawl patterns in the County. The Town will maintain this cooperative effort to help understand if growth allocation should be considered to develop at higher densities within GA1 or GA2, as well as to determine development scenarios with the Planning Area.

110 residential units could potentially bring in 275 additional residents through the planning period, for a total of approximately 775 people in the Town of Secretary in the year 2030.

Growth Demands

Increased residential and commercial growth will place additional demands on existing facilities. Since some of the services and facilities available to the Town's residents are owned and controlled by the County, the Town has given the various County agencies in charge of the specific facilities discussed below the opportunity to comment on the Town's growth plans. County comments have been incorporated into the Comprehensive Plan where appropriate. For those facilities controlled by the Town, each section discusses how future impacts will need to be mitigated. In the policies and recommendations section below, further guidance is given concerning methods used to ensure that developers' proportionate share of growth impacts are mitigated.

Parks and Recreation

The State of Maryland's Program Open Space goal is to provide residents of a community with 30 acres of parks space and recreational facilities for every 1,000 people. Based on the current population, the Town needs approximately 15 acres of parks and recreational space to serve the existing community; 23 total acres are needed to meet the Program Open Space goals for the expected future population.

The Town has approximately 11.5 acres of active recreational space, which includes the County Park, the school playground (available for public use) and the Town owned and maintained boat ramp. Additionally, the wooded area behind Warwick Elementary provides nature trails which are open to the public; the entire wooded area is approximately 29 acres. With the Town having in excess of 40 acres of total parks and recreational facilities, the current and future population of the Town is more than adequately serving its residents under the Program Open Space guidelines.

Some additional improvements could be made to improve the nature trail system and to provide neighborhood parks and tot lots in residential growth areas. The Town will seek to find funds for those improvements.

Schools

Dorchester County Public Schools operates and maintains the three schools serving Secretary and its growth area. Future residential growth will add new students to the school system. Impacts of the additional 275 residents potentially moving to Secretary are noted in the table below. The Town will work with the County to track growth and proposed development. At this time, school capacity is adequate for the middle and high school serving the area through 2018. However, Warwick Elementary school is at 122% of its State-rated capacity. This was to be alleviated with a planned expansion, but fiscal issues have caused that project to be put on hold.

MDP has developed a set of *Models and Guidelines* concerning "smart growth" and school construction they are urging communities to follow. The main premise is that local government should work with their local school agency to develop guidelines to make school construction and expansion efficient and feasible. The Town should review the MDP publication and begin working with the school district on these matters.

Table 12 Potential Future Enrollment Increases for Schools Serving Secretary		
Student Type	Estimated Students Per	110 Households
Elementary (Ages 5 – 10)	0.27	30
Middle (ages 11 – 13)	0.135	15
High (ages 14 – 17)	0.206	23
Total Students: 58		
Source: Davis, Bowen and Friedel, Inc. *"Estimated Students per Household" standard provided by the U.S. Homebuilder's Association		

Libraries

The Dorchester County Library system provides services through the Main Branch in Cambridge and a north county branch nearby in Hurlock. The libraries adequately are serving the needs of the community.

Public Transportation

The proposed population increases will likely not lead to the need for increased public transportation services to the Town. The Town is attempting to provide jobs and services in the Town so substantial travel is not necessary. If a need for public transportation arises, the Town will work to locate a bus stop along existing routes of the transit system serving the area. However, the current level of service meets the needs of the existing population and will likely meet the needs of future residents.

Public Health

No public health facilities exist within Secretary. Doctors are available nearby in both Hurlock and Cambridge. More intensive services are available in Salisbury if needed. Because of the size of Secretary, and the planned future growth, health services are not necessary within the Town limits throughout the 20 year horizon of this plan.

Public Safety and Emergency Services

The Town is adequately served by the Secretary Volunteer Fire Department with fire protection services. EMS service is not available directly on staff, but the County medic is summoned per an agreement with the Town when an emergency call is made. The Town should work with the Fire Department to determine if EMS onsite staffing should be considered and to help fund the position.

The Town does not have its own police force and requires Dorchester County and the State Police answer calls for service. The Town is not adequately patrolled at this time and there are some issues with speeding. As the Town grows, increased traffic can be dangerous for children and pedestrians. The Town should work closely with the County police force to provide more regular patrols. The Town should also explore the cost of creating and maintaining its own police force.

Policies and Recommendations

- Monitor County growth and work closely with the County to direct future populations to Secretary as part of this "smart growth" initiative;
- Encourage owners of infill lots to provide housing for future residents to prevent unnecessary annexations;
- Ensure facilities are being provided at the necessary levels of service for adequate use and enjoyment by Town residents;
- Promote and enhance the Town's nature trail system behind Warwick Elementary to provide increased use and safety for all residents;
- Phase growth areas and annexations as discussed in this section;
- The Town will work to create the financing mechanisms necessary to make improvements where necessary
- Work with County and State police to increase patrols in the community.

Water Resources Element

Introduction

This element is:

- Based on Background Studies for Water Supply and Receiving Waters (prepared September 2007) and MDP's Models and Guidelines for Developing a Water Resources Element;
- Integrated with the Town's Comprehensive Plan;
- Prepared in conjunction with the Municipal Growth Element;
- Coordinated with the Town of East New Market and Dorchester County;
- An iterative element that will be updated over time in conjunction with new water supply and water quality data and findings from the State.

This element incorporates the Background Studies by reference. The purpose of the Water Resources Element is to identify:

- 1. Drinking water and other water resources that will be adequate for the needs of existing and future development proposed in the Land Use Plan element; and,
- 2. Suitable receiving waters and land areas to meet storm water management and wastewater treatment and disposal needs of existing and future development proposed in the Land Use Element.

Water Supply

Water Supply Background

The Town depends on the groundwater supplies held in Coastal Plain aquifers at fairly deep levels. Specifically, the Town utilizes groundwater resources in the Piney Point and Federalsburg Aquifers. The supply is abundant and the storage and delivery systems are adequate. Natural occurring arsenic in the Town wells in the Piney Point aquifer exceeds modern standards. The Town blends water from the Piney Point wells with source water from the Federalsburg aquifer in order to bring arsenic levels to the acceptable standards.

The Town of Secretary consumes very little of the region's groundwater. Most of the groundwater in the area is used for agricultural irrigation. Irrigation in Maryland is mostly concentrated within northern Dorchester County and southern Caroline County; in 2000, nearly 57% of groundwater resources used for irrigation was used in these two counties. Withdrawal for irrigation is expected to increase dramatically by the year 2030.

The Maryland Department of the Environment (MDE) estimates by the year 2030 irrigation on the Eastern Shore will use over 73 million gallons per day (MGD), about 2.5 times more water than the remainder of the State. Because irrigation withdrawals are only periodic, their actual daily withdrawal during irrigation season is much higher that the annual daily average. This means the stress on water supply during withdrawal season is even greater than would appear from the data.

The Town is not experiencing water quality issues identified by MDE within the Coastal Plains aquifers. Town well sites are secure and there is no storage or release of hazardous materials from nearby that may jeopardize the wellhead. However, the Town should create policies to protect wellheads and excellent recharge areas to prevent the possibility of future contamination of the water supply.

Water Capacity

Based on the Town's well production data from 2009, the Town's average daily flow was approximately 98,000 gallons per day. The three-year average from 2007 through 2009 was about 107,000 gallons per day. Water usage has declined sharply since 2007, by nearly 28,000 gallons per day. In 2009, the Month of Maximum Use was August, where the Town averaged 147,000 gallons per day of water usage.

One (1) equivalent dwelling unit (EDU) as used in previous studies by the Town of Secretary is equivalent to 300 gallons per day. The Town will provide water to currently vacant residential parcels, but has not previously set aside capacity for unutilized and underutilized parcels. For purposed of this study, the Town will assume 120 EDUs are needed to accommodate future growth – 35 potential infill units, 75 residential units in growth areas and 10 EDUs for commercial and institutional uses. If the Town realizes its full growth potential, 143,000 gallons per day will be needed to serve the Town on an average day. For the Month of Maximum Use, it is estimated that the Town will need approximately 195,000 gallons per day.

Water Treatment

The Town's water treatment facility has an approximate treatment capacity of 1.2 million gallons per day. The treatment facility can disinfect the water through chlorination and treat for arsenic levels at this capacity. The treatment capacity is enough to serve the future growth of the community.

Storage

Per Ten State Standards, "water storage" is defined as the storage held in the elevated storage tank combined with the production of wells on a backup power source. The Town's storage system consists of a 150,000 gallon storage tank. An additional 400,000 gallons of capacity is hypothetically possible with one well from each aquifer producing at the highest rated pumping capability for a 16-hour period. The Town has the capability to provide residents and businesses with enough raw water through the year 2030. Generators exist on the wells to provide backup power for the pumps during power outages.

Water Appropriations and Use Permit

The Town has two Water Appropriation and Use Permits (WAUP), one for each aquifer being utilized by the Town. Both permits became effective on November 1, 2009. The Town's WAUP for the Federalsburg aquifer allows for the withdrawal of 120,000 gallons per day and 150,000 gallons per day during the Month of Maximum Use. The WAUP for withdrawal from the Piney Point aquifer allows 40,000 gallons per day and 100,000 per day during the Month of Maximum Use. The Town is permitted to withdrawal the expected levels necessary to accommodate its residents and businesses through the year 2030. The Town should compare growth and usage over time to ensure permitted withdrawal levels are not being violated.

Water Summary

The Town has the production, storage and treatment capabilities to serve the Town through the year 2030. Backup power on all wells can help guarantee consistent production in adverse situations and make the Town consistent with Ten State Standards' definition of water storage.

Wastewater

Wastewater Flows

The Town of Secretary operates and maintains the Twin Cities Wastewater Treatment Plant (WWTP) that serves the Town of East New Market and the Green Point subdivision. The Twin Cities Commission creates policies and deals with issues at the WWTP. The two towns share the remaining capacity of the 281,000 gallon per day WWTP after treating discharge from Green Point. This equates conservatively to 139,000 gallons per day for each municipality. No additional capacity is being allocated for areas west of the Warwick River besides what is being currently allocated at Green Point, at this time.

From 2007 to 2009, Secretary produced approximately 83,000 gallons per day of wastewater. After completing inflow and infiltration repairs in October 2008, the Town's wastewater discharge decreased from an average of 94,000 gallons per day in 2007 to 72,000 gallons per day in 2008. Discharge rates continued to decrease through March 2009 compared to the same month in 2008. From April 2009 through the remainder of the year, the Town had an unexpected increase in discharge rates compared to the same month in the prior year (with the exception of July). With the expected increase of 120 EDUs to serve future residents and businesses, 119,000 gallons per day of wastewater treatment capacity will be needed.

On average, compared to the same month in the prior year, the WWTP treated 10,000 to 15,000 additional gallons per day, with an increase of 40,000 gallons per day in June. In November 2009, generally a low flow month, the Town discharged 117,000 gallons of discharge on the average day – more than twice the amount treated in November 2008. It is also important to note that over the past three years that the Month of Maximum Use for the Town's water supply does not correspond with the Month of Maximum Use at the WWTP. As of this report, there is also more discharge in the treatment lagoons than what is being tracked by the meters installed throughout the system. Secretary should resolve this problem before taking on any significant growth.

Upon repairing the items mentioned above, the Town still will need to continue planning and designing capacity and treatment upgrades to the WWTP. The Town hired an engineering consultant to develop a sewer study that was adopted by the Town in 2007. This study provides for the development of a 500,000 GPD WWTP that will treat discharge at Biological Nutrient Removal (BNR) levels. While the goal is to upgrade the WWTP to replace the current lagoon system, it is unclear from the study of how the effluent will be discharged and if more stringent requirements were put in place for wastewater treatment plants at this capacity by MDE after the adoption of the study. The Town will likely need a feasibility study to help choose the best type of treatment plant, find funding for the design and construction of the plant, and to also determine the current State standards and permitting requirements.

Nutrient Loads

Wastewater entering the wastewater treatment facility is treated in two lagoons and is eventually discharged into the Warwick River. The Warwick River has been deemed by the State as a suitable waterway for wastewater discharge per the permit requirements described in the current MDE Discharge Permit. The Twin Cities Commission works hard to meet the permitted goals and will continue to monitor wastewater discharge.

Currently, only chlorine is being used to treat effluent entering the lagoon systems. Upgrade of the plant to BNR levels will greatly reduce nitrogen levels of treated effluent. The Town is currently under nitrogen and phosphorous discharge goals, not mandates. The current NPDES permit will require nitrogen and phosphorous limits upon expansion of the existing plant. At the existing capacity of 281,000 gallons per day, and despite the increased treatment opportunities provided with a BNR upgrade, the WWTP could not meet the permitted limits for nitrogen loading at secondary treatment or biological nutrient removal (BNR) levels (assuming 8mg/l of nitrogen is being discharge with BNR removal).

It is likely that upon planned expansion of the WWTP that enhanced nutrient removal (ENR) would be necessary to meet the State permitted requirements. The permitted levels upon expansion indicate a 500,000 gallon per day WWTP would be the maximum capacity allowed, and that ENR treatment levels of 4mg/l of nitrogen and 0.3 mg/l of phosphorous would be necessary to meet the loading mandates.

However, based on the growth in this plan, the Town and the Twin Cities commission may be interested in taking a phased approach to upgrading the WWTP as growth continues. It may be more efficient and financially sound to make smaller capacity expansions to the plant at BNR treatment levels with upgrade capabilities to 500,000 GPD at ENR treatment levels. The Town will work with the Twin Cities Commission on creating a WWTP expansion feasibility study on this matter.

Additional Wastewater Concerns

There are no customers currently on private septic systems within the Town limits. There are three existing residents in the growth areas that would be connected to the central sewer system upon annexation. Although generally helpful to the environment, until the upgrade of the WWTP is complete connection to the Twin Cities plant would not significantly reduce effluent nutrient loads.

