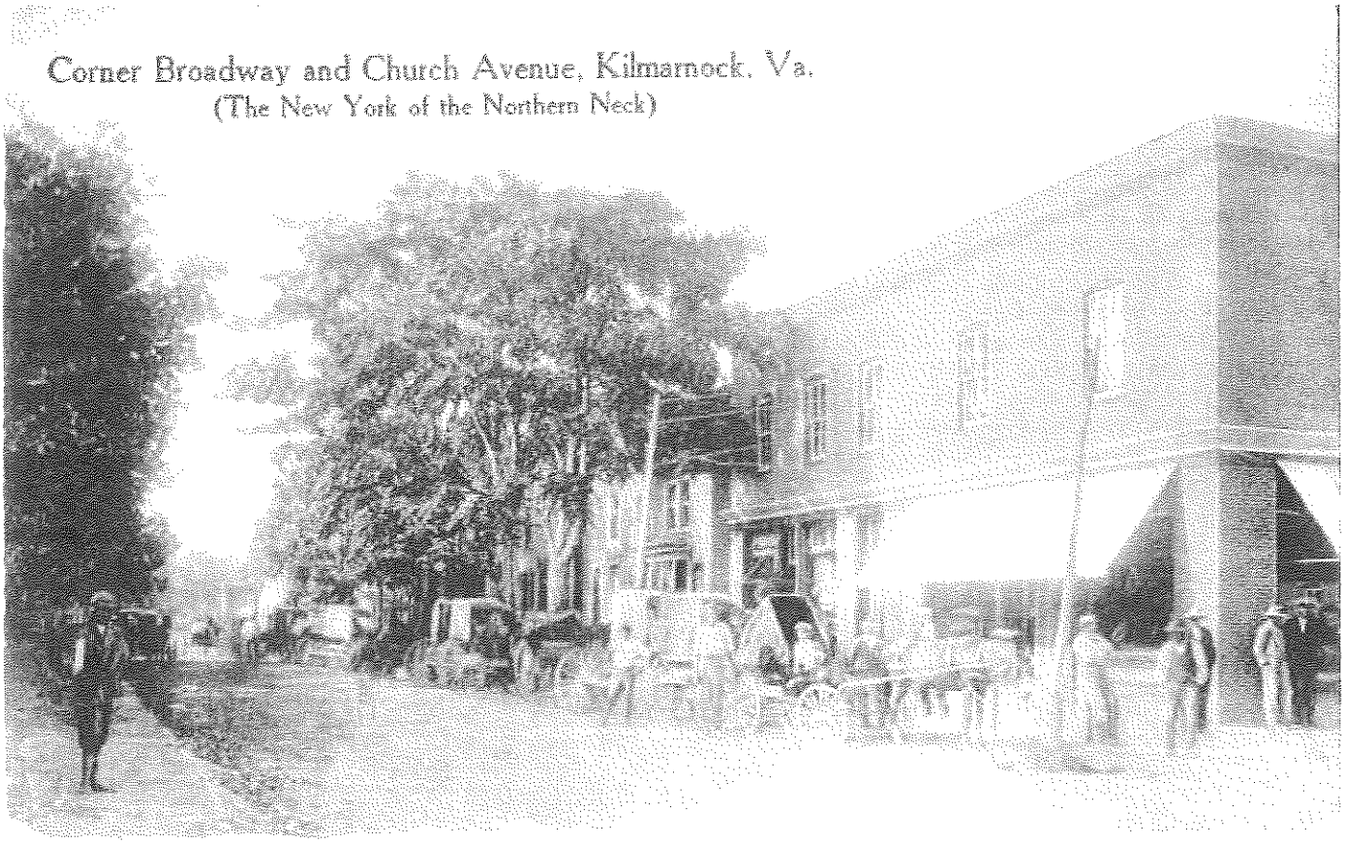
Town of Kilmarnock Virginia

COMPREHENSIVE PLAN - 2014



Prepared by:

Kilmarnock Planning Commission

Adopted by:

Kilmarnock Town Council

April 21, 2014

COMPREHENSIVE PLAN
TOWN OF KILMARNOCK, VIRGINIA

Prepared by the
KILMARNOCK PLANNING COMMISSION

Adopted by the
KILMARNOCK TOWN COUNCIL
April 21, 2014

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Emerson Gravatt, Vice Mayor

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Marshall A. Sebra, Planning Director

2006 Comprehensive Plan by PMA - Planners and Architects & Community Planning Consultants
Rewritten 2011 through 2014 by the Town of Kilmarnock

~ Special thanks to Commissioner Ann Towner for her hard work and dedication in this plan ~

TABLE OF CONTENTS

TABLE OF CONTENTS	1
PREFACE	3
VISION STATEMENT	5
CHAPTER 1: HISTORIC SETTING, DEMOGRAPHICS & GROWTH SCENARIOS & ECONOMIC PROFILE	
A. HISTORIC SETTING & LOCATION	6
B. DEMOGRAPHICS & GROWTH SCENARIOS	7
C. AGE DISTRIBUTION	10
D. ECONOMIC PROFILE	11
TABLES	
1.1: Northern Neck Population & Projections: 2000 -2040	7
1.2: Population Growth and Projections, Kilmarnock: 1960-2020	8
1.3: Employer Categories in Kilmarnock	11
1.4: Occupation Categories in Kilmarnock	12
1.5: Income/Year for All Households in Kilmarnock	14
1.6: Income/Year for Family Households in Kilmarnock	14
1.7: Housing Value / Owner Occupied Unit	16
1.8: Housing Type in Kilmarnock	17
1.9: Changes in Kilmarnock Revenue (FY 2011 & 2012)	18
FIGURES & GRAPHICS	
1.1: Kilmarnock Location Map	6
1.2: Change in Age Distribution in Kilmarnock: 1970, 2000, 2011	10
1.3: Businesses & Service Establishments in Kilmarnock	13
1.4: Construction Activity & Building Value: 2006 – 2012	16
CHAPTER 2: PHYSICAL FACTORS AFFECTING GROWTH AND DEVELOPMENT	19
A. AMOUNT OF LAND	19
B. TOPOGRAPHY AND DRAINAGE	22
C. RESOURCE PROTECTION AREAS AND POTENTIAL STREAM EROSION	25
D. SOIL SUITABILITY FOR SEPTIC TANKS	27
E. GROUNDWATER TABLE	34
F. SHRINK-SWELL SOIL QUALITIES	36
G. AVAILABLE LAND FOR DEVELOPMENT	38
TABLES	
2.1: Existing Land Use in Kilmarnock, 2013	20
FIGURES	
2.1: Developed and Available Land	19
2.2: Existing Land Use	21
2.3: Watershed Drainage Basins and Elevations	23
2.4: Resource Protection Areas and Areas of Potential Erosion	26
2.5: Public Sewage System	28
2.6: Public Water System	29
2.7: Soil Suitability for Septic Systems	31
2.8: Soil Permeability	33
2.9: Groundwater Table	35