Inflow and infiltration (I&I) issues might still be a concern as well. Although there was a measurable decrease in wastewater flows after completing initial I&I repairs, there have recently been unexplained increases in the Town's wastewater flows that could be due to other I&I problems. The Town may need an additional I&I study if preliminary studies indicate that flow increases are correlated with higher-than-expected average daily flows.

Wastewater Summary

The Town has several wastewater issues that were identified in a report developed by a previous engineering study. They have also taken several steps since adoption of the study in 2007 to solve I&I problems. The Town is planning to begin a preliminary study to determine the manner for upgrading the Twin Cities WWTP, which is on track with the Capital Improvements section of the engineering study.

Secretary will need to identify and repair immediate sewerage issues before allowing significant growth to occur outside of the existing Town limits. A capacity and nutrient treatment upgrade, as outlined throughout the Town's 2007 engineering study, is also necessary in order for the Town to reach its 2030 growth plans.

County Water and Sewer Plan

Dorchester County was waiting for the completion of its Water Resources Element before revising its Water and Sewer Master Plan. In January 2009, the County updated the accompanying Water and Sewer Service maps. All of GA1 and GA2 are included in the County's plan to allow extension of central water and sewer service. The portion of GA3 south of Main Street is also included in the water and sewer maps for the extension of service, but the northern portion is not slated to receive service at this time.

As part of the House Bill 1141 requirements, the Town will provide draft versions of its Comprehensive Plan, including the Municipal Growth Element and Water Resources Element to the County for review and comment. The goal is to have the County "sign off" on the Town's development plans and revise the County Water and Sewer Plan as necessary to make it consistent with the Town's growth plans. Since the growth areas shown on Map 4 are generally consistent with the County's draft Comprehensive Plan maps developed in coordination with the Town of Secretary, this should not be an issue.

The County will also be revising its Comprehensive Plan, which will take into account the growth areas of its municipalities. The current Water and Sewer Master Plan is based on the currently adopted, but outdated, County Comprehensive Plan. The Town has reduced its overall growth area and does not intend to serve some of the "transition areas" noted in the previous plan. Secretary will work with the County to revise the Water and Sewer Master Plan to reflect only those growth areas that will be ultimately served by public water and sewer.

Build Out Scenario

The Water Resources Element requires review of the community's "ultimate buildout" scenario of the Town and its growth areas. This is problematic for several reasons under this plan. Without definite development plans for the Growth Areas, it is unknown if the entire Growth Areas will be utilized and whether Growth Allocation of Critical Areas will be approved. Moreover, development scenarios for the Planning Area have not been determined and will not be figured out for some time (when the County begins working on the revision to their comprehensive plan). The same is true for determining the locations of transition areas.

Since overall development of the Town is so small and will take a long period of time, waiting to complete an ultimate buildout scenario until the six year update of this plan should not create a burden on services. The Town will work with the County to finalize issues discussed herein that is making the creation of a hypothetical buildout scenario difficult.

Stormwater Analysis

The analysis discussed below is based of a set of assumptions provided by the Maryland Department of the Environment (MDE), which equates land use changes with assumed increases or decreases in non-point source nutrient loads, pervious and impervious space. The spreadsheet developed by MDE is included as Appendix A.

Land Use Scenarios

House Bill 1141 guides local governments to create several land use scenarios for growth. The various land use scenarios are then to be tested against MDE's nutrient loading spreadsheet to determine each scenario's impact. The locality is then asked to choose the "least impactful" land use scenario for deciding future development.

Though there are many flaws with this concept, the biggest issue is the Town's inability to manufacture multiple land use scenarios. Due to the size and historic growth patterns of the Town, as well as potentially conflicting policies, the Town only has one land use scenario to choose that will maintain the character of the community. Degradation of community character is an impact not measured in MDE's assumptions; straying away from what makes Secretary a great community would have the greatest impact on the Town. The Town is utilizing the land use scenario developed through the Municipal Growth Element analysis.

Watersheds

Map 6 indicates the watersheds in and around the Town of Secretary and its growth areas. The Town is completely within the Warwick River watershed. Non-point source impacts in Secretary will solely affect this waterway.

Non-Point Source Loading

There are only negligible changes in land uses when comparing existing land uses shown on Map 2 and future land uses, as shown on Map 3. There are only a few properties along Main Street that are being planned for Village Commercial development where currently single-family homes exist. However, the Village Commercial land use designation is still residential in nature and will allow residential and commercial uses in character with the existing makeup along the Main Street corridor. Since there is no change in the existing "scenario", only the current impact is discussed based on MDE assumptions. Currently, the Town generates 1,277 pounds of nitrogen runoff per year and 150 pounds of phosphorous per year.

The future land use scenario examines development in Growth Areas One and Two, without development in the RCA Critical Areas. Development within the Critical Areas within GA1 and GA2, considering the current land uses within the Critical Area, will surely increase nutrient loading. Increased loading can be mitigated as part of the Growth Allocation process. Since there are too many variables without having an approved Growth Allocation, development in the RCA Critical Areas has not been considered at this time.

Current land uses in GA1 and GA2 consist of mainly agricultural uses and three homes characterized as rural residential. The development of GA1 and GA2, and connecting three existing homes to the Twin Cities WWTP, will lead to reductions in nitrogen loading of 460 pounds per year and five pounds of phosphorous per year. Secretary's future development scenarios will lessen the non-point source impact on the watershed.

Per MDE assumptions, the Town will increase impervious space by 23 acres, which can cause a greater impact within the watershed. The Town will review the new Stormwater Act of 2007 regulations and will plan future growth to meet these guidelines. This should help reduce non-point source nutrient runoff.

Total Maximum Daily Loads (TMDLs)

The Lower Choptank River has been identified as being an impaired water body by the U.S. Environmental Protection Agency for high levels of nutrients, sediments and fecal coliform. The TMDL plan for the Lower Choptank recognizes land uses within the Warwick River and several other waterways as contributing to high levels of fecal coliform. However, the fecal coliform issues are not caused by urban runoff according to the report, but due to the rural makeup of the Warwick River basin – more than 80% of land uses within the Warwick River watershed are agricultural or forested lands.

Although the Town of Secretary is not directly contributing to impairments in the Lower Choptank River, the Town should work with the County and the State where possible to implement policies that will reduce impairments.

Tier II Waterways

The Federal Clean Water Act requires States to identify high quality waterways, known as Tier II waterways. Blinkhorn Creek I has been identified as a Tier II waterway by the State. Point source discharge and non-point source runoff from the Town of Secretary or potential development within its growth areas will not affect Blinkhorn Creek I. The

Town should monitor Tier II waterway designations and assist in maintaining high quality waterways where possible.

Policies and Recommendations

- Place existing wells on backup power to ensure consistent pumping capabilities;
- Test pumping capabilities at existing wells to precisely determine their pumping abilities, which will help better assess the Town's water storage;
- Begin a feasibility study to move forward with expanding and upgrading the Twin Cities WWTP;
- Identify current issues with unexpected wastewater flows and make repairs necessary to allow for future growth prior to upgrade of the WWTP;
- Review the 2007 Stormwater Act regulations and adopt the necessary rules to bring the Town into compliance with the new rules;
- Work with the County to incorporate the findings of this element into the County's Water Resources Element and Comprehensive Plan;
- Work with the County and State to protect adjacent waterways, and to help promote TMDL implementation and protection of adjacent Tier II waterways.

Transportation Element

Introduction

The movement of people and goods is an important aspect of all growth plans. The Transportation Element examines the existing transportation infrastructure and any deficiencies that may exist. Beyond streets and roads, this element also examines the pedestrian, bicycle and public transportation aspects of the entire transportation system. Next, the relationship between land use, future growth and necessary improvements to the transportation system will be examined. If necessary, improvements to the transportation system will be recommended and funding sources will be discussed.

Secretary hopes to realize its future vision for transportation needs in the Town – safe streets to walk, bike and drive.

Goals and Objectives

- 1. Connect future land uses with transportation development.
- 2. Encourage the development and use of alternative transportation methods.
 - Provide alternative transportation modes for residents by improving pedestrian and bicycle facilities within the Town and along intra-city roadways;
 - Continue to develop a sidewalk system to encourage more pedestrian traffic and to reduce Vehicle Miles Traveled (VMTs).
- 3. Program funding for expected roadway improvements.
 - Find public and private funding for building new roadways, maintaining existing roadways and for the creation of sidewalks and bikeways;
 - Monitor the State's Highway Needs Inventory and County plans for road construction:
- 4. Protect sensitive areas.
 - Implement access management strategies, where applicable, and discourage street access for new development along Main Street;
 - Limit impervious surfaces where possible.

Roadway System

The Town of Secretary can be accessed by via Main Street (Maryland Route 14). Access to Route 14 can generate from a number of roadways, with U.S. Route 50, Maryland Route 16 and Route 392. The classification of roadways discussed below better details the various roadways throughout the Town and their intended use. The future intensity of development for land uses discussed in this plan should be based on the functional classification of streets in Secretary.

Functional Classification of Streets

The initial and most essential step in developing a balanced transportation plan that addresses future growth is classifying the function of streets indicating the service they were designed to provide. Secretary's roadway system consists of a combination of "major" and "minor collectors", and local streets. Future land uses, including the type, density and intensity, should be focused based in coordination with the classification system — with more intense development and land uses concentrated along higher functioning streets. The various functional classifications are indicated on Map 9 - Transportation.

Major Collectors: Connect residential streets and minor collectors through or adjacent to more than one neighborhood and have continuity to arterials.

Minor Collectors: Allows traffic from major collectors to have access to neighborhoods and local streets.

Local Streets, Cul-de-Sacs and Alleys: Provides access to residences within a neighborhood, abutting properties, and the rear property line of abutting properties, respectively.

The Town has an adequate system of streets. If the need arises to create additional roads and access to new development, it is important to create roadways in a manner that channel future traffic within the Town to the appropriate major and minor collectors. New ingress and egress points along Main Street should be avoided unless other means of access to the property cannot be utilized.

Levels of Service Standards

The ability for a roadway system to carry traffic can be measured quantitatively using Levels-of-Service (LOS) analysis. LOS reflects the analysis of a number of factors affecting the free flow of traffic, including: the degree of congestion, speed and travel time, traffic interruption, freedom to maneuver, safety, driving comfort and convenience. LOS calculations are generally accepted standards and are used in traffic impact analyses to determine the affects new developments have on roadways.

LOS standards and future traffic impacts are directly related to land use. In other words, the actual proposed future use of land, including the intensity of the future land use, directly affects the LOS of adjacent roadways and intersections. Traffic impact studies are recommended for future development to ensure that the LOS does not fall below an acceptable level.

SHA's When Main Street is a State Highway Guide

SHA has developed a guide for "Main Street" Communities to work with SHA to develop corridor and street improvement plans. Secretary's Main Street is a State highway that is an important corridor which provides significance in defining Secretary's character. The Town should work closely with SHA through the guidance of this award winning plan to implement the scenic corridors and improvements described herein.

The guide can be viewed at:

http://www.sha.state.md.us/businessWithSHA/projects/ohd/Mainstreet/MainStreet.pdf

Highway Needs Inventory

The 2006 Highway Needs Inventory (HNI) for Dorchester County indicates several SHA road improvement projects that will occur near the Town of Secretary, including on portions of Maryland Routes 14 and 16. However, Maryland Route 14 within the Town of Secretary is not slated for improvements. The HNI for Dorchester County can be found online at:

http://www.sha.state.md.us/oppen/hni_Do.pdf

Alternative Transportation

Pedestrian and Bicycle Paths

Sidewalks are scattered throughout the Town and help with local travel of citizens. The specific location of sidewalks can be found on Map 9 – Transportation Map. The Town should work to connect sidewalk networks throughout the Town where feasible.

In order to reduce impervious space within the Town, a system of trails through parks and other public areas should be considered. The Town already has a trail system near Warwick Elementary and bike routes also exist nearby. The Town should consider the National Safe Routes to School Program as a possible program and funding opportunity. More information can be found about this program at: http://www.saferoutesinfo.org.

Public Transportation

Public transportation does not travel into the Town at this time, though public transportation is available in nearby Cambridge and Hurlock. The expected increase in the Town's population is not likely to sustain public transportation service to the Town. If a need for public transportation occurs as Secretary grows, the Town should work with the County to advocate for periodic service to more populous areas where services can be made easily available for Town residents.

Financial Impact and Funding Mechanisms

The Town should minimize financial impact by passing the financial burden of creating new infrastructure onto developers. The Town can creatively allow for upgrading existing streets and the development of new streets and infrastructure through properly executed public works agreements.

For the continued maintenance of Town streets, the Town should forecast the budget to anticipate repairs for existing streets and sidewalks based on best practices for age and use standards.

Policies and Recommendations

meet its transportation needs:

The following policies and recommendations are being suggested to allow the Town to

- Using SHA's guide, work to create scenic gateways, streetscapes and other improvements along SHA roadways within the Town limits;
 - Protect the character of Main Street. Highly discourage new points of ingress and egress along North Main Street;
- Coordinate the need for additional pedestrian and bicycle walks with the plans to connect neighborhoods;
- Require traffic impact analyses for residential subdivision/development of ten lots or greater and for all new strip commercial development;
- Create provisions within developers' agreements that require developers to pay for necessary street and sidewalk improvements, but to also seek reimbursement for the proportionate share of future development;
- Determine the likeliness repairs will be necessary and forecast the budget far enough in advance to make said repairs;
- Seek out grant money where applicable;
- Periodically review the most recent Highway Needs Inventory for the County to see if repairs are forecasted within Secretary;
 - If necessary, communicate repair needs along roadways under SHA control to be placed on the HNI report.
- Develop a "streets master plan", which will examine the feasibility of the following:
 - Extending the Town's traditional grid system into newer development areas and future growth areas;
 - Reducing traffic noise:
 - Lessening the impacts on existing streets;
 - Develop standards for the removal of cul-de-sacs, dead-end streets, traffic calming devices (i.e. narrower streets, lower speed limits, roundabouts, etc.)
 - o Review and adoption of widely accepted standards;
 - Development of a westside collector street.
- Implement alternative transportation options for existing residents
 - Place bike racks throughout Town to encourage increased bicycle usage;
 - Examine the feasibility of developing a trail along portions of existing and former railroad areas on the east side of Secretary, as well as near the downtown areas.

Sensitive Areas Element

Introduction

The need to protect environmentally sensitive areas is based on the concept that these resources are vital to the well being of our community. Destruction or drastic alteration of these areas can be detrimental to the social and economic welfare of a community by creating hazards such as flooding; destroying important public resources such as groundwater supplies and water quality of streams, rivers, and the Chesapeake Bay; wasting important productive lands and resources; and destroying the natural beauty that makes Secretary a nice place to live and work.

The Economic Growth, Resource Protection, and Planning Act as amended in 2009 requires the Secretary Comprehensive Plan address protection and management of the land and water resources, including the Chesapeake and Costal Bays, and living resources; and conserve waterways, forest, agriculture areas, open space, natural systems, and scenic areas.

Other sensitive areas have also been identified. (See *Map 5 – Sensitive Areas*.) These areas are susceptible to the adverse impacts of development and are vulnerable to degradation associated with the number, movement, and activities of people. Quite often, these areas are unsuitable for development. Disturbance of these areas degrades or eliminates natural processes that provide flood control, stormwater management, and habitat protection. In addition, disturbance of these areas can impact the natural resources that contribute to the Town's character and the residents' quality of life.

The existing pattern of development in Secretary predates the recognition of the problems and limitations of these areas. As a result, some sensitive areas within Secretary have been developed or have been impacted by development. However, for future development and re-development, the following goal for protecting sensitive areas is established for the Town of Secretary:

Water quality and wildlife habitat will be protected, and where feasible, improved.

Sensitive Area Objectives

- 1. To protect the quality of the air, water, and land from the adverse effects of development and growth.
- 2. To ensure that development occurs in a manner that negative on-site and off-site impacts are minimized by protecting sensitive areas, controlling stormwater runoff and preserving the quality of the Town's groundwater, both during and after construction.

100-Year Floodplain

Historical reasons for floodplain protection have been to guard against injury to people and to prevent the destruction of property. In the context of sensitive areas protection, relatively undisturbed floodplains provide a variety of benefits including: moderation and storage of floodplains; reduction of erosion and sedimentation; and maintenance of water quality.

The 100-year tidal floodplain is the land along or adjacent to tidal waters that is susceptible to inundation by the 100-year flood generated by coastal or tidal flooding due to high tides, hurricanes, tropical storms or steady on-shore winds. The nontidal 100-year floodplain is the land area along or adjacent to nontidal streams and bodies of water that is susceptible to inundation by the 100-year flood as a result of rainfall and runoff from upland areas.

The Town's 100-year floodplain is shown on the Sensitive Areas map (see *Map 5*). Floodplain mapping is based on information adapted from the 1992 Federal Insurance Rates Map. This floodplain is entirely tidal. These floodplain areas are characterized by relatively flat topography and soil types that were laid down during past inundations by flood waters. Within Town the floodplain extends from 10 to over 100 feet from the banks of the North and South Branches of the Warwick River and from the tidal wetlands and tributaries adjacent to the River.

The Secretary Floodplain Ordinance (#1992-2) regulates development within the 100-year floodplain. In general, the Ordinance states that development may not occur in the floodplain where alternative locations exist. Any development within the floodplain must be elevated to or above the flood protection elevation and must be set back a minimum of 100-feet from the bank of the stream. A minimum 50-foot flood protection setback is applied for those streams which have no designated floodplain. Natural vegetation is to be maintained in the setback areas. Where natural vegetation does not exist, high priority shall be given to planting trees in the setback area to stabilize banks and to enhance aquatic resources. Due to the date of the Floodplain Ordinance, it may be necessary for the Town to amend it to be more consistent with new County, State and Federal regulations.

With regard to new subdivisions, creation of any new flood prone building sites shall not be permitted without proper mitigation and permitting. Where development is not possible, floodplain areas within subdivisions shall be preserved and dedicated to natural buffer areas, open space, recreation, and similar compatible uses by deed restriction, restrictive covenants, or donation of a conservation easement to a land trust. Forested areas adjacent to watercourses shall also be given high priority for preservation. No platted lots shall be created with inadequate areas of upland. Flood protection setbacks of at least 100 feet are required. High priority will be given to clustering development out of the floodplain while preserving the low lying land and forested areas in natural vegetation.

Streams and Their Buffers

The Town of Secretary is located between the North and South Branches of the Warwick River, where these branches come together to form the main stem of the river. One small unnamed tributary stream flows east-west through the center of Town between Gordon and South Streets. An additional small tributary streams are located at the outskirts of Town.

These streams are valuable to the Town in many ways. For example streams receive stormwater runoff and transport nutrients and sediments. Streams are important spawning grounds for fish, and help support other kinds of wildlife. Stream buffers are areas along the lengths of stream banks, established to protect streams from man made disturbances. Buffers are a "best management technique" that reduce sediment, nitrogen, and phosphorus and other runoff pollutants by acting as a filter, thus minimizing damage to streams. Stream buffers also improve habitat for fish and other stream life.

Buffers also provide wetland habitats. In view of the fact that most of Secretary is in the Chesapeake Bay Critical Area, buffer protection is already required for the Warwick River its North and South Branches and their tributaries.

Outside of the Critical Area it is recommended that the Town continue to assist property owners and developers to comply with current state law governing protection of wetlands. This law requires an undisturbed 25-foot buffer around nontidal wetlands. Wetlands along streams form a natural buffer, and may be more extensive than a standard buffer width of 50 or 75 feet. The minimum stream buffer requirement for areas outside the Critical Area should be 50 feet from the bank of all streams and/or their associated nontidal wetlands, whichever is greater.

Sensitive Species Project Review Areas

Protection of threatened, endangered and locally rare species is grounded in ethical and cultural reasons for preservation of all species, regardless of their known value to humans. The key to protecting rare, threatened, and endangered species is protecting their natural habitats from human disruption. Map 5 indicates the location of Sensitive Species Project Review Areas, areas under examination by the State where rare, threatened or endangered plant or animal species may exist.

The large forested tract at the northeastern corner of Town is important habitat for the Delmarva fox squirrel (<u>Sciurus niger cinereus</u>.) This area is also potentially important habitat for forest interior dwelling birds (also known as FIDS.) The Delmarva fox squirrel has been listed as federally endangered since 1967. Remnant populations of this species occur only in portions of Dorchester, Talbot, Queen Anne's and Kent Counties. Its habitat requirements consist mainly of mature forests of species such as loblolly pine, oak, or in mixed stands. Location of this habitat is indicated on the Sensitive Areas Map (see Map 5). This area is located within the Chesapeake Bay Critical Area; some protection is addressed in the Town Critical Area Program.

Timber harvesting, forest conversion to agriculture, and development constitute general threats to Delmarva fox squirrels and FIDS and their habitat. Additionally, accidental Delmarva fox squirrel mortality is frequently attributed to being struck by automobiles and to hunters who mistake Delmarva fox squirrels for gray squirrels. Within Town, threats to this habitat area are minimal because the property is owned by Dorchester County and the Town and both are committed to preserving the area for passive recreation only.

It is possible that other habitat areas may be discovered in the future. At such time as these areas are identified, goals, objectives and policies will be recommended for each site. This work will be conducted in coordination with the Heritage and Biodiversity Conservation Programs (HBCP) of the Maryland Department of Natural Resources (DNR). The Comprehensive Plan will be amended as necessary to incorporate future recommendations for protection of newly identified sites.

HBCP provides advice on measures for habitat protection and is in charge of the detailed data for site boundaries. The Town shall provide HBCP a reasonable period of time to review and comment on any development applications that may affect this habitat. This information will be made part of the public record along with other information submitted on a project.

Threatened and Endangered Species Protection Implementation Policies:

- 1. Development shall not be permitted within known habitat areas of threatened and endangered species.
- 2. If development is proposed within a SSPRA, the Town shall require the developer to meet the required State investigation, mitigation and other guidelines prior to granting project approval.
- 3. Town and County personnel should be educated in ways to minimize adverse impacts to sensitive species.

Chesapeake Bay Critical Area

The Chesapeake Bay Critical Area Program is a legislatively mandated approach to minimize the adverse impacts of development on water quality of the Chesapeake Bay and its tributaries, and to conserve fish, wildlife and plant habitat. The "Critical Area" is defined as all waters of and lands under the Chesapeake Bay and its tributaries to the head of tide, and the first 1000 feet inland from the boundaries of tidal waters, state wetlands and private tidal wetlands. The Critical Area boundary is shown on the Sensitive Areas Map. Nearly all jurisdictions with lands in the Critical Area have adopted local Critical Are programs.

The State's Critical Area criteria calls for mapping of three types of land use categories based on land use existing on December 1, 1985. Intensely Developed Areas, or IDAs, are those areas where residential, commercial, institutional, and/or industrial uses predominate, and where relatively little natural habitat occurs. Limited Development areas, or LDAs, are those areas which are currently developed in low or moderate intensity uses. LDAs also contain areas of natural plant and animal habitats, and the quality of runoff from these areas has not been substantially altered or impaired: Resource Conservation Areas, or RCAs, are those areas characterized by nature-dominated environments (i.e., wetlands, forest, abandoned fields) and resource-utilization activities (i.e., agriculture, forestry, fisheries activities, or aquaculture.)

The Critical Area within Town is designated either IDA or LDA; there are no areas which met the criteria for designation as RCA (see Map 6). All tidal wetlands within Town are protected through the Critical Area Program. Approximately 133 acres or roughly 81% of the Town is within the Chesapeake Bay Critical Area. Future development activities in the Critical Area are guided by the Secretary Critical Area Program, zoning, and subdivision ordinances according to land use designations. In general, more intense future development should be directed outside the Town's Critical Area to the extent possible. When more intense development activities are proposed in the Critical Area they shall be accommodated exclusively in designated IDAs and use the prescribed best management practices during site development.

Secretary's Critical Area Program regulates those lands within the Critical Area. The Program should also be used as a reference for making educated decisions on land use issues affecting lands outside of the Critical Area. Many of the resource protection measures required in the Critical Area, e.g., stream buffers, limiting development in areas with development constraints, and limits on forest clearing should be considered for application outside the Critical Area.

The State of Maryland Critical Area Commission revised the current Critical Area law through House Bill 1253, which has been in effect since July 1, 2008. Substantial changes are made under the new laws. Brief overviews of the changes are as follows:

- A 200 foot Buffer is required for new subdivisions on lands designated RCA lands and also for projects requiring site plan approvals involving a change in land use in the RCA lands.
- Improvements to protect shorelines from erosion shall consist of nonstructural shoreline stabilizations measures, such as marsh creation unless demonstrated not feasible.
- Growth allocations shall now be based on standards rather than guidelines.
- Impervious surface requirements in the past will be replaced with "lot coverage" in LDA and RCA lands.

Lot coverage is now defined to include areas covered by a structure, accessory structure, parking area, driveway, walkway, or roadway. Gravel, stone, shell, impermeable decking, pavers, permeable pavement, and any other man-made materials are included in lot coverage calculations. Lot coverage does not include walkways and stairs in the Buffer, a wood mulch pathway, or deck with gaps to allow water to pass. While the lot coverage is defined to include elements that are not considered impervious in the past, the lot coverage limit remained as previously provided for under State law.

The Critical Area boundary throughout the State will be updated based on the current aerial imagery by the Critical Area Commission, DNR, and MDE through working cooperatively with the local governments. This mapping will determine the shorelines and landward boundary of tidal wetlands and a digital generated geo-referenced 1,000-foot Critical Area Boundary.

Secretary's existing Critical Area law is outdated and the Town will update its Critical Area law to be consistent with the new State Critical Area law and subsequent regulations.

Nontidal Wetlands

Nontidal wetlands are the transition zone between open water or aquatic environments and uplands. They are typically areas where the water table is at or near the surface, or the land is covered by shallow water. These areas contain distinct biological and chemical characteristics due to their wetness.

"Nontidal wetlands" are defined under state law COMAR 08.05.04 or as amended as: an area that is inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

The Maryland Department of the Environment (MDE) regulates activities in all nontidal wetlands in the State of Maryland. Nontidal wetlands are identified by using the 1989 publication entitled the <u>Federal Manual for Identifying and Delineating Jurisdictional Wetlands</u>. This manual was put together by the Fish and Wildlife Service, Environmental Protection Agency, Department of the Army and the Soil Conservation Service.

There are nontidal wetlands located along Secretary's current southern boundary. This area is also within the 100-year floodplain. These nontidal wetlands are shown on the Sensitive Areas Map (See Map 5). Current state law requires a minimum 25 foot undisturbed buffer around nontidal wetlands. It is recommended that nontidal wetlands be added to the list of areas that should be protected from development impacts. Additionally, restoring buffer areas around nontidal wetlands by planting trees would further mitigate the adverse impacts of development.

Forests and Woodlands

There are only a few scattered stands of forest areas within Town, all of which are located within the Critical Area. The most significant forested area is the northwestern corner of the Town near the park along the North Branch of the Warwick River. This area was previously discussed in the section on Habitat of Threatened and Endangered Species.

Forest land is protected through the Town's Forest and Developed Woodland Program of the Secretary Chesapeake Bay Critical Area Program for the 81% of the Town within the Chesapeake Bay Critical Area. Secretary does not have a local Forest Conservation Program. The State Forest Conservation program is in effect for the 13% of the Town outside the Critical area. This means that any project of 40,000 square feet or greater outside of the critical area that requires a subdivision plan, grading permit or sediment control permit approval will need to have an exemption or a Forest Conservation Plan approved by the Forest Service prior to receiving approval by the Town. In the future, if development pressure increases, the Town may develop and implement its own forest conservation program for that portion of Town outside the Critical Area.