TABLE OF CONTENTS

2.10: Shrink-Swell Soil Qualities 37
2.11: Available Land for Development 39

CHAPTER 3: LAND USE PLAN, HOUSING & ECONOMIC DEVELOPMENT 41
A. THE ROLE & DESCRIPTION OF THE LAND USE PLAN 42
B. LAND USE PLAN AND DEVELOPMENT POLICIES 43
1. Development Policies in General 43
2. Resource Protection Areas, Chesapeake Bay Preservation Act and Conservation Easements 43
3. Future Land Use and Development 46
4. Commercial Areas 47
a. Downtown Commercial "Steptoe's District" 47
b. North Main Street Commercial Corridor 50
c. Partially Undeveloped Commercial Area 51
5. Residential Areas 52
a. Established Residential Neighborhoods 52
b. Low Density Residential 54
c. Medium Density Residential 55
6. Public / Semi-Public Land Use 56
7. Business and Technology Park 57
C. DEVELOPMENT PROPOSED ADJACENT TO KILMARNOCK IN THE UNINCORPORATED AREAS 58
D. HOUSING 59
E. ECONOMIC DEVELOPMENT 60
F. IMPLEMENTATION OF THE LAND USE PLAN 62
FIGURE
3.1: Land Use Plan 41

CHAPTER 4: PUBLIC SERVICES AND FACILITIES 63
A. WASTEWATER DISPOSAL AND WATER SUPPLY 63
B. TRANSPORTATION: STREETS AND HIGHWAYS 68
C. OTHER PUBLIC SERVICES AND FACILITIES 71
FIGURE
4.1: Public Services and Facilities 75

CHAPTER 5: PRESERVATION OF RESOURCES 76
A. HISTORIC RESOURCES 76
B. PRESERVATION OF WATER QUALITY 78
1. GROUNDWATER RESOURCES 78
2. SURFACE WATER RESOURCES 81
a. CHESAPEAKE BAY PRESERVATION ACT / RESOURCE MANAGEMENT AREA & LOCAL RESOURCE PROTECTION AREAS 82
b. EROSION CONTROL, RUNOFF, STORM WATER & REDEVELOPMENT 83
C. PRESERVATION OF WATER QUANTITY 84

APPENDIX A: SUMMARY OF ISSUES & POLICIES

PREFACE

WHAT IS A COMPREHENSIVE PLAN?

Every locality in Virginia is required to have a comprehensive plan (Va. Code Sections 15.2-2223 to 15.2-2232). The goal of the plan is to guide and coordinate different local planning and land use actions. Most importantly, the plan is to serve as a guide for implementing the zoning ordinance, controlling the location, intensity, and design of residential, commercial, and industrial development. It also serves to guide decisions about the placement of public facilities such as schools, roads, sidewalks, and sewer lines.

Although required by law, the plan is only a guide. Virginia does not require that land use and zoning decisions be consistent with the plan. By itself, the plan cannot control the use of a given parcel or the location of public facilities. Implementation of the plan occurs through zoning decisions and decisions about the location of public facilities. When consistently followed, the plan can provide an important legal foundation for land use decisions. When not consistently followed, courts will be unlikely to allow a locality to rely on the plan as a defense for its actions.

The plan is a projection of land use needs and trends projected forward for twenty years. State law requires review, but not necessarily revision, of the plan every five years. The plan typically takes into consideration natural resources (both as assets and limitations), economics, population characteristics, growth trends, development patterns, and community wishes.

Comprehensive plans have the general purpose of guiding development to best promote the health, safety and general welfare of the community. Because the plan is a long-term tool intended to shape land use in a locality over time, it should be left in place for a number of years for it to be effective. Constant amendment of the plan undermines and limits its effectiveness. Some localities constantly amend their plans to accommodate requested rezonings that would otherwise be inconsistent with the plan. Such frequent amendments mean that the plan, rather than guiding land use, simply follows the fluctuations of the land market and the speculations of individual landowners. Other localities seem to be constantly in the process of undertaking major overhauls of their plan. In these localities the plan seems never to be settled; here again, the plan fails to establish patterns that provide long-term, reliable guidance for land use.

WHAT ARE THE COMPONENTS OF A COMPREHENSIVE PLAN?

The plan consists of a text, which usually describes the resources of the community and its history, population, and economy. The text typically has a section that describes the designation of areas for various types of public and private development and use. In addition to the text there is usually a plan map that shows the generalized boundaries of the different land use areas within the locality and the location of existing and planned public utilities and facilities. Comprehensive plans may also include an analysis of transportation facilities, cultural and natural resources, physical factors (natural and man-made), and resource protection.

WHAT IS THE PROCESS FOR PREPARING & ADOPTING A COMPREHENSIVE PLAN?

Virginia law requires that the local Planning Commission develop the plan and any amendments to it. The Planning Commission must hold at least one public hearing (after public notice) before taking final action to recommend adoption of a plan. The Planning Commission's action of adoption or amendment constitutes a formal recommendation to the local governing body.

Final action to approve the plan or amendments is the responsibility of the Town Council. Town Council must hold a public hearing, after providing public notice, before taking final action on the Planning Commission's formal recommendation regarding the plan.

The Planning Commission and the local governing body may hold "work sessions" as they review the proposed plan update. Public comment at these work sessions is encouraged. The Kilmarnock Planning Commission has conducted public meetings or work sessions virtually every month during the Comprehensive Plan update process beginning in the fall of 2012.

(Source: The above information is from "A Citizen's Guide to Planning and Zoning in Virginia" by the Chesapeake Bay Foundation's BaySavers ™ Institute, February 2003).

WHAT IS INCLUDED IN THE TOWN OF KILMARNOCK'S COMPREHENSIVE PLAN?

The Town of Kilmarnock's plan is comprehensive because it: 1) provides a framework for all existing and future development, both private and public; 2) covers all of the physical area within the jurisdiction of the Town of Kilmarnock; 3) addresses the need for different types of land use and development in relation to the infrastructure necessary to support the community; and 5) reflects the Town's vision based on input by Kilmarnock's residents, various responsible agencies (such as the Virginia Department of Transportation), as well as Lancaster and Northumberland counties.

Chapters 1 and 2 establish the framework for Kilmarnock's Comprehensive Plan. Chapter 1 includes a demographic and economic profile for the Town and surrounding area with, among other things, population and build-out projections and key economic development issues associated with the Kilmarnock's economy. Chapter 2 addresses physical factors, both natural and man-made, that help to determine land that may be developed, its limitations and opportunities.