Many small jurisdictions without resources to perform Forest Conservation review will work with the County to review development plans and the local jurisdiction will ensure enforcement of the Forest Conservation law. The Town should consider adopting the County's Forest Conservation Ordinance, or engage in a Memorandum of Understanding to allow Dorchester County to administer the Forest Conservation Program on the Town's behalf.

Forest and Woodland Conservation Recommendations

It is recommended that the Town support efforts to standardize administration and enforcement procedures for forest conservation inside and outside the Chesapeake Bay Critical Area. The Forest Conservation Program and the Chesapeake Bay Critical Area Program have differing standards and administrative requirements, in part because the Forest Conservation Program was adopted more recently. Since the two program's goals are similar, the Town should encourage efforts at the state level which would standardize administration and enforcement procedures. Having the same regulations throughout Town in and outside of the Critical Area may provide some regulatory consistency and streamlining.

Steep Slopes

Areas of steep slopes can create limits to human activity and are generally not well suited for development. Steep slopes are defined as areas with slopes of 25 percent incline or greater. Currently, there are no areas within the Town meeting these criteria. Should a condition occur to make a steep slope exist, the Town will regulate development on this land according to State law, and Critical Area law, depending on the location.

Mineral Resources

Sand and gravel are Dorchester County's only mineral resources. There are no sand and gravel operations within Town, although there is an active 37 acre sand and gravel pit adjoining the Town's southern boundary. Mineral recovery operations, including sand and gravel operations are not addressed under the Town's zoning ordinance. Mineral extraction is regulated by the Maryland Department of the Environment and the U. S. Army Corps of Engineers. The sand and gravel pit adjoining the Town limits is not part of the Town's targeted growth area. Should the parcel containing the sand and gravel operation ever be annexed by the Town, the Town's zoning ordinance should be amended to address sand and gravel operations, prior to the annexation of that site.

Historic Preservation

Several sites within Secretary have been identified by the Maryland Historical Trust as warranting preservation for historic reasons, namely: Carthegena – also known as "My Lady Sewall's Manor," which is located on Willow Street; and, Secretary United Methodist Church located on Main Street. Both structures are owned by local long-established churches and are unlikely to be subject to development or redevelopment pressures. Historical and cultural resources, as well as natural resources, contribute to the beauty and livability of the Town.

Historic Preservation Recommendations

The Town should further research and identify significant structures and sites within the corporate limits and the Town's growth area. If additional sites are located, the Town may take further steps at that time to insure that these cultural and historic resources are preserved for future generations. The Town should support the County's Heritage Tourism Plan as it relates to the Town of Secretary.

Heritage Area Program

The Town of Secretary is within the *Heart of the Chesapeake Country Heritage Area.* The Heart of the Chesapeake Country Heritage Area Tourism Management Plan, dated June 2002, and as may be amended from time to time in the future, is hereby incorporated, by reference, in the Town of Secretary Comprehensive Plan.

More information about the *Heart of the Chesapeake Heritage Area* and the Tourism Management Plan can be found online at:

http://mht.maryland.gov/heritageareas stories.html

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Interjurisdictional Coordination and Streamlining Element

Interjurisdictional coordination is an important issue for Secretary. The Town's growth and development depend on coordination with various federal, state, and county agencies as well as municipal officials from neighboring East New Market.

Interjurisdictional Coordination Goals

Increase cooperation and coordination between the Town of Secretary, the Town of East New Market and Dorchester County.

The Town of Secretary and the Town of East New Market already cooperate on an issue of vital importance to both towns by sharing the Twin Cities Wastewater Treatment Plant. Each municipality has entered into an agreement to share the use of the facility owned by the Town of Secretary and have agreed to share in its costs, management, maintenance and future capital improvements.

The Town of Secretary and Dorchester County also already cooperate in many ways. Examples include the following:

- Secretary's streets (except Route 14, which is a State maintained highway) are maintained by the Town.
- ➤ The County and Town work closely together to develop and maintain parks and recreational facilities throughout the Town.
- ➤ The Dorchester County Board of Education allows the use of the Warwick Elementary School facilities for community activities throughout the year upon request.

Recommended Coordination Strategies:

- ➤ Continue coordinating with East New Market and the County in semi-annual meetings regarding growth and development issues.
- Work with East New Market and the County to increase sewer capacity and identify funding sources for water and sewer improvements.
- > Institute a joint Secretary / East New Market project review for projects located in between the two town boundaries.
- ➤ The Town shall continue to work with the County to maintain the Town Growth Boundary and to accomplish strategic planning with regard to annexation potential.
- ➤ When the Secretary Comprehensive Plan is revised in the future, the process shall include meetings with relevant County and State officials.
- ➤ The Town shall provide notices to the County of proposed actions within the Town and the Town Growth Boundary which may be of interest to the County.

- The Town shall work with the County to arrange reciprocal notification of nearby proposals that may be of interest to the Town.
- ➤ The Secretary Planning commission shall work with the County to establish a process for review and comment on proposed land activities located within the Town Growth Boundary that have potential to affect the Town.
- ➤ The Town will pursue the recommendation of the 1996 Dorchester County Comprehensive Plan that county agencies assume more responsibility for development review in the towns.

Streamlining Regulations

Article 66B calls for streamlining of regulatory mechanisms to achieve the State's visions. Regulations are a key concern of Secretary's residents. The Town and its residents continue to be strongly affected by environmental regulatory programs including:

- Floodplain protection program;
- Chesapeake Bay Critical Area Protection Program;
- Tidal and non-tidal wetlands protection programs;
- > Forest conservation program.

The Town of Secretary has been affected to a large degree because of the extent of its naturally occurring environmentally sensitive areas. Much complexity arises from the range of local, state and federal agencies which can be involved in a review process.

While there is concern about the amount of government regulation, Secretary residents recognize the necessity of regulations in order to (1) protect residents' health, safety and general welfare, and (2) to protect the Town's beauty, which results, to a great degree, from the very environmentally sensitive areas many regulations are designed to protect.

The level of development activity in Secretary to date has been low, and mostly limited to accessory structures. The Town's review of these projects occurs in a timely manner. Larger, more complex projects, like the recently completed water system improvements, experience delays because of review by outside agencies (i.e., the Maryland Department of the Environment, Maryland Department of Natural Resources and the Army Corps of Engineers).

The Town should seek to create streamlined review of applications for development, including permit review and subdivision plat review within the Town Growth Boundary; and flexible regulations to promote economic growth, innovative and cost saving design, and environmental protection.

Recommended Streamlining Strategies

- 1. Produce a guide to land development and environmental restrictions/permits in language understandable to the average lay-person. The guide would address the permits or approvals needed for typical activities, including brief descriptions of the applicable regulatory programs, and direct people to the appropriate agencies. It should include names, addresses and phone numbers.
- 2. Support efforts to standardize administration and enforcement procedures for forest conservation inside and outside the Chesapeake Bay Critical Area.
- 3. Work with the County to explore the possibility of having County agencies assume more responsibility for development review in the Town.
- 4. Predesignate portions of the Critical Area with the Town's Growth Boundary for Growth Allocation.
- 5. Place a time limit between approval of a preliminary plan and submission of a final subdivision plan.
- 6. Require that approved final subdivision plans be recorded within six months or else be void.

Implementation Element

The ultimate success of any planning program lies in its implementation. After the Secretary Comprehensive Plan is formally adopted by the Planning Commission and the Mayor and Town Commissioners, it becomes the official growth policy statement and long-range development philosophy of the community. However, the adoption of the Comprehensive Plan by local officials does not guarantee its implementation. In order for the plan to be an effective instrument of Town government, it must be an integral part of the day-to-day administrative and political process of the government of the Town of Secretary. The Secretary Comprehensive Plan cannot be implemented unless a deliberate and coordinated effort is made by the Planning Commission and the Mayor and Town Commissioners to insure that all future development proposals are carefully evaluated as to their conformance with the basic development philosophy and policies set forth in the Plan.

To facilitate and encourage implementation of the Plan, each element of the Plan contains strategies or policies detailing how measures should be implemented. This should give clear guidance to those responsible for implementation as how to proceed, while still allowing room to change details if warranted by new information or changed conditions.

Recommended Implementation Strategies

- 1. The Town shall amend and adopt zoning maps, zoning and subdivision regulations, and other regulations and procedures in accordance with the strategies and policies contained in this plan.
- 2. Require minimum landscaping requirements for commercial development.
- 3. Adopt a health and safety housing code for all housing units (including owner occupied.)
- 4. Review fee schedule and revise to include demolition and burning permits and other necessary revisions.
- 5. Require subdivisions to provide adequate land for recreation and open space.
- 6. The Town will create policies and work with other permitting agencies to streamline the permitting process, especially as it concerns development in the Critical Area and growth allocation requests.
- 7. The Planning Commission shall prepare an Annual Report which summarizes planning, zoning, subdivision, site plan, project review, and Board of appeals activities; assesses progress in meeting the visions of the plan, summarizes County and State actions affecting the Town; and makes recommendations to the Mayor and Town Commissioners for strengthening growth management and resource protection in the Town.

Administrative Duties for Implementation

Throughout the Plan recommendations are made for projects to be undertaken mainly by the Planning Commission or the Mayor and Town Commissioners. The major recommendations are listed below according to what group is responsible. This list is not intended to be inclusive of all responsibilities.

Secretary Planning Commission

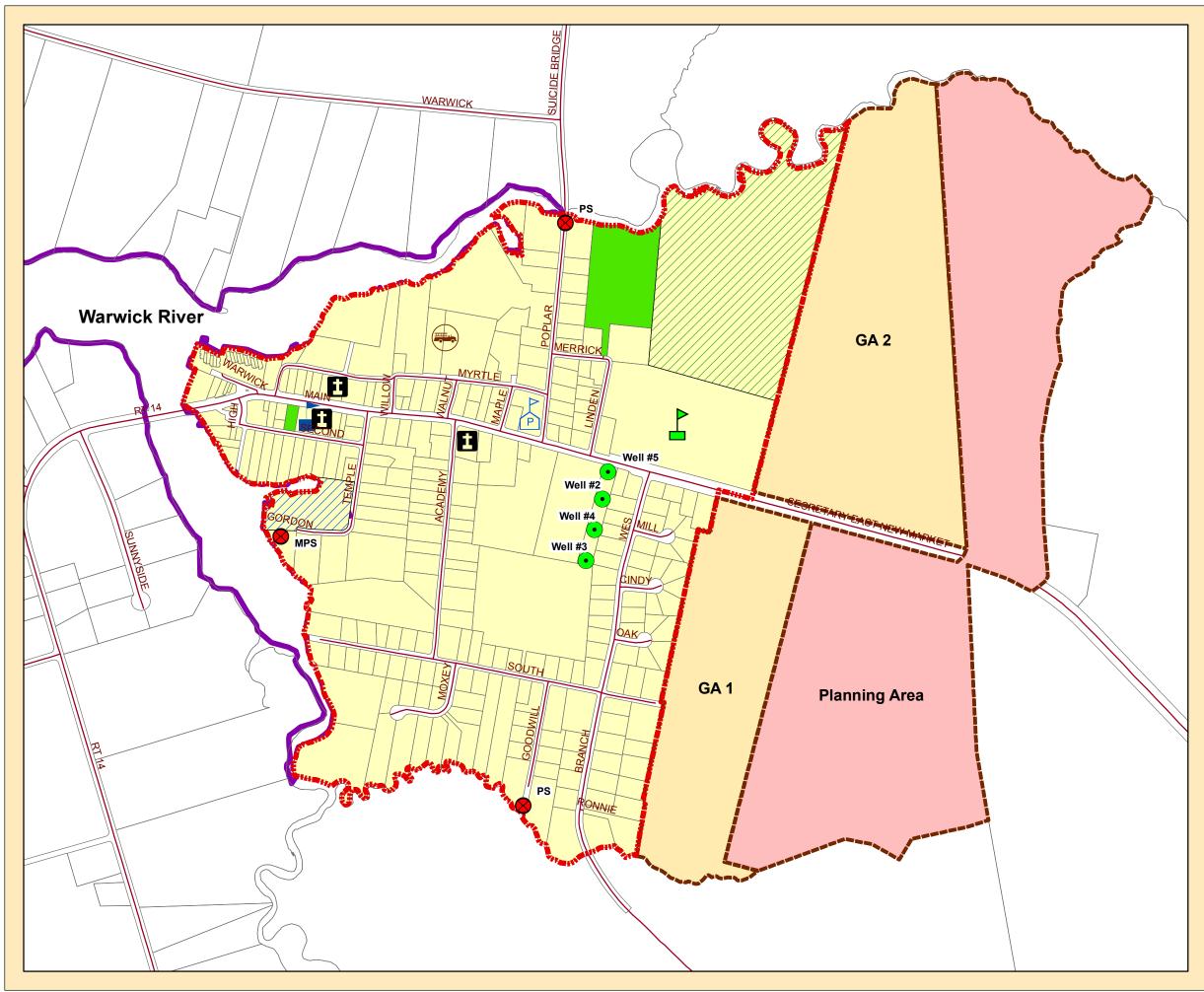
- Prepare amendments to zoning ordinance and subdivision regulations using strategies and policies proposed in the Plan.
- Prepare Annual Report and make recommendations to the Mayor and Town Commissioners for strengthening growth management and resource protection in the Town.
- Make recommendations on all proposed annexations based on the anticipated costs, benefits of the annexation and consistency with the Plan.
- ➤ Review subdivisions and site plans for their impact upon the community, the environment and consistency with the Plan. A Public Works Agreement, where appropriate, should be required before final approval of the site plan.
- > If directed by the Mayor and Town Commissioners, prepare a draft housing code.
- Seek input from the fire company and fire marshal when reviewing subdivisions plats and site plans.
- Consider the need for geographically balanced park and recreational facilities as the Town extends its corporate limits. New subdivisions and developments should be required to provide recreational areas and retain natural drainageways, streams or ditches.
- Amend subdivision regulations to include street standards.