The heart of the Comprehensive Plan is the Land Use Plan in Chapter 3. The Land Use Plan establishes the framework around which public and private development may occur. By establishing development constraints and opportunities and the Town's potential for future growth in Chapters 1 and 2, the Land Use Plan then projects the future land use arrangement within Kilmarnock by designating areas for different types of resource protection, residential, commercial, and public uses. Along with maps showing the areas that appear most favorable for development in Chapter 2, the Land Use Plan includes a set of development policies for each type of land use area.

The link between the Land Use Plan (Chapter 3) and the public service element (this Chapter) is what enables the document to rise to the level of its name, "Comprehensive Plan." Public services and facilities discussed in Chapter 4 include water, sewer and transportation issues, as well as local government, recreation, and community services. The information in Chapter 4 identifies opportunities and potential resources for developing additional community services and ties potential future development to the capacity of the town's infrastructure.

The final chapter addresses the need to protect certain resources in Kilmarnock, such as the quality and quantity of the Town's water supply, to ensure the ongoing protection of the public's health, safety, and welfare.

VISION STATEMENT

The Town of Kilmarnock, located in both Lancaster and Northumberland counties, is in Virginia's Northern Neck, a strategic area that shares shorelines of the Chesapeake Bay and two of Virginia's great rivers, the Potomac and Rappahannock. Kilmarnock, incorporated in 1930, claims a rich heritage linking it to Scotland, Native Americans and early European settlers.

The Town is named for Kilmarnock, Scotland, although in earlier times it was also known as the "Crossroads." and "Steptoe's Ordinary." Road patterns today resemble paths used by Native Americans prior to European settlement. A town of approximately 1,500 citizens and 3.36 square miles in size, Kilmarnock is firmly established as the trade and service center of the eastern part of the Northern Neck. Kilmarnock is positioned for continued growth not only as the region's commercial and community service center, but also as an excellent place for living, working, retiring, tourism, public services and leisure activities.

Kilmarnock's residents, the Town Council and Planning Commission hereby articulate our vision for the future in the following goals:

Economy Enhance and maintain a strong sustainable economic base by assuring the dominance of the Town as a major business, community service, and visitor serving center for its residents and the region. Provide a wide-range of full-time employment opportunities in commercial, technological, public service, and visitor serving enterprises.

Commerce Maintain the historic small town identity of the Steptoe's District/downtown area as the central business and visitor zones, to provide economic incentives for new and existing businesses.

Growth, Land Use & Infrastructure Plan and manage growth consistent with the need to accommodate future population in sync with the Town's ability to provide public facilities and services. Protect the delicate balance and land use compatibility between existing/future land use development and the natural environment.

Preservation Incorporate the preservation of natural environmental, historical and cultural features of the community into planning and implementation of all public and private activities.

Housing Provide a range of affordable housing styles that incorporate open space and other recreational amenities in pedestrian-oriented settings. Utilize available land planning and architectural techniques such as planned unit development and mixed-use development.

Transportation Provide a network of streets accommodating a compatible relationship among various forms of traffic including vehicular, pedestrian and bicycle. Supplement traffic routes with adequate parking facilities in order to establish a workable circulation pattern throughout the community.

Public Uses & Community Services Enhance and maintain Kilmarnock's strong community service base by assuring the dominance of the Town as a major center for public services for its residents and the region.

CHAPTER 1

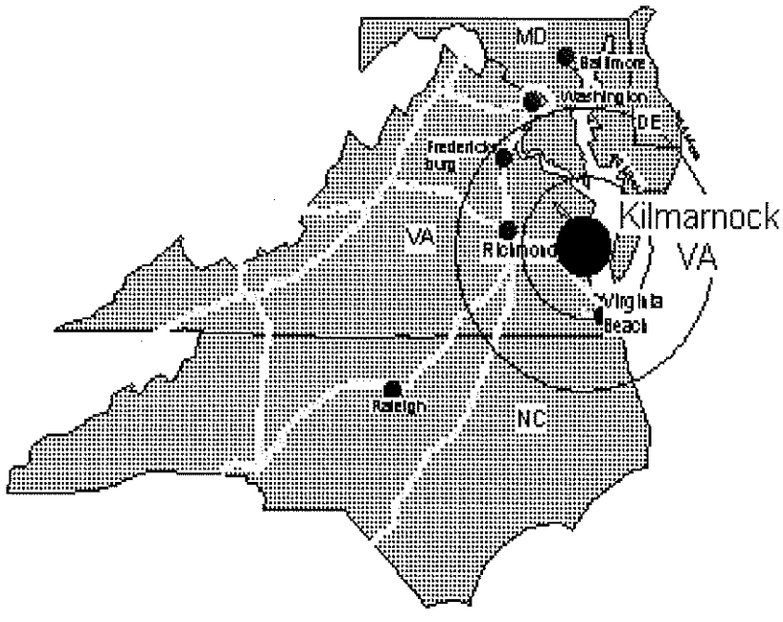
HISTORIC SETTING, DEMOGRAPHICS, GROWTH SCENARIOS & ECONOMIC PROFILE

A. HISTORIC SETTING AND LOCATION

First settled in the mid-1600s, Kilmarnock was originally known as "The Crossroads" based on a brief history provided in the 1989 Comprehensive Plan. That document suggests that Kilmarnock probably had its beginnings at the intersection of Native American paths which later became the locations of Routes 3 and 200. In the early 1700s William Steptoe operated a storehouse and ordinary at "The Crossroads" and the area came to be called "Steptoe's Ordinary." In 1764, Robert Gilmour, an agent for a mercantile firm based in Glasgow, Scotland, is thought to have been involved in giving the name of "Kilmarnock" to the crossroads location using the name of Kilmarnock, Scotland, where he apparently also owned land. The earliest known record referenced to "Kilmarnock, Virginia," is in a deed recorded in 1778. Although Kilmarnock was ravaged by two fires in the early and mid 1900s, the town continues to grow and is firmly established as the trade and service center of the eastern part of the Northern Neck region.

Kilmarnock was incorporated as the "Town of Kilmarnock" by an act of the Virginia General Assembly in 1930. At the time of incorporation Kilmarnock was 761.5 acres in size. Currently the town occupies 3.36 square miles or 2,193 acres.

Figure 1.1 - LOCATION MAP



Kilmarnock is primarily located in Lancaster County near the southeastern tip of the Northern Neck. A small portion of Kilmarnock, located along the southeastern side of Church Street, is in Northumberland County. Lancaster and Northumberland counties were officially established in 1651 and 1648, respectively. While the town does not have major transportation corridors, such as interstate highways, railroads or carrier-based airports, it is within 100 miles of the metropolitan areas

of Richmond, Hampton Roads, and Washington D.C. This places major urban services via Virginia's primary highways within less than two hours drive of Kilmarnock.

B. DEMOGRAPHICS

1. Population and Growth: Northern Neck Region

The population of the Northern Neck (the four-county area comprising the Northern Neck Planning District includes Lancaster, Northumberland, Richmond and Westmoreland counties) started the 20th Century at 35,126 people. By 1950 the population was roughly the same at 35,079. From 1950 until 2000 the population of the Northern Neck increased by 14,276 people to 49,355, which is a 41 percent increase. Between 2000 and 2010 the area's population reached 50,429 or an 8.6 percent increase.

Table 1.1
NORTHERN NECK POPULATION: 2000-2010

County	2000	2010	% Change
Lancaster	11,567	11,391	-1.5
Northumberland	12,268	12,330	.6
Richmond	8,802	9,254	5.1
Westmoreland	16,718	17,454	4.4
TOTAL	***49,355***	***50,429***	***8.6***

(Source: U.S. Census Bureau: 2000 - 2010)

Since 2000 the major increase in population occurred in two adjoining counties: Richmond (5.1 percent) and Westmoreland (4.4 percent). The population of Lancaster County, in which most of Kilmarnock is located, actually decreased by 176 people; Northumberland County grew by a modest 0.6 percent.

Recent estimates provided by the Northern Neck Planning District Commission based on data by State agencies, specifically the Virginia Employment Commission, project the population for the Northern Neck area as follows:

2020 = 52,444 **2030** = 54,512 **2040** = 56,446

2. Population and Growth: Town of Kilmarnock

Kilmarnock's population has also grown. The town's population has gradually increased from 627 people in 1960 to 1,487 in 2010. Between 2000 and 2010, however, Kilmarnock's population grew by 19.5 percent which is the highest increase since the 1960s. One explanation for this population growth since 2000 may be the result of the adjustment to the town's corporate limits in 2007 which increased the size of the town to 3.36 square miles. The area annexed to the town consists primarily of established residences, resulting in a population increase.

Table 1.2 shows population growth in Kilmarnock based on census data from 1960 – 2010. The table also provides projections of the town's population to year 2020. The population projection for this table is based on a "linear regression" model. This process takes known values (i.e., census data for

the population from 1960-2010) that show Kilmarnock's growth during the past 50 years to project the town's population into the future based on historic trends.

Table 1.2
POPULATION GROWTH & PROJECTIONS, KILMARNOCK: 1960-2020

Year	1960-2010 Population with Projections through 2020*	Amount of Increase	% Increase
1960	627		
1970	841	214	34.1
1980	944	103	12.3
1990	1,109	165	17.5
2000	1,244	135	10.8
2010	1,487	243	19.5
2020	*1,659**	*172*	*11.5*

Source: U. S. Census Bureau: 1960 – 2010
***Projections based on 1960-2010 census data using the "linear regression" model described in preceding paragraph.**

Note: Of the current population (1,487 residents), 871 are female (59 percent) and 616 (41 percent) are male. **(Source: U.S. Census Bureau, 2007-2011 American Community Survey)**

3. Growth Scenarios: Town of Kilmarnock

Population growth will be the factor that drives the need for residential development, public facilities, commercial, visitor serving and community services of all types. Expectations of growth must be examined from several different scenarios.

Growth based on census data and population trend growth: Table 1.2 above sets forth a projection of Kilmarnock's population based on historic patterns. Trend growth assumes that future growth would be consistent with past trends. Based on this approach, Kilmarnock would continue to grow at about the same relatively moderate rate as in past years reaching a population of approximately 1,600 – 1,700 people by 2020.

Growth based on existing residentially developed acreage, population density and vacant undeveloped land: New development in areas of Kilmarnock, currently undeveloped and designated for residential use, presents another growth scenario, particularly in light of the large amount of undeveloped residential acreage.

Kilmarnock presently encompasses 3.36 square miles or 2,193 acres. Of this amount, roughly 47 percent of the town is developed with various types of land use and approximately 13 percent of the community is considered undevelopable due to designated Resource Protection Areas (RPA) and two large conservation easements. The areas designated as RPA essentially include steep slopes and stream basins. This leaves roughly 40 percent of the land in Kilmarnock as vacant and developable.

Of the developed acreage in Kilmarnock, approximately 635 acres consist of existing single family and multi-family residences, as well as public/semi public uses typically part of a residential area. This results in an existing density of approximately 2 people (2.3 people precisely) per acre (current population is 1,487).

The developable vacant land in Kilmarnock totals approximately 880 acres, much of which could be constructed with housing. Using this acreage, coupled with the existing population density of roughly 2 people per acre, results in a potential increase of roughly 1,754 residents for a total population of 3,214 people. This scenario may not be as accurate since a portion of the developable 880 acres is designated for commercial use which would reduce the overall residential population.

Growth based on existing housing units, number of people per household and vacant undeveloped land: There are 795 existing residential units in Kilmarnock, of which approximately 687 are occupied and roughly 108 units are vacant. **(Source: U.S. Census Bureau, 2007-2011 American Community Survey)**. With a population of 1,487 this equates to roughly 2 people (1.88 persons precisely) per household.

The overall residential density in Kilmarnock is 1.3 units per acre. (Explanation: 635 acres are currently developed with 795 single and multi-family residences resulting in 1.3 residential units per acre.) Assuming roughly 40 percent (i.e., 880 acres) of Kilmarnock is undeveloped, coupled with the current density of 1.3 units per acre, would potentially result in development of an additional 1,140 residential units at build-out with an increase of 2,143 people for a total population of approximately 3,630 residents. Again, this scenario may not be as accurate since a portion of the 880 acres deemed to be developable is designated for a commercial use which would reduce the overall residential housing density in Kilmarnock.

Growth based on approved but undeveloped residential units and vacant lots of record (i.e., infill development): Another scenario to determine population growth and the number of potentially new residential units is to evaluate the total number of units that have been approved but, to date, not constructed. Currently there are approximately 642 residential units that fall into this category. (See Chapter 2 - Section A - for a list of these projects).