Secretary Mayor and Town Commissioners

- > Adopt amended zoning ordinance and subdivision regulations.
- Closely evaluate annexation requests.
- Require developers to pay for all on-site costs and consider off-site costs on a case by case basis, using a Public Works Agreement.
- Continue to seek funding sources for water and sewer system improvements and expansion.
- Coordinate with East New Market and the county in semi-annual meetings regarding growth and development issues.

Secretary Staff

Assist the Planning Commission in revising zoning and other regulations to facilitate Plan implementation.



Town of Secretary

Comprehensive Plan Adopted: DRAFT

Map 1: Community Facilities

Legend

Wells

Town Hall

School

Pump Stations

Post Office

Fire Station

Chruch

Recreational Facilities

Boat Ramp

Nature Trail

Town Park

Source:

Town parcel data was supplied by Dorchester County

600

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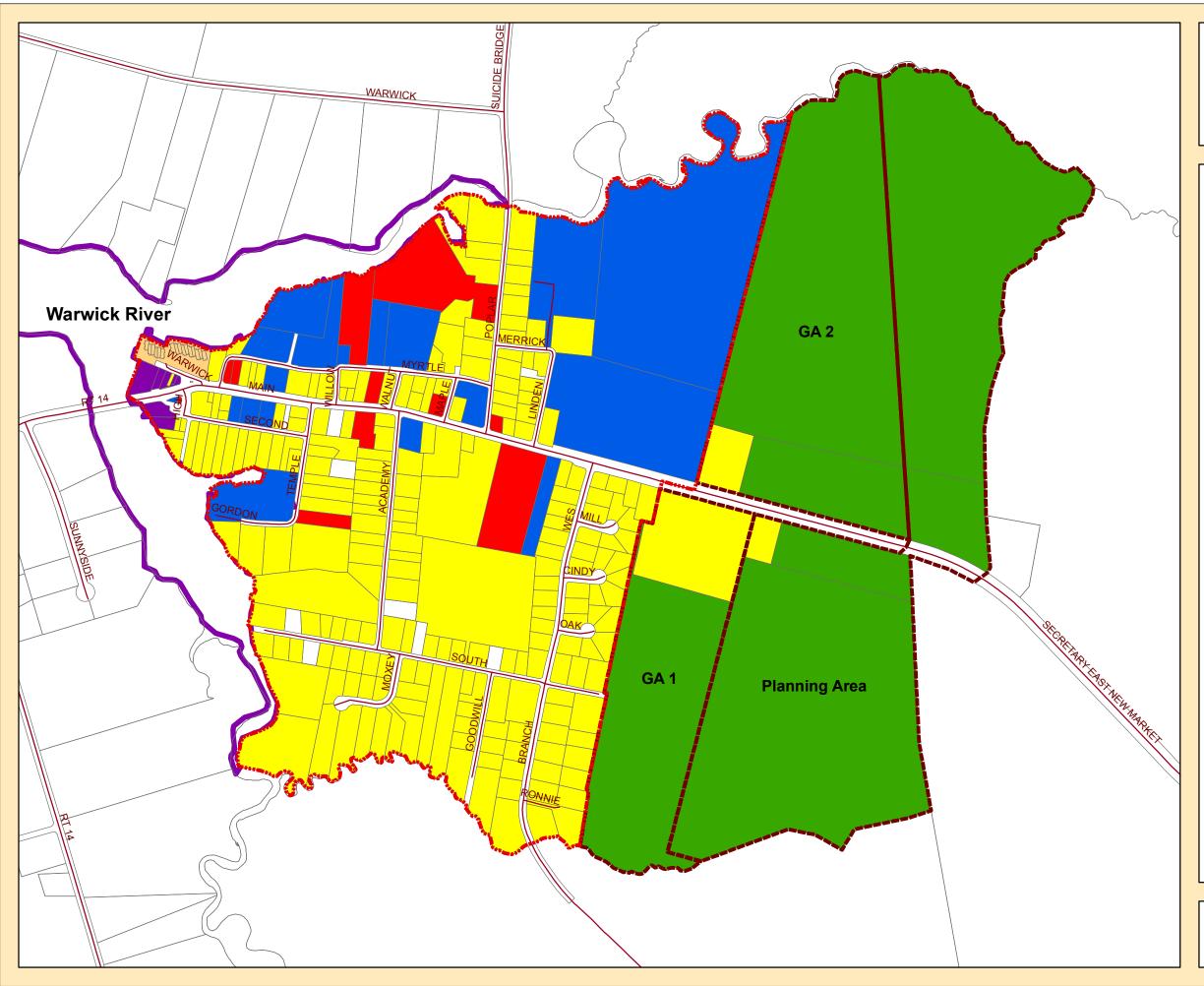


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SALISBURY, MARYLAND (410) 543-9091 MILFORD, DELAWARE (302) 424-1441 EASTON, MARYLAND (410) 770-4744

1,200

Feet



Comprehensive Plan Adopted: DRAFT



Legend

Existing Land Uses

Agricultural

Commercial

Public / Institutional

Industrial

Single Family

Multi Family

Vacant

Municipal Boundary

Growth Areas

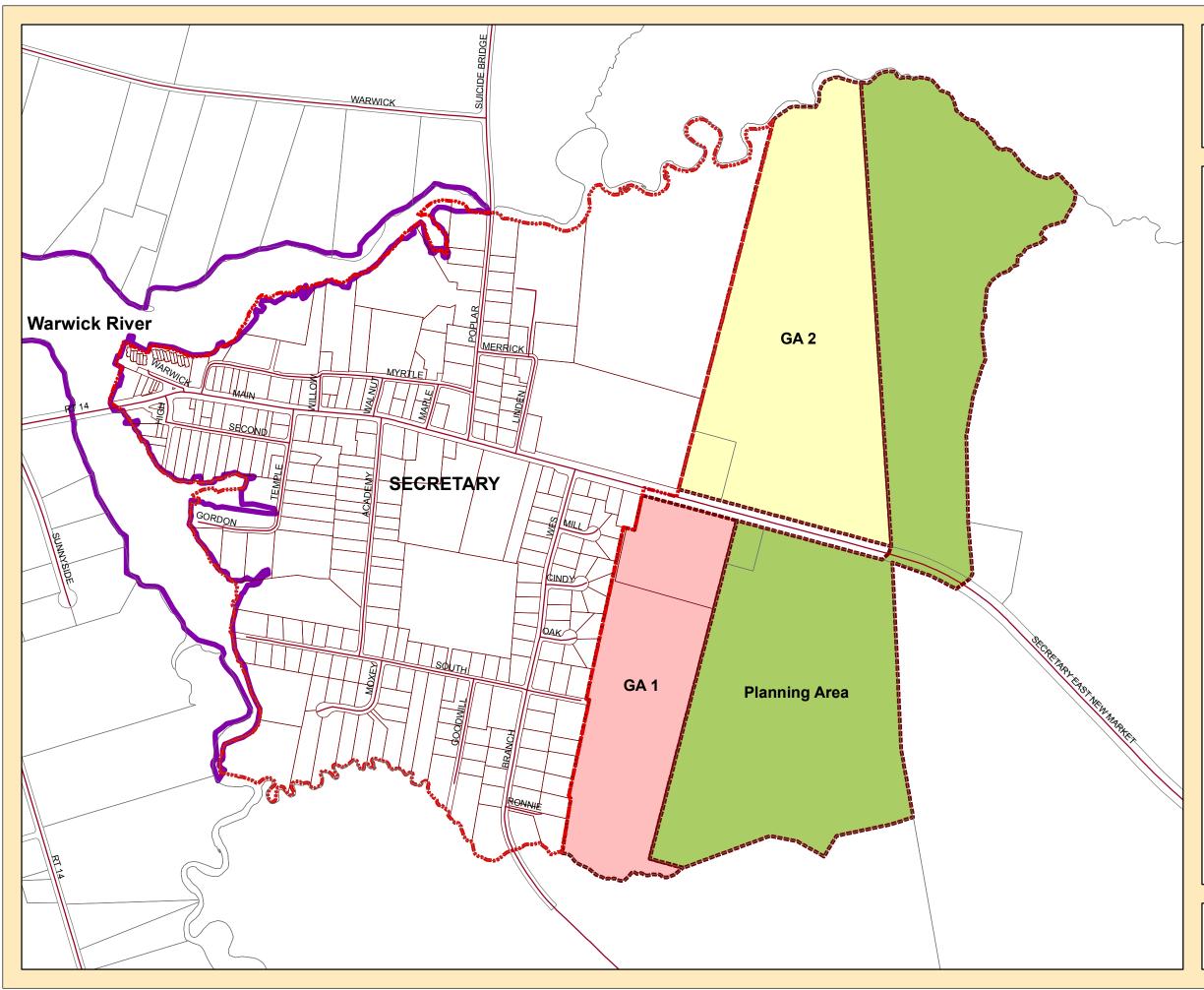
Town parcel data was supplied by Dorchester County

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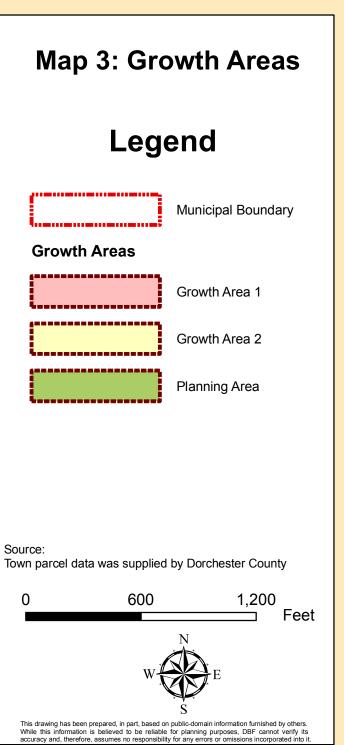
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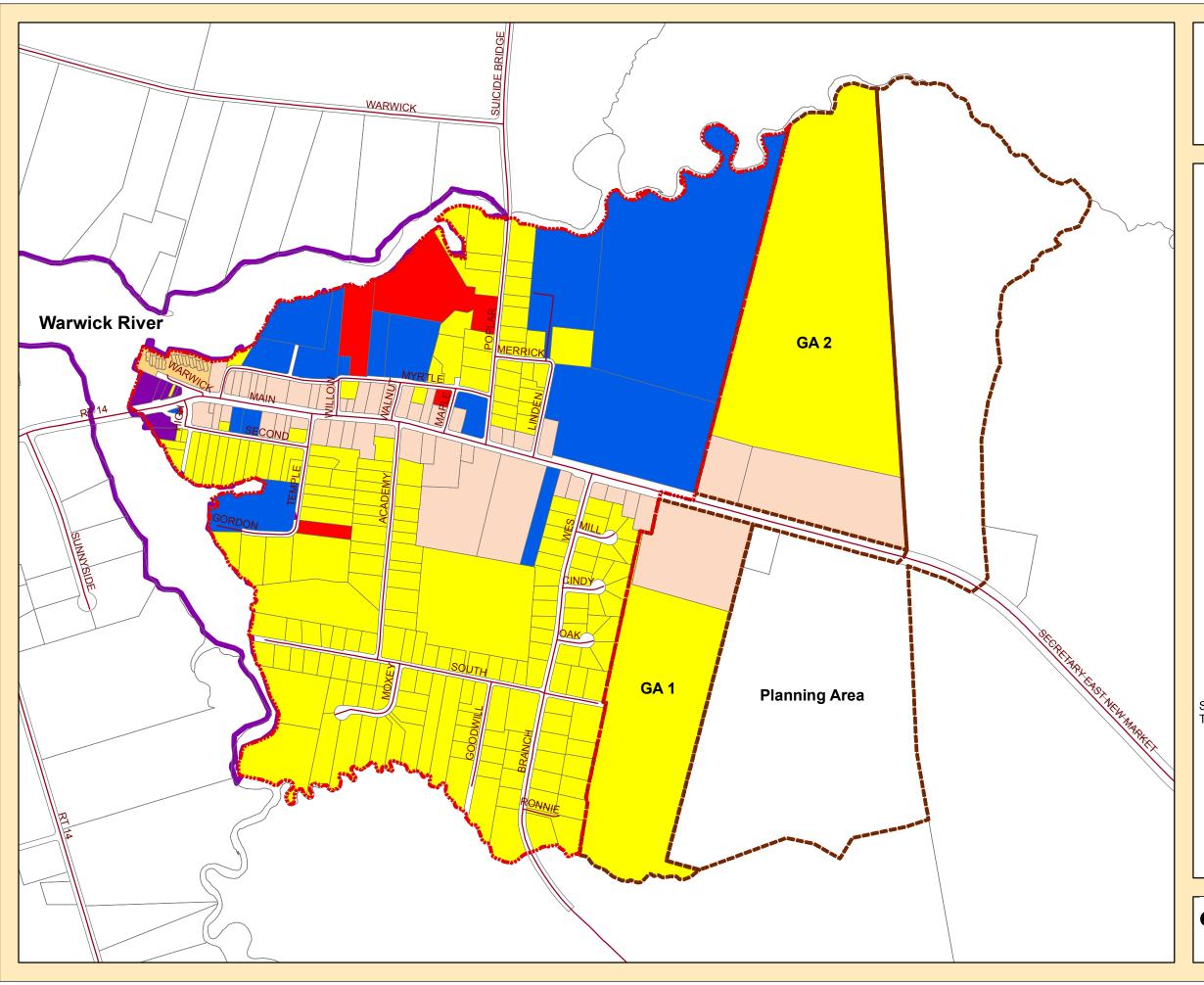