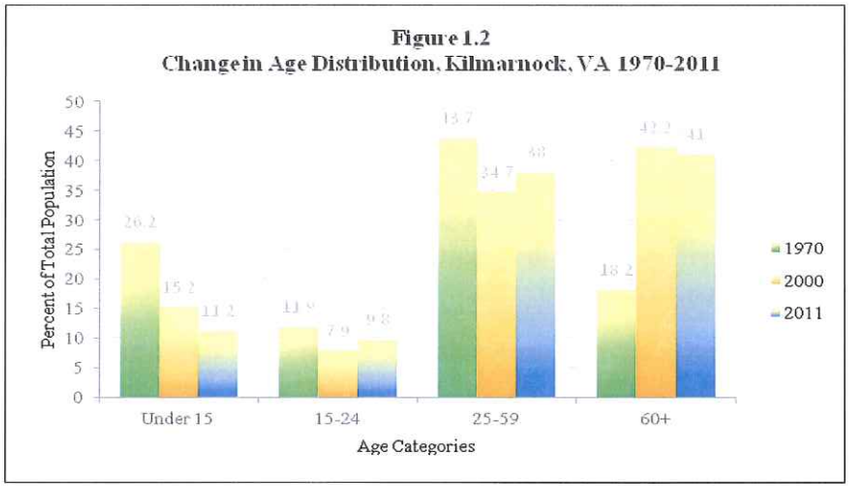
The units described above are in addition to potential development of vacant lots of record (i.e., infill) interspersed throughout the established residential areas of Kilmarnock. Waste Water Management, Inc., (WWM) prepared a "Water and Sewer Master Plan" (Master Plan) for the Town of Kilmarnock (dated February 4, 2010) to determine build-out potential. To accomplish this, WWM used the approved development density identified in the Comprehensive Plan for areas where no development is proposed and subtracted resource protection areas and open space requirements to estimate the number of future units classified as infill. Table 3 of the Master Plan estimates that a total of 314 infill units (roughly 229 residences and 85 commercial buildings) could be constructed in Kilmarnock in the future.

To summarize, the combined total of approved, but not constructed, units along with the potential infill development may result in an increase of 941 new residences for a total of 1,666 housing units. Again, assuming roughly 2 people (1.88 persons precisely) per household would result in a population increase of roughly 1,742 people for a total of 3,229 Kilmarnock residents. In addition, infill development on commercially designated vacant lots could add up to 85 new buildings and/or commercial uses.

Factors affecting population growth and build-out projections: There are many factors affecting population and build-out projections in Kilmarnock. As a result, the projections above are estimates at best. Factors affecting population growth and future development include, but are not limited to, annexations that expand the size of the town, resource and infrastructure constraints, economic development, and land use designated for residential use but developed for public or semi-public use, (i.e., streets and sidewalks) which are typically located in residential areas. In addition, public policies and zoning regulations play a large part in determining the ultimate density of development within Kilmarnock. These issues and constraints are analyzed in subsequent chapters of this document.

C. Age Distribution

The average median age of Kilmarnock's population is 54 with the highest percentage of residents between 60 to 64 years of age. Census data show that 30.6 percent of the population is under the age of 40 with the remaining 69.4 percent over 40.



(Source: U.S. Census Bureau, 2007-2011 American Community Survey)

The above figure shows the following changes in Kilmarnock's age distribution since 2000:

- Age: Under 15 = 11.2 percent (down 4 percent)
- Age: 15 - 24 = 9.8 percent (up 1.9 percent)
- Age: 25-59 = 38 percent (up 3.3. percent). Of this amount 28.4 percent are between the ages of 40 and 59.
- Age 60+ = 41 percent (down 1.2 percent)

Figure 1.2 reflects the long-term shift, most notably between 1970 and 2000, in the composition of Kilmarnock's population from a younger to an older population, 60 years of age and over. The population trend in Lancaster County in terms of age is similar. For example, demographic data provided by the U.S. Census Bureau states that as of the 2010 estimate, 31.5 percent of the population in Lancaster County is over 65 years old. This is roughly 3 times the Virginia and national average.

There are several issues related to the increase in the older population, most notably an emphasis on services and facilities oriented to that age group, including, but not limited to, community and public services. An older population may also have fewer children, thus reducing the number of students in

local schools. Elderly residents may also rely on a service-based economy with increased access to community services, health care, transportation, and local businesses to meet day-to-day needs. A retired population is also less likely to seek employment in the community which may explain why less than half the town's population is in the work force (see Section "D" below). As the "baby boomers" continue to retire, the share of retirement-age population is likely to grow even larger thus increasing the need for these types of services.

D. ECONOMIC PROFILE

(NOTE: Unless otherwise noted, the source for all of the following information is the "U.S. Census Bureau, 2007 – 2011," American Community Survey (date refreshed: 2/10/2013) and town records. It is also important to note that the last Comprehensive Plan adopted in 2006 contained very little, if any, economic data pertaining specifically to the Town of Kilmarnock. Therefore it is difficult to ascertain certain economic changes in the community since baseline information pertaining specifically to Kilmarnock is not available).

Kilmarnock is the business, commercial and community / public service center for Lancaster County and parts of the neighboring counties of Northumberland and Middlesex. The town's population makes-up approximately 11 percent of Lancaster County's population, yet roughly 47 percent of the county's business and service establishments are located in Kilmarnock.

1. Employment

Kilmarnock's residents, 16 years of age and over, total 1,249 people. Of this amount 673 people are in the labor force. 26 people in Kilmarnock are classified as unemployed, which is roughly 3.8 percent of the town's labor force. This percentage is well below the unemployment rate for the Northern Neck Region at 6.7 percent and the State of Virginia, 6.2 percent unemployment **(source: DRAFT Northern Neck Comprehensive Economic Development Strategy, November 2012, p. 12).** As of August 2013 the national unemployment rate was 7.4 percent.

The remaining 576 people residing in Kilmarnock, or 46 percent of the town's population 16 years of age or older, are not in the labor force presumably due primarily to retirement.

Table 1.3 below shows employment in Kilmarnock by industry group. The health care, social assistance and educational services category employs the most people, totaling 23 percent of Kilmarnock's labor force. This is primarily due to the work force at Rappahannock General Hospital, which is a major employer in Kilmarnock, and other related health care and medical office facilities. This trend shows that Kilmarnock is largely a service based economy with a primary emphasis on health care. Construction, retail and visitor serving/commercial employment categories follow, respectively.

Table 1.3
EMPLOYER CATEGORIES IN KILMARNOCK
Employed population = 647

Industry:	Kilmarnock's Employed Population
Health Care, Social Assistance & Educational Services	151
Construction	97
Retail Trade	93
Entertainment, Recreation, Accommodations & Food Services	73
Professional, Scientific, Management/Administrative	72
Transportation, Warehousing & Utilities	40
Public Administration	27

Finance, Insurance & Real Estate	22
Manufacturing	15
Information	8
Wholesale Trade	7
Other / Unclassified	42

2. Occupations

The occupational categories for Kilmarnock's work force, as shown in Table 1.4 below, reflects the town's employment categories in the above table. This table also shows that the highest numbers of people in Kilmarnock have jobs in the service industry category, with the least number of occupations in construction, maintenance and manufacturing.

Table 1.4
OCCUPATION CATEGORIES IN KILMARNOCK
Employed population = 647

Occupation:	Kilmarnock's Employed Population
Management, Business, Science & Arts	177
Service	173
Sales & Office	163
Natural Resources, Construction & Maintenance	86
Production, Transportation & Material Moving	48

Class of Worker in Kilmarnock: Of the 647 people in Kilmarnock's labor force, 443 are private wage/salary workers; 133 are government workers and 71 are self-employed.

3. Businesses and Service Establishments

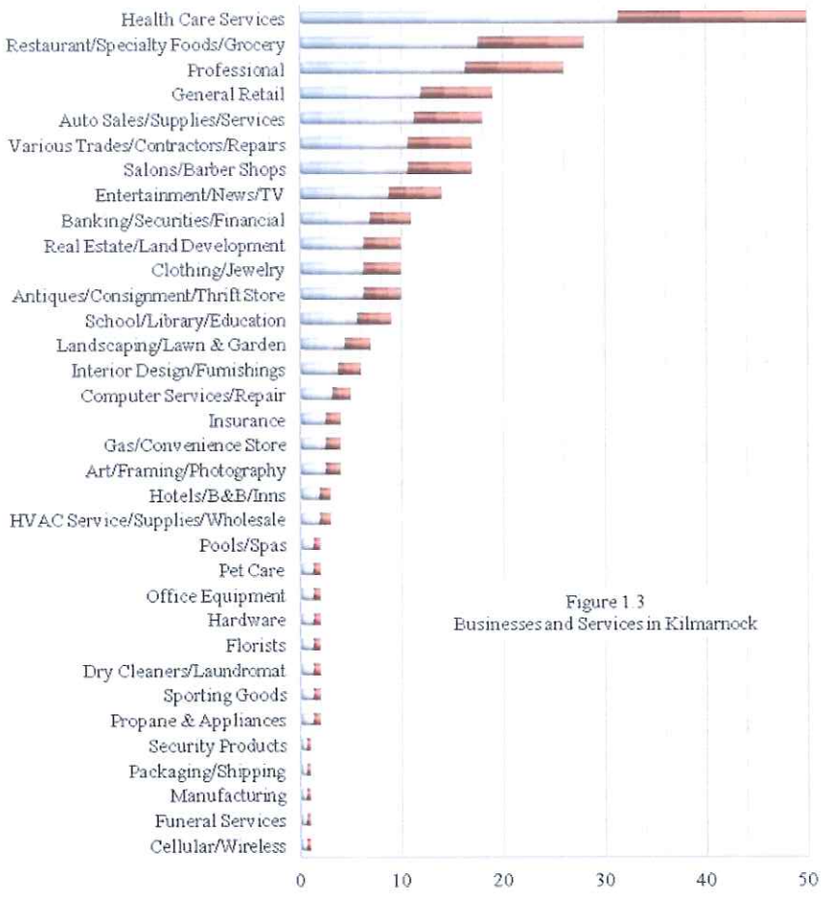
Another measure of how Kilmarnock functions as the business, commercial and service center for the region can be seen in the concentration of establishments within the Town proper. Figure 1.3 below lists the businesses and services operating within Kilmarnock in March 2013 as reported by Town records.

The 2006 Comprehensive Plan identifies 259 business and service establishments in Kilmarnock at that time. Since then the number increased to roughly 292 which is a total of 33, or nearly a 13 percent increase, new businesses in town. Since the data for this table is based in part on the number of business licenses issued it is important to clarify that some new businesses, for which licenses were issued, include small un-manned kiosks for movie rentals such as those located outside of CVS, Walgreens and Wal-Mart and home occupations. Regardless, Figure 1.3 shows that, despite the nationwide economic downturn, business activity in Kilmarnock continued to grow during the past 7 years. The increase in the number of businesses in the town may be explained in large part due to the development of large commercial projects between 2006 and 2007 such as the Wal-Mart shopping complex, Walgreens and the Bowling Alley. Similar to national trends, this surge in Kilmarnock's commercial development occurred shortly before the nationwide economic recession which began roughly at the onset of 2008.

Perhaps the most revealing information in Figure 1.3, is the *type* of business and service establishments in Kilmarnock and the *increase* in each category since 2006 (increase in number of

services since 2006 is shown in red in Figure 1.3). The top category, almost double in size when compared to other establishments in Town, is health care services. The number of health care facilities in Kilmarnock also increased substantially when compared to growth in other sectors of the Town's economy. Following health care services are: 2) restaurants/grocery stores; 3) professional offices; 4) general retail stores; and 5) auto sales, supplies and services, respectively. These top 5 sectors of Kilmarnock's economy are also where the most growth, in terms of new businesses and service establishments, occurred since 2006. This trend further corroborates information in the preceding tables indicating that Kilmarnock's economy is service based, especially relative to health care, and this sector of the Town's economy is expanding.

Figure 1.3
BUSINESS & SERVICE ESTABLISHMENTS IN KILMARNOCK, MARCH 2013



4. Income

Employment, unemployment, occupations and the number and types of businesses in Kilmarnock only describe part of the town's economy. Another part is conveyed by residents' income, some of whom may not actually work in the town. Table 1.5 below shows the various income levels for Kilmarnock's residents based on the total number of occupied households.

Table 1.5
INCOME PER YEAR FOR ALL HOUSEHOLDS IN KILMARNOCK
(Total number of households – not employed population)
Households = 687 (including family & single-resident households)

Income:	Total Number of Households:
Less than $10,000	52
$10,000 - $14,999	69
$15,000 - $24,999	141
$25,000 - $34,999	67
$35,000 - $49,999	108
$50,000 - $74,999	121
$75,000 - $99,999	21
$100,000 - $149,999	72
$150,000 - $199,999	30
$200,000 or More	6

This table shows that roughly 48 percent of the households in Kilmarnock earn less than $34,999 per year while 229 or 33 percent of households earn between $35,000 and $74,999. The remaining 129 households (roughly 19 percent) earn $75,000 or more per year.

Of the total number of occupied households (i.e., 687) in the community, 405 are classified as a "family" household (i.e., more than one individual residing in a residence). Table 1.5 above can be broken down further to show the annual income for family households in the town, as follows:

Table 1.6
INCOME PER YEAR FOR FAMILY HOUSEHOLDS IN KILMARNOCK
Family Households = 405

Income:	Total Number of FAMILY Households:
Less than $10,000	0
$10,000 - $14,999	25
$15,000 - $24,999	53
$25,000 - $34,999	43
$35,000 - $49,999	66
$50,000 - $74,999	109
$75,000 - $99,999	18
$100,000 - $149,999	62
$150,000 - $199,999	23
$200,000 or More	6

Based on the above table, the median family household income is $52,813. The income bracket with the most family households (i.e., roughly 27 percent of the town's families) is between $50,000 and $74,999 per year.