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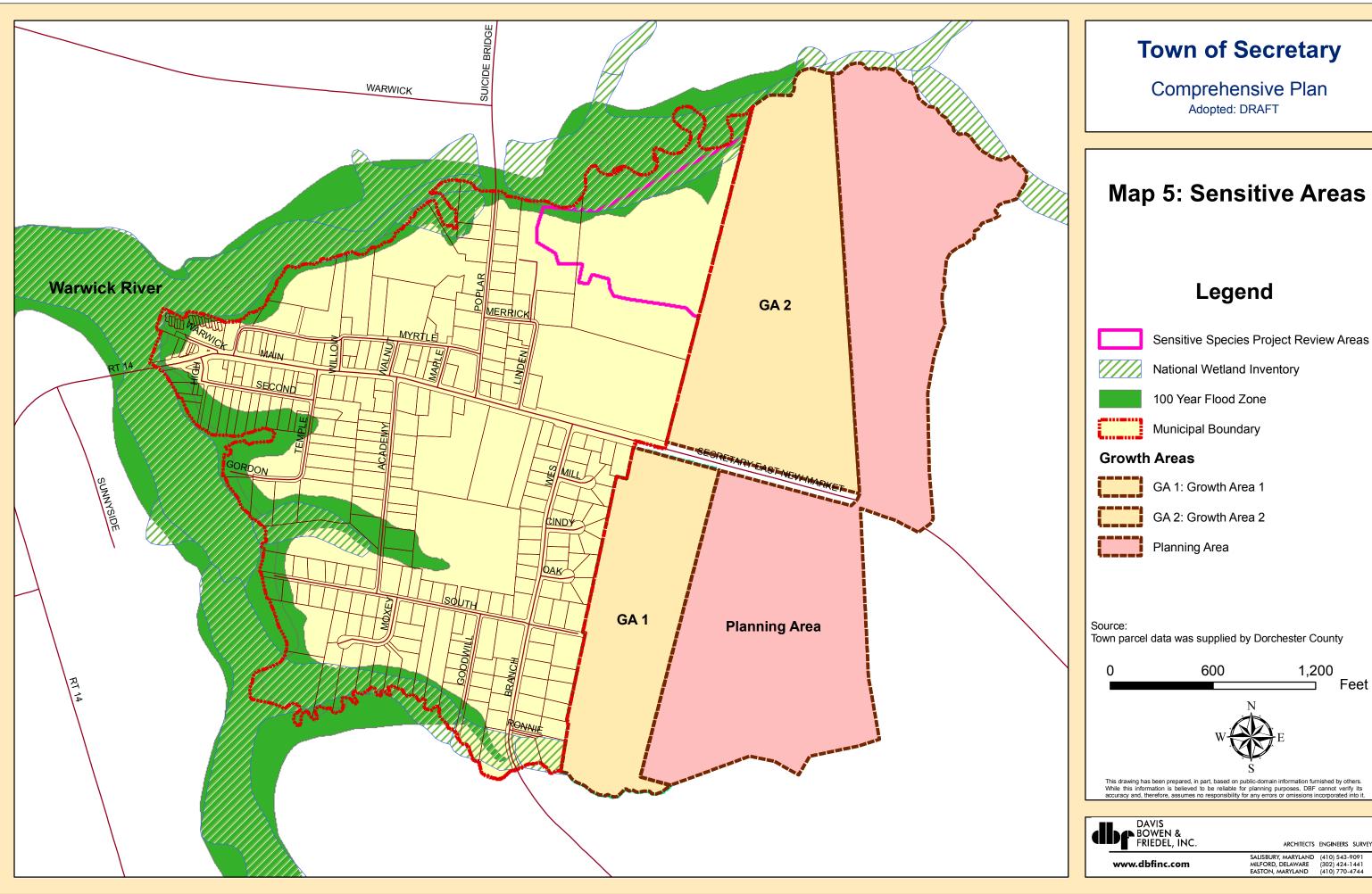


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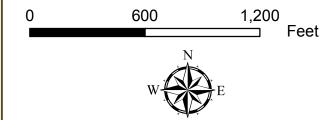


Comprehensive Plan Adopted: DRAFT

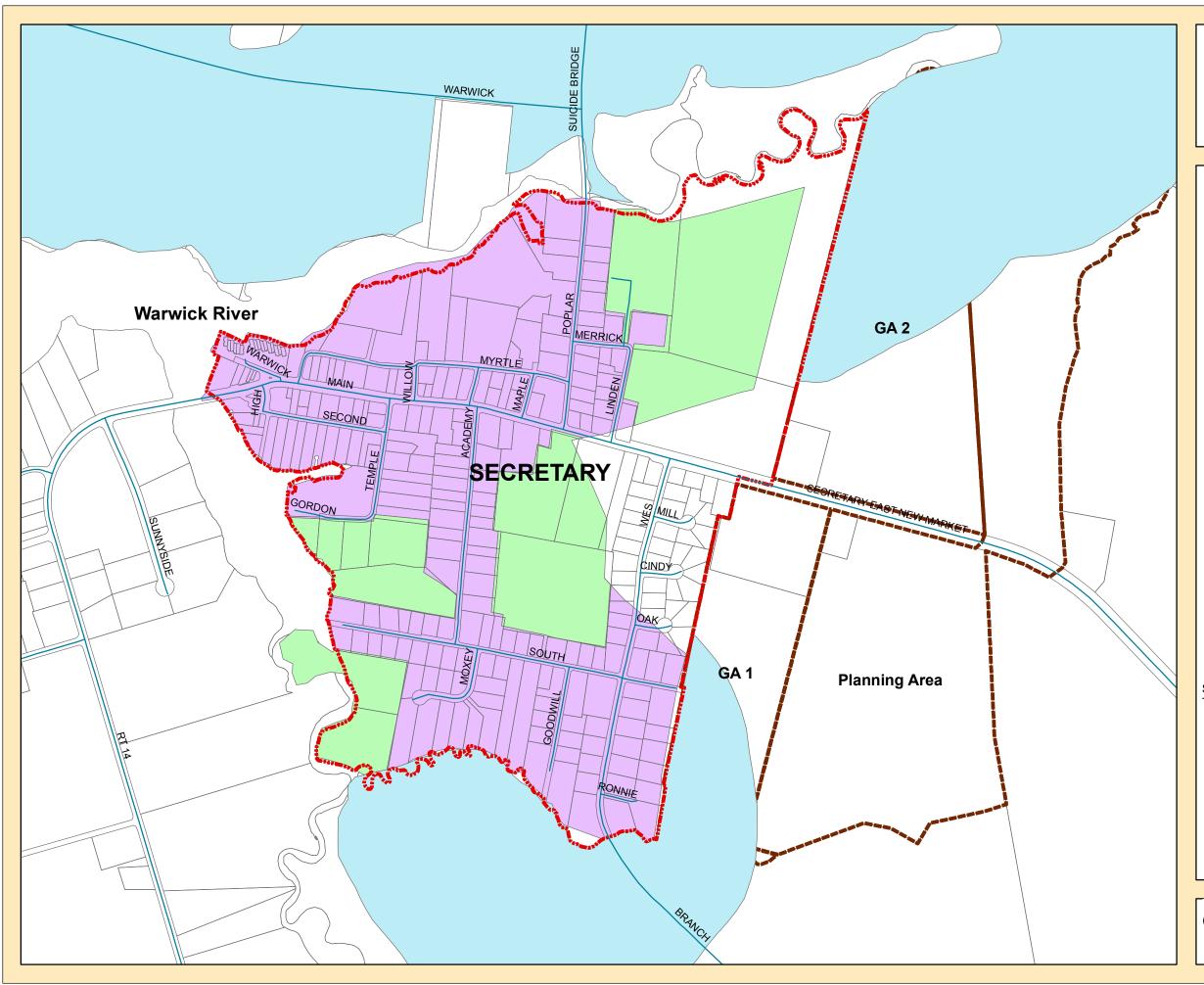
Map 5: Sensitive Areas

National Wetland Inventory

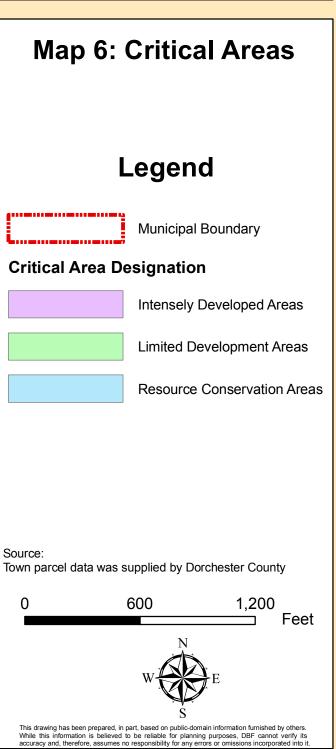
Town parcel data was supplied by Dorchester County



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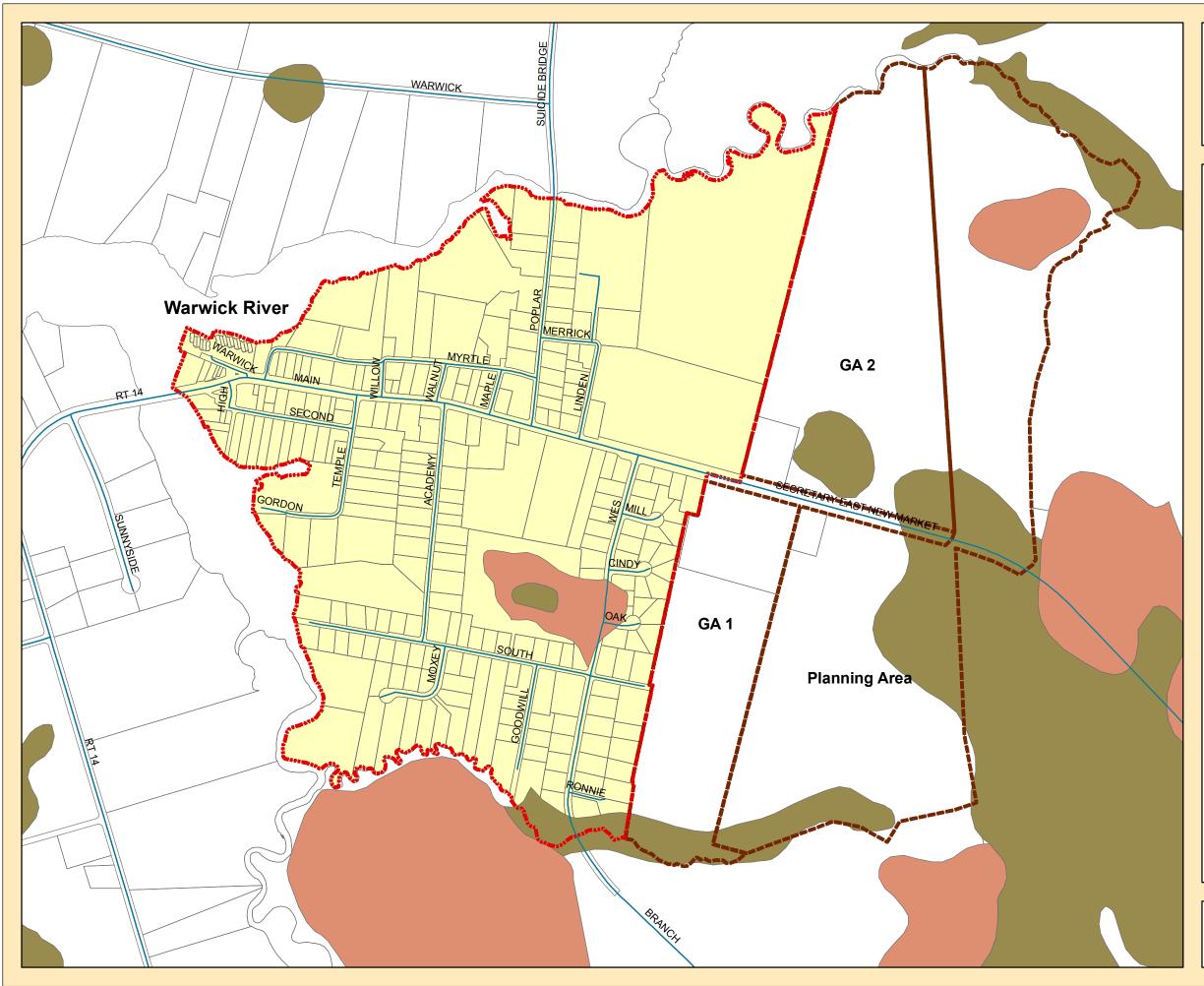