Single Individuals: Non-family households, or single individuals residing in a residence, total 282 people in Kilmarnock. In contrast, the median non-family income for a single individual is $19,063.

Employed Population: As stated above, 647 of Kilmarnock's residents are actively employed. The median income for all people residing in Kilmarnock in the labor force is $25,903. Census data estimate that of the employed **MALE** population, the median income for full-time year-round worker is $43,947 whereas median earnings for **FEMALES** (full-time year-round workers) total $29,107.

Poverty Level: Percentage of **ALL People** in Kilmarnock with Income below the Poverty Level (in the past 12 months) = 17.3 percent
Percentage of **ALL Families** in Kilmarnock with Income below the Poverty Level (in the past 12 months) = 11.1 percent

Average (not median) Wage per Job, by Job Count (2011)

U.S. =	$48,301
Virginia =	$52,072
Westmoreland =	$28,209
Richmond =	$35,332
Northumberland =	$32,987
Lancaster =	$32,287

(Source: DRAFT Northern Neck Comprehensive Economic Development Strategy (update Feb., 2013, p. 11)

Per Capita Income: Still another dimension of the economy is revealed by examining income for the Town of Kilmarnock on a per capita basis which is $24,883. This is an indicator of the personal income of the town's residents from sources other than what is reported through the payroll taxing system. The average per capita income in 2011 is lower than all others reported for the region, state and nation as shown below:

Per Capita Income (2011)

U.S. =	$41,560
Virginia =	$46,107
Westmoreland =	$36,557
Richmond =	$26,941
Northumberland =	$41,936
Lancaster =	$48,607
Kilmarnock =	$24,883

(Source for above: DRAFT Northern Neck Comprehensive Economic Development Strategy (update Feb., 2013, p. 10)

5. Construction Activity

Another indicator of the strength of Kilmarnock's economy is reflected in construction activity. In the 1990s and continuing through 2007 construction activity in Kilmarnock was strong. Figure 1.4, however, shows a significant drop in commercial construction after 2007, similar to national, state and local trends occurring at roughly the same time. In 2006 construction of new commercial and office buildings is significant with a building value of roughly $15,000,000. This is due in part to development of the new Wal-Mart shopping complex, Walgreens and the Bowling Alley. By 2007 commercial development in Kilmarnock begins to decline precipitously until it reaches virtually the bottom of the scale in 2009 with negligible flocculation at best from that time through 2012.

In contrast, residential development has remained roughly the same since 2006, despite the downward economy, although these building values are slightly higher between 2006 and 2008. By 2008, however, residential construction and building values dip slightly and hover at or below the

$1,000,000 mark and remain at that level for the ensuing years. During this time, the relationship between commercial and residential development also remains fairly constant.

Figure 1.4
CONSTRUCTION ACTIVITY & BUILDING VALUE: 2006 - 2012

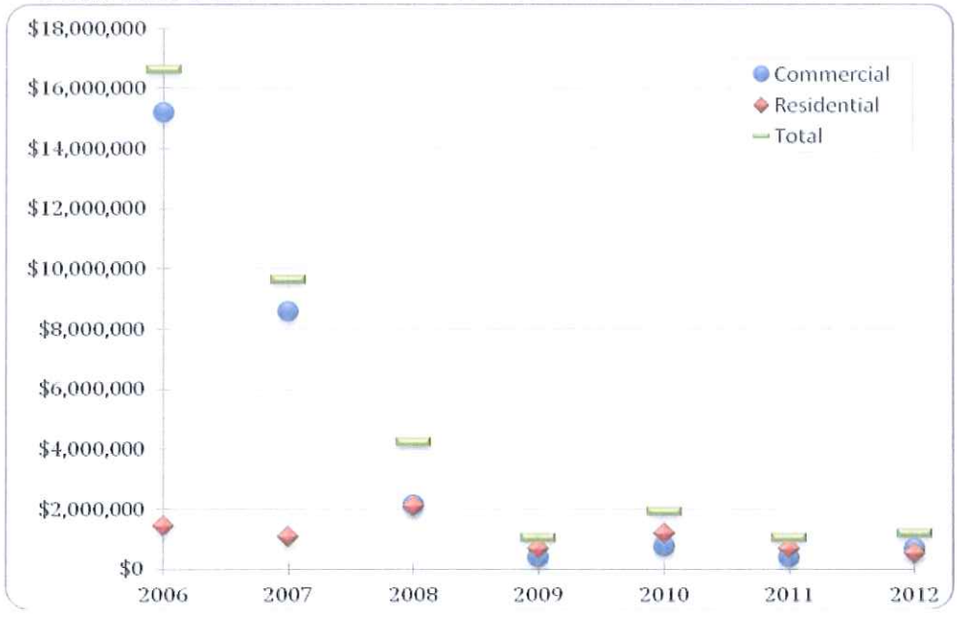


Figure 1.4 is consistent with the trends identified above pertaining to occupational and employer categories, as well as the figure showing new business establishments in Kilmarnock. When combined, all the data clearly show Kilmarnock's ongoing growth in and shift to a service based economy.

6. Housing

In addition to construction activity and value, the type of housing and housing values in the town also help to establish the baseline for Kilmarnock's economy. Currently, there are a total number of 795 housing units in the Town of Kilmarnock. Of these approximately 687 are occupied and 108, or 14 percent, of the town's housing units are vacant. Homes that are owner occupied total 408; the remaining 279 are rental units. Housing issues, specifically the type of residential development and affordability, are discussed in greater detail in Chapter 3 (Land Use).

Table 1.7 shows the value of owner occupied housing units in Kilmarnock.

Table 1.7
HOUSING VALUE – OWNER OCCUPIED HOMES IN KILMARNOCK
Owner Occupied Homes = 408

Value:	Total Number of Owner Occupied Units:
Less than $50,000	8
$50,000 - $99,999	18
$100,000 - $149,999	39
$150,000 - $199,999	139

$200,000 - $299,999	127
$300,000 - $499,999	69
$500,000 - $999,999	6
$1,000,000 or more	2

The above table shows that the value of most homes in Kilmarnock ranges between $150,000 and $299,999; approximately 65 percent of the owner occupied homes in town fall into this category. Roughly 19 percent of the homes are valued at $300,000 or more with 16 percent valued at less than $150,000. The median home value in Kilmarnock is $200,000 and the median cost for rent is $706 per month (median).

The type of housing in Kilmarnock shows that detached single family residences are the predominant type of residence in the town with 585 homes. The next highest category is multi-family residential homes with an attached unit. Often these are classified as a senior citizen or caretaker unit for a family member.