Comprehensive Plan Adopted: DRAFT

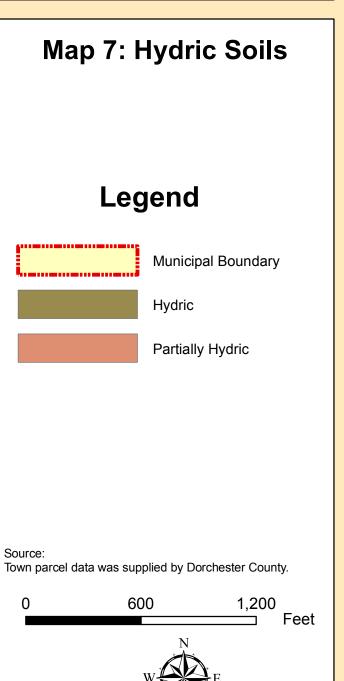




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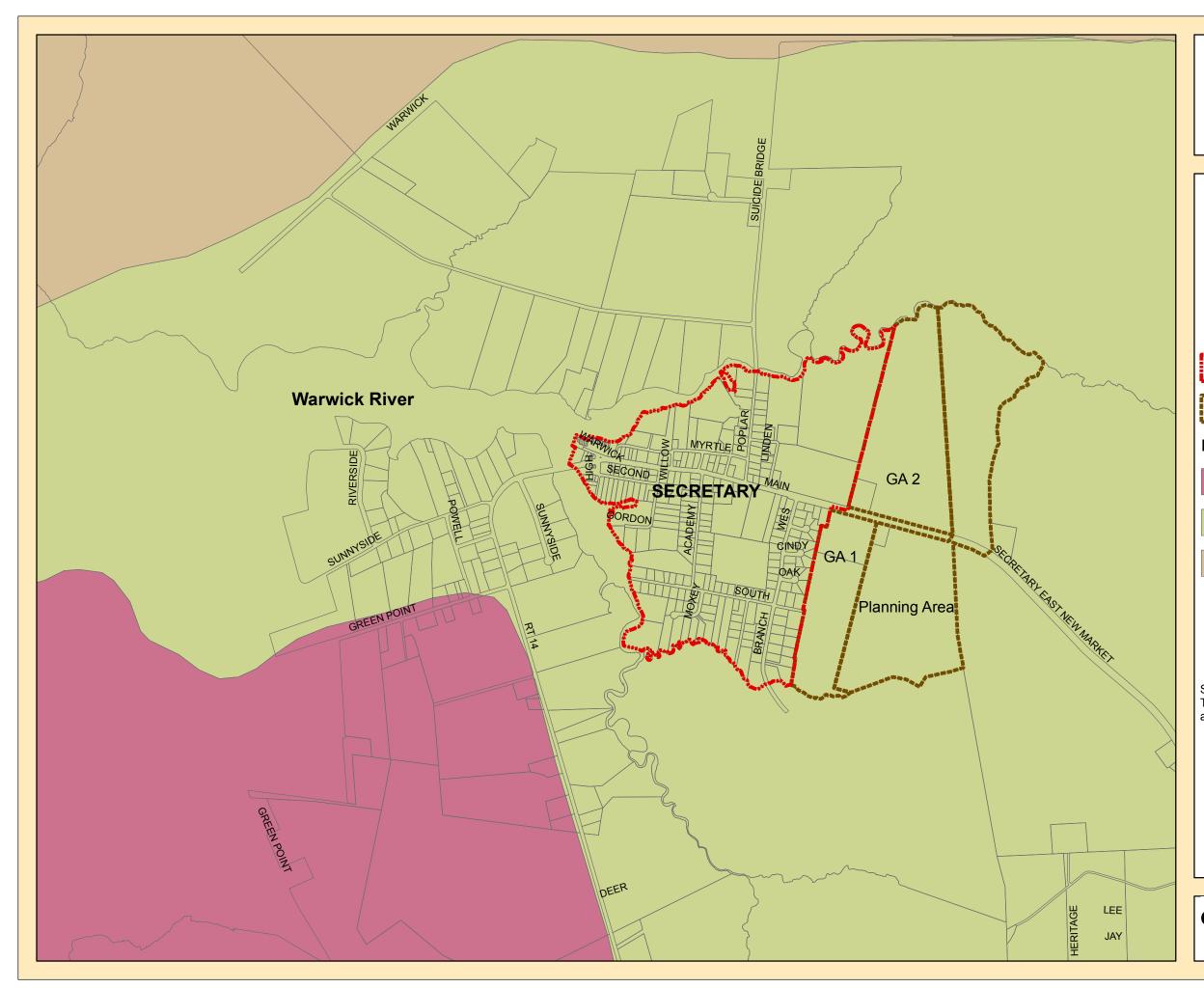
Comprehensive Plan Adopted: DRAFT



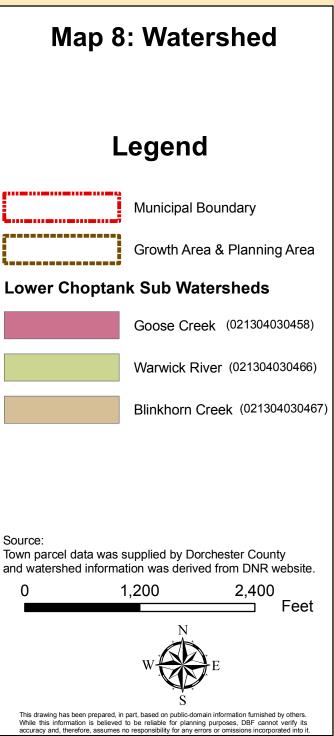


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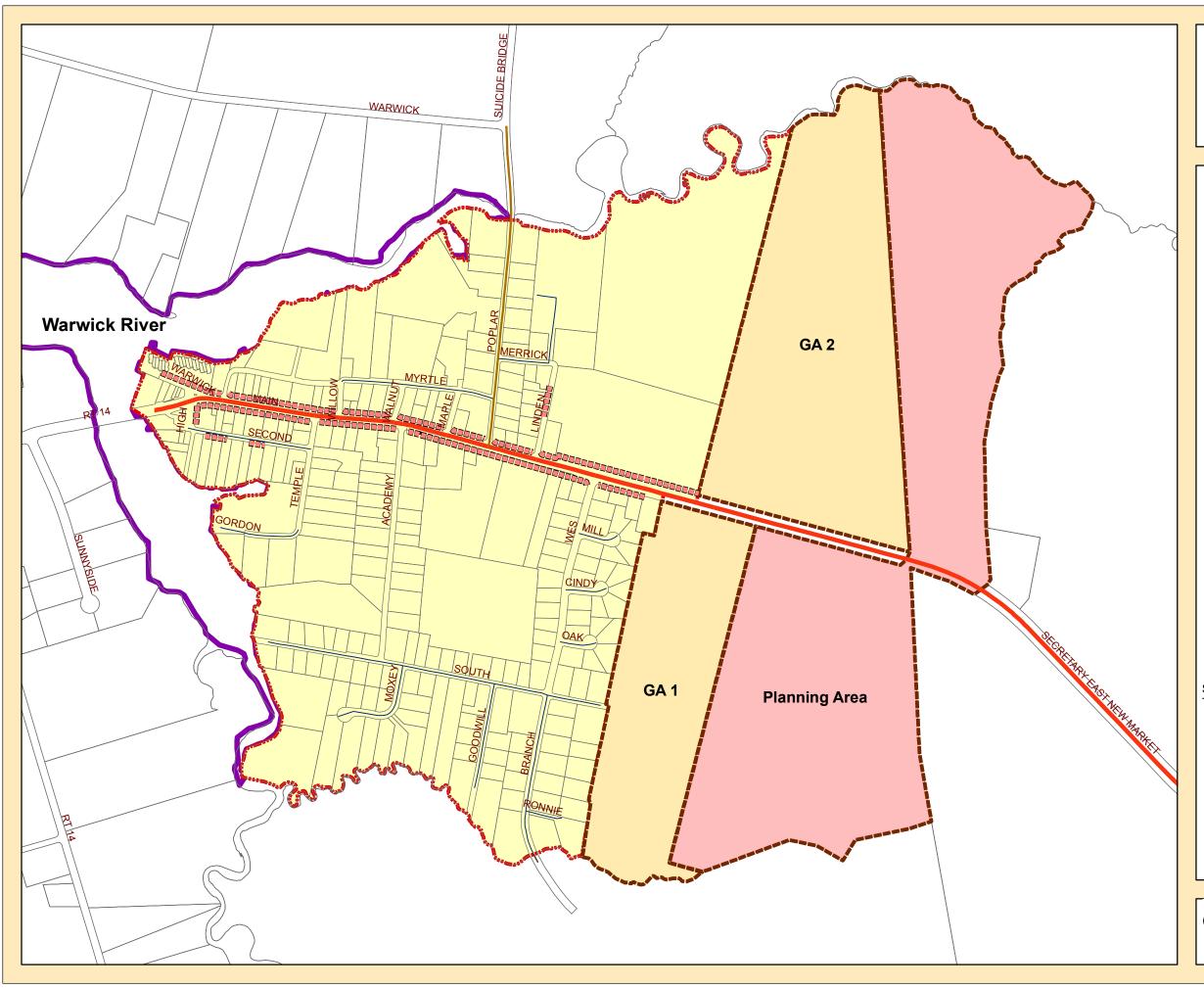


Comprehensive Plan Adopted: DRAFT





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Comprehensive Plan Adopted: DRAFT



Legend

Classification

Major Collector

Minor Collector

Local

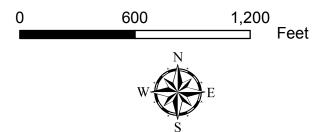
Existing Sidewalks

Municipal Boundary

GA 1: Growth Area 1

GA 2: Growth Area 2
Planning Area

Town parcel data was supplied by Dorchester County



This drawing has been prepared, in part, based on public-domain information furnished by others. While this information is believed to be reliable for planning purposes, DBF cannot verify its accuracy and, therefore, assumes no responsibility for any errors or omissions incorporated into it.



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rown of Secretary:	2010 Comprenensive Plan

Appendix A Secretary Land Use Analysis for Non-Point Source Loading

Scenario 1

Nutrient Loads for 2002 Landuse with 2002 Implementation of BMPs

Existing City Limits

Ionpoint Source Nutrient Loading		ı	Land Use In	formation					
- t	Secreta	ary					тот	AL	
	Initial	Future	Initial	Future	Initial	Future	Initial	Future	P
and Use/Cover	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Imp
	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	
ULC11 (Low Density Residential)	84						84	0	
ULC12 (Medium Density Residential)	1						1	0	
ULC13 (High Density Residential)							0	0	
ULC14 (Commercial)	7						7	0	
ULC15 (Industrial)	1						1	0	
ULC16 (Institutional)	30						30	0	
ULC17 (Extractive)							0	0	
ULC18 (Open Urban Land)							0	0	
ULC21 (Cropland)							0	0	
ULC22 (Pasture)							0	0	
ULC23 (Orchards)							0	0	
ULC24 (Feeding Operations)							0	0	
ULC25 (Row and Garden Crops)							0	0	
ULC41 (Deciduous Forest)							0	0	
ULC42 (Evergreen Forest)							0	0	
ULC43 (Mixed Forest)	29						29	0	
ULC44 (Brush)	29						0	0	
ULC50 (Water)							0	0	
							- U	0	
ULC60 (Wetlands)							0	0	
ULC71 (Beaches)							0	0	
ULC72 (Bare Rock)							-	0	
ULC73 (Bare Ground)							0	0	
ULC80 (Transportation)	21						21	0	
ULC191 (Rural Residential)							0	0	
ULC241 (Feeding Operations)							0	0	
ULC242 (Agricultural Buildings)							0	0	
TOTAL	173	0	0	0	0	0	173	0	S
Septic Systems									
Residential Septic Systems-									
Number, Conventional	0	Φ					0	0	
Residential Septic Systems - Number,									
Denitrifying	0	α					0	0	
Non-Residential Septic Systems- Acres,									
Conventional		,					0	0	
		Ψ					U	U	
Non-Residential Septic Systems- Acres,									
Denitrifying	0	Φ					0	0	

Nonpoint Source Nutrient Loading Land Use Information										
	Secret	ary	()		0	TO ⁻	TAL		
	Initial	Future	Initial	Future	Initial	Future	Initial	Future	Pe	erc
Land Use/Cover	(acres)	(acres)	Imp	er						
	Phosphorus	Phosphorus	J							
LULC11 (Low Density Residential)	84	0	0	0	0	0	84	0		ıIIII
LULC12 (Medium Density Residential)	1	0	0	0	0	0	1	0		Ш
_ULC13 (High Density Residential)	0	0	0	0	0	0	0	0		Ш
LULC14 (Commercial)	7	0	0	0	0	0	7			Ш
LULC15 (Industrial)	1	0	0	0	0	0	1	0		ıIIII
LULC16 (Institutional)	30	0	0	0	0	0	30	0		Ш
LULC17 (Extractive)	0	0	0	0	0	0	0	0		Ш
LULC18 (Open Urban Land)	0	0	0	0	0	0	0	0		Ш
LULC21 (Cropland)	0	0	0	0	0	0	0	0		ıIIII
LULC22 (Pasture)	0	0	0	0	0	0	0			Ш
LULC23 (Orchards)	0	0	0	0	0	0	0	0		Ш
LULC24 (Feeding Operations)	0	0	0	0	0	0	0	C		ıIIII
LULC25 (Row and Garden Crops)	0	0	0	0	0	0	0	0		Ш
LULC41 (Deciduous Forest)	0	0	0	0	0	0	0	C		ıIIII
LULC42 (Evergreen Forest)	0	0	0	0	0	0	0	C		ıIIII
LULC43 (Mixed Forest)	29	0	0	0	0	0	29	C		ıIIII
LULC44 (Brush)	0	0	0	0	0	0	0	C		ıIIII
LULC50 (Water)	0	0	0	0	0	0	0	Ü		Ш
LULC60 (Wetlands)	0	0	0	0	0	0	0	C		ıIIII
LULC71 (Beaches)	0	0	0	0	0	0	0	Ü		Ш
LULC72 (Bare Rock)	0	0	0	0	0	0	0	C		ıIIII
LULC73 (Bare Ground)	0	0	0	0	0	0	0	Ü		Ш
LULC80 (Transportation)	21	0	0	0	0	0	21	C		ıIIII
LULC191 (Rural Residential)	0	0	0	0	0	0	0	0		Ш
LULC241 (Feeding Operations)	0	0	0	0	0	0	0	0	<u> </u>	ااااا
LULC242 (Agricultural Buildings) TOTALs	0 173	0	0	0	0	0	0 173	0		Щ

Point Source Information	Initial	Future
Total Nitrogen Load (lb/yr)	0	0
Total Phosphorus Load (lb/yr)	0	0

Land Use (acres) by Generalized Land Use/Land Cover

Land Use/Cover	Initial (acres)	Future (acres)	Change (acres)
Low Density	84	0	-84
Medium Density	1	0	-1
High Density	0	0	0
Commercial/Industrial	8	0	-8
Agriculture*	0	0	0
Forest/Wetlands	29	0	-29
Water	0	0	0
Other**	51	0	-51
Total Area	173	0	-173

^{*} Agriculture is made up of Cropland, Pasture, Orchards, Feeding Operations, Agricultural Buildings, and Row & Garden Crops ** Other land uses include Institutional, Extractive, Open Urban, Beaches, Bare Rock and Bare Ground.

Land Use Area Summary

Land Use/Cover	Initial (Acres)	Future (Acres)	Change (acres)
Development	114	0	-114
Agriculture*	0	0	0
Forest	29	0	-29
Water	0	0	0
Other**	30	0	-30
Total Area	173	0	-173
Residential Septic (EDUs)	0	0	0
Non-Residential Septic (EDUs)	0	0	0

Nitrogen Loading Summary

Land Use/Cover	Initial (Lbs/Yr)	Future (Lbs/Yr)	Change (Lbs/Yr)
Development	977	0	-977
Agriculture	0	0	0
Forest	44	0	-44
Water	0	0	0
Other**	257	0	-257
Total Terrestrial Load	1,277	0	-1,277
Residential Septic (EDUs)	0	0	0
Non-Residential Septic (EDUs)	0	0	0
Total Septic Load	0	0	0
Total NPS Nitrogen Load	1,277	0	-1,277

Phosphorus Loading Summary

Land Use/Cover	Initial (Lbs/Yr)	Future (Lbs/Yr)	Change (Lbs/Yr)
Development	119	0	-119
Agriculture	0	0	0
Forest	1	0	-1
Water	0	0	0
Other**	31	0	-31
Total NPS Phosphorus Load	150	0	-150

This analysis is used for comparision purposes between 2002 BMP Implementation and Tributary Strategy Implementation

	N	onpoint So	urce Load	S				
Secretary		0		0		0 TOTAL		
Initial	Future	Initial	Future	Initial	Future	Initial	Future	
lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	
Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	
741	0	0	0	0	0	741	(
9	0	0	0	0	0	9	(
0	0	0	0	0	0	0	(
56	0	0	0	0	0	56		
8	0	0	0	0	0	8	(
257 0	0	0	0	0	0	257 0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
44	0	0	0	0	0	44	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
163	0	0	0	0	0	163	(
0	0	0	0	0	0	0		
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
1,277	0	0	0	0	0	1,277		
	0	0	0	0	0	0		
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
0	0	0	0	0	0	0	(
U	<u> </u>	0	U	0	<u> </u>	0		
0	0	0	0	0	0	0	(
0 1,277	0	0	0	0	0	0 1,277		

Nonpoint Source Loads								
Secre	etary	C)	()	TO	TAL	
Initial	Future	Initial	Future	Initial	Future	Initial	Future	
lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	
Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	
100	0	0	0	0	0	100	0	
1	0	0	0	0	0	1	0	
0	0	0	0	0	0	0	0	
5	0	0	0	0	0	5	0	
1	0	0	0	0	0	1	0	
31	0	0	0	0	0	31	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1	0	0	0	0	0		0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	,		•	ű	0	0	
0	0	0	0	0	0	0	0	
11	0	0	0		0	11	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	
1 50	0	0	0	0	0	150	0	
150	U	U	U	U	U	150	U	

	Change in Loads							
Secretary	0	0	Total					
Future	Future	Future	Future					
lbs/yr	lbs/yr	lbs/yr	lbs/yr					
Nitrogen	Nitrogen	Nitrogen	Nitrogen					
-741	0	0	-741					
-9 0	0	0	-9 0					
-56	0	0	-56					
-8	0	0	-8					
-257	0	0	-257					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
-44	0	0	-44					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
-163	0	0	-163					
0	0	0	0					
0	0	0	0					
-1,277	0	0	-1,277					
.,		•	.,					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0	0	0	0					
0 -1 277	0	0	-1,277					
-1,277	U	U	-1,2//					

	Change in Loads								
Secretary	0	0	Total						
Future	Future	Future	Future						
lbs/yr	lbs/yr	lbs/yr	lbs/yr						
Phosphorus	Phosphorus	Phosphorus	Phosphorus						
-100	0	0	-100						
-1	0	0	-1						
0	0	0	0						
-5	0	0	-5						
- <u>1</u> -31	0	0	-1 -31						
		0							
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
-1	0	0	-1						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
0	0	0	0						
-11	0	0	-11						
0	0	0	0						
0	0	0	0						
0	0	0	0						
-150	0	0	-150						

Impervious Cover						
Initial	Future					
Acres	Acres					
12	0					
0	0					
0	0					
5	0					
1	0					
10	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
0	0					
20	0					
0	0					
0	0					
0	0					
48	0					

Open Space Agriculture					
	Total				
Initial	Future				
Acres	Acres				
0	0				
0	0				
0	0				
0	0				
Ŭ	0				
0	0				
0	0				
0	0				

Open Space Forest						
To	tal					
Initial	Future					
Acres	Acres					
0	0					
0 29	0 0 0					
0	0					
-	Ü					
29	0					

Scenario 2

Nutrient Loads for 2002 Landuse with 2002 Implementation of BMPs

Growth Areas

Nonpoint Source Nutrient Loading	Land Use Information								
1	Secreta	ary					TOT	AL	1
	Initial	Future	Initial	Future	Initial	Future	Initial	Future	Percent
Land Use/Cover	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Impervious
	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	1
_ULC11 (Low Density Residential)	_	45					0	45	ф.:
_ULC12 (Medium Density Residential)							0	0	Φ.:
ULC13 (High Density Residential)							0	0	Φ.
_ULC14 (Commercial)		14					0	14	Ф.:
_ULC15 (Industrial)							0	0	Ф.
_ULC16 (Institutional)							0	0	Φ.:
_ULC17 (Extractive)							0	0	Ф.
_ULC18 (Open Urban Land)							0	0	φ.
_ULC21 (Cropland)	60						60	0	ф.
_ULC22 (Pasture)							0	0	
_ULC23 (Orchards)							0	0	Φ.
_ULC24 (Feeding Operations)							0	0	0 .
ULC25 (Row and Garden Crops)							0	0	φ.
_ULC41 (Deciduous Forest)							0	0	φ.
_ULC42 (Evergreen Forest)							0	0	0 .
_ULC43 (Mixed Forest)							0	0	o.
_ULC44 (Brush)							0	0	0 .
_ULC50 (Water)							0	0	0.
_ULC60 (Wetlands)							0	0	o.
_ULC71 (Beaches)							0	0	0 .
_ULC72 (Bare Rock)							0	0	1.
_ULC73 (Bare Ground)							0	0	0.
LULC80 (Transportation)		7					0	7	0 .
_ULC191 (Rural Residential)	6						6	0	0 .
ULC241 (Feeding Operations)							0	0	o.
_ULC242 (Agricultural Buildings)							0	0	0
TOTAL	66	66	(0	0	0	66	66	Sub Tota
Septic Systems									
Residential Septic Systems-									
Number, Conventional	3	(I) (I) (I) (I) (I)					3	0	N
Residential Septic Systems - Number,									1
Denitrifying	0	ф					0	0	N
Non-Residential Septic Systems-Acres,									1
Conventional		ή					0	0	N
Non-Residential Septic Systems- Acres,							Ŭ		1
Non-Residential Septic Systems- Acres , Denitrifying							0	^	
Denitritying	- 0	Ψ					0	0	N

Nonpoint Source Nutrient Loading		L	and Use In	formation							
	Secretary		(0		0		0 TOTAL		ΓAL	1
	Initial	Future	Initial	Future	Initial	Future	Initial	Future	Pe		
Land Use/Cover	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Impe		
	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus	Phosphorus			
LULC11 (Low Density Residential)	0	45	0	0	0	0	0	45			
LULC12 (Medium Density Residential)	0	0	0	0	0	0	0	0			
LULC13 (High Density Residential)	0	0	0	0	0	0	0	0			
LULC14 (Commercial)	0	14	0	0	0	0	0	14			
LULC15 (Industrial)	0	0	0	0	0	0	0	0			
LULC16 (Institutional)	0	0	0	0	0	0	0	0			
LULC17 (Extractive)	0	0	0	0	0	0	0	0			
LULC18 (Open Urban Land)	0	0	0	0	0	0	0	0			
LULC21 (Cropland)	60	0	0	0	0	0	60	0			
LULC22 (Pasture)	0	0	0	0	0	0	0	0			
LULC23 (Orchards)	0	0	0	0	0	0	0	0			
LULC24 (Feeding Operations)	0	0	0	0	0	0	0	0			
LULC25 (Row and Garden Crops)	0	0	0	0	0	0	0	0			
LULC41 (Deciduous Forest)	0	0	0	0	0	0	0	0			
LULC42 (Evergreen Forest)	0	0	0	0	0	0	0	0			
LULC43 (Mixed Forest)	0	0	0	0	0	0	0	0			
LULC44 (Brush)	0	0	0	0	0	0	0	0			
LULC50 (Water)	0	0	0	0	0	0	0	0			
LULC60 (Wetlands)	0	0	0	0	0	0	0	0			
LULC71 (Beaches)	0	0	0	0	0	0	0	0			
LULC72 (Bare Rock)	0	0	0	0	0	0	0	0			
LULC73 (Bare Ground)	0	0	0	0	0	0	0	0			
LULC80 (Transportation)	0	7	0	0	0	0	0	7			
LULC191 (Rural Residential)	6	0	0	0	0	0	6	0			
LULC241 (Feeding Operations)	0	0	0	0	0	0	0	0			
LULC242 (Agricultural Buildings) TOTALs	0 66	0	0	0	0	0	0 66	0 66			

Point Source Information	Initial	Future
Total Nitrogen Load (lb/yr)	0	0
Total Phosphorus Load (lb/yr)	0	0

Land Use (acres) by Generalized Land Use/Land Cover

Land Use/Cover	Initial (acres)	Future (acres)	Change (acres)	
Low Density	6	45	39	
Medium Density	0	0	0	
High Density	0	0	0	
Commercial/Industrial	0	14	14	
Agriculture*	60	0	-60	
Forest/Wetlands	0	0	0	
Water	0	0	0	
Other**	0	7	7	
Total Area	66	66	0	

^{*} Agriculture is made up of Cropland, Pasture, Orchards, Feeding Operations, Agricultural Buildings, and Row & Garden Crops ** Other land uses include Institutional, Extractive, Open Urban, Beaches, Bare Rock and Bare Ground.

Land Use Area Summary

Land Use/Cover	Initial (Acres)	Future (Acres)	Change (acres)
Development	6	66	60
Agriculture*	60	0	-60
Forest	0	0	0
Water	0	0	0
Other**	0	0	0
Total Area	66	66	0
Residential Septic (EDUs)	3	0	-3
Non-Residential Septic (EDUs)	0	0	0

Nitrogen Loading Summary

Land Use/Cover	Initial (Lbs/Yr)	Future (Lbs/Yr)	Change (Lbs/Yr)
Development	54	564	510
Agriculture	942	0	-942
Forest	0	0	0
Water	0	0	0
Other**	0	0	0
Total Terrestrial Load	996	564	-432
Residential Septic (EDUs)	29	0	-29
Non-Residential Septic (EDUs)	0	0	0
Total Septic Load	29	0	-29
Total NPS Nitrogen Load	1,025	564	-460

Phosphorus Loading Summary

Land Use/Cover	Initial (Lbs/Yr)	Future (Lbs/Yr)	Change (Lbs/Yr)
Development	8	68	60
Agriculture	65	0	-65
Forest	0	0	0
Water	0	0	0
Other**	0	0	0
Total NPS Phosphorus Load	73	68	-5

This analysis is used for comparision purposes between 2002 BMP Implementation and Tributary Strategy Implementation

	N	onpoint Sc	ource Load	s			Nonpoint Source Loads								
Secre	tary	0		0		TO	ΓAL								
Initial	Future	Initial	Future	Initial	Future	Initial	Future								
lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr								
Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen	Nitrogen								
0	397	0	0	0	0	0	397								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	113	0	0	0	0	0	113								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
942	0	0	0	0	0	942	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	54	0	0	0	0	0	54								
54	0	0	0	0	0	54	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
996	564	0	0	0	0	996	564								
29	0	0	0	0	0	29	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
0	0	0	0	0	0	0	0								
29	0	0	0	0	0	29	0								
1,025	564	0	0	0	0	1,025	564								

	Nonpoint Source Loads									
Secr	etary	()	0		TO [*]	ΓAL			
Initial	Future	Initial	Future	Initial	Future	Initial	Future			
lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr	lbs/yr			
Phosphorus	Phosphorus	Phosphorus			Phosphorus	Phosphorus				
0	54	0	0	0	0	0	54			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	10	0	0	0	0	0	10			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
65	0	0	0	0	0	65	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
0	4	0	0	0	0	0	4			
8	0	0	0	0	0	8	0			
0	0	0	0	0	0	0	0			
0	0	0	0	0	0	0	0			
73	68	0	0	0	0	73	68			

Change in Loads				
Secretary	0	0	Total	
Future	Future	Future	Future	
lbs/yr	lbs/yr	lbs/yr	lbs/yr	
Nitrogen	Nitrogen	Nitrogen	Nitrogen	
397	0	0	397	
0	0	0	0	
0 113	0	0	0 113	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
-942	0	0	-942	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
54	0	0	54	
-54	0	0	-54	
0	0	0	0	
0	0	0	0	
-432	0	0	-432	
-29	0	0	-29	
0	0	0	0	
0	0	0	0	
0	0	0	0	
-29	0	0	-29	
-460	0	0	-460	

Change in Loads				
Secretary	0	0	Total	
Future	Future	Future	Future	
lbs/yr	lbs/yr	lbs/yr	lbs/yr	
Phosphorus	Phosphorus	Phosphorus	Phosphorus	
54	0	0	54	
0	0	0	0	
0	0	0	0	
10	0	0	10	
0	0	0	0	
0	0	0	0	
0	0	0	0	
-65	0	0	-65	
-05	0	0	-65 0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
4	0	0	4	
-8	0	0	-8	
0	0	0	0	
0	0	0	0	
-5	0	0	-5	

Impervious Cover		
Initial	Future	
Acres	Acres	
0	6	
0	0	
0	0	
0	10	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	0	
0	7	
0	0	
0	0	
0	0	
0	23	

Open Space Agriculture				
Total				
Initial	Future			
Acres	Acres			
60	0			
0	0			
0	0			
0	0			
0	U			
0	0			
0	0			
60	0			

Open Space Forest				
Total				
Initial	Future			
Acres	Acres			
0	0			
0	0 0 0			
0	0			
0	0			
0	0			