Table 1.8
HOUSING TYPE IN KILMARNOCK

Housing Type:	**Number of Units:**
Single Family Residential (detached)	585
Multi Family Residential	
1 unit attached	51
2 units (duplexes)	17
3 to 4 units	29
5 to 9 units	47
10 to 19 units	32
20 or more units	39
Mobile Homes	15

7. Kilmarnock Tax Revenue

Another way to evaluate changes to Kilmarnock's economic base is to analyze tax revenue generated by a variety of sources. This information, for fiscal year 2012 and changes since 2011, is presented in Table 1.9 below. Specifically, the restaurant, retail sales and hotel taxes generated during fiscal year 2012 provide a mechanism to gauge changes to the town's economic profile since 2011.

Restaurant and fast-food sales are up indicating more people are eating in Kilmarnock's restaurants. Retail sales tax remains essentially unchanged since fiscal year 2011. This may be in part due to the fact that, as shown in Figure 1.4 above, there has been minimal, if any, new commercial development in Kilmarnock during the same period.

There are three visitor serving commercial establishments that provide overnight accommodations in Kilmarnock. These include the "Holiday Inn Express" and two Bed and Breakfast Inns known as the "Kilmarnock Inn" and "Back Inn Time." Revenue generated by the hotel/motel room tax is down by $7,625 when compared to the previous fiscal year in 2011.

It should be noted that the significant drop by over $48,000 in revenue generated by the Town's business license tax is somewhat misleading and irrelevant to this analysis. This drop is primarily due to Town Council's decision in June 2010 to decrease this tax by as much as 40 percent in some categories in order to provide an economic incentive for the establishment of new businesses in

Kilmarnock. The drop in this revenue does not necessarily reflect a substantial decline in the number of business licenses issued.

Table 1.9
KILMARNOCK REVENUE FOR FY 2012 & CHANGES SINCE 2011

Tax Type	Change since FY 2011	
Restaurant/Meals Tax	**UP**	$9,086
Business License Tax	**DOWN**	$48,199
Local Sales Tax	**DOWN**	$353
Hotel/Motel Room Tax	**DOWN**	$7,625

8. Economy - Summary

Three major activities drive the economy of Kilmarnock. The first and principal economic strength comes from the town's service economy. Kilmarnock is the regional trade and service center for the eastern part of the Northern Neck. As shown in the above tables, the service sector of Kilmarnock's economy dominates employment, occupation and business categories. This is, in part, the result of health care services provided by Rappahannock General Hospital, related medical services, as well as assisted living residential and health care facilities. In addition, since adoption of the Comprehensive Plan in 2006 several large scale commercial projects were developed in 2007 including the Wal-Mart Shopping complex, Walgreens and the Bowling Alley. Because Kilmarnock is the dominant trade and service center in the region, an employment base in the service and retail economy will likely continue to produce the most jobs.

Retirement comprises another part of Kilmarnock's economic base although its impact is not directly seen in economic statistics. The Northern Neck region, and specifically Kilmarnock, has seen a steady increase in the number of people 60 years of age and over. Currently, roughly 41 percent of the town's population is over the age of 60. An elderly population is more likely to rely on a service economy for access to community services, health care, transportation, and local businesses to meet day-to-day retail needs. A retired population is also less likely to seek employment in the community which may explain why less than half the town's population is in the work force.

The third factor in the local economy is tourism. While Kilmarnock does not have direct waterfront access to the Chesapeake Bay or any of its major estuarine rivers, its proximity to one of the finest shorelines for recreation along the Atlantic Coast, coupled with the Town's business and commercial venues, places the town in a good position to continue to increase revenue from visitors to the Northern Neck, particularly during the summer season. Ongoing improvements to the downtown commercial district to maintain and enhance Kilmarnock's small-town appeal also enhance the town's ability to capture a larger share of tourist dollars.

Manufacturing and industrial activity is not likely to be a strong force in the local economy because lack of major transportation corridors is a constraint. The distance from Kilmarnock to railroads, interstate highways and carrier airports is a barrier to developing products that require timely distribution to outside markets. On the other hand, in today's computer-driven economy and "next day" delivery service available almost anywhere, numerous economic opportunities present themselves to individuals and corporations alike located in rural areas.

CHAPTER 2
PHYSICAL FACTORS AFFECTING GROWTH AND DEVELOPMENT

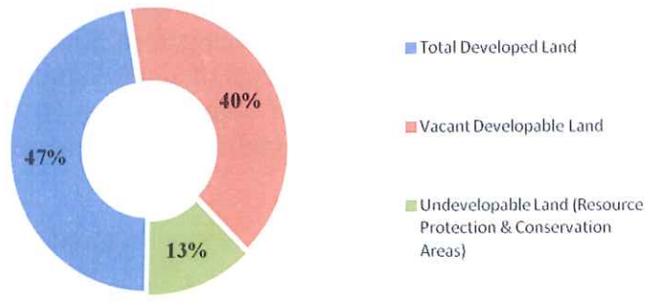
Factors affecting Kilmarnock's potential for future development may be broadly analyzed based on four topics: (1) the amount of land within the town's corporate boundaries; (2) the extent to which that land is already developed; (3) land that is protected from development by regulation, conservation or other means; and (4) physical characteristics likely to limit development. Of course, future adjustments to the town's corporate limits would also affect development potential.

In this Chapter, these conditions are analyzed and illustrated based on available data and maps that show various physical issues. Development policies are also included that relate to the physical factors affecting growth and development in Kilmarnock. This Chapter also identifies natural resource constraints for future land use in the Town of Kilmarnock, which is the topic of Chapter 3.

A. AMOUNT OF LAND

The land in Kilmarnock may be broadly divided into three categories shown in Figure 2.1: 1) developed land; 2) vacant developable land; and 3) undevelopable land based on resource constraints including, but not limited to, conservation easements and designated Resource Protection Areas (RPA). Figure 2.1 shows roughly 40 percent of the land in Kilmarnock has the potential for development.

Figure 2.1
Developed and Available Land
Kilmarnock, Virginia



There are essentially three changes that have affected the developable area of Kilmarnock since adoption of the last Comprehensive Plan in 2006. First, the town's corporate limits were expanded in 2007 as a result of a boundary adjustment to include an additional 432 acres (or .67 of a square mile). This area, largely an established residential land use at the time of the adjustment, was annexed by the Town of Kilmarnock from Lancaster County, and extends the town boundary to the south. Since the Town's boundary adjustment in 2007 Grace Hill Subdivision, consisting of 66 units, was recorded in this area. This single-family residential subdivision remains largely undeveloped with the exception of just a few residences.

The second factor is the dedication of two conservation easements over two large areas comprising roughly 10 percent of the land within the town of Kilmarnock. One easement primarily allows for the continued agricultural use of the property, while the other area is forested and precludes development in its entirety (including agriculture), although timber harvesting is permitted. In both cases, future, if any, structural development is restricted. These areas are shown in Figure 2.11 and are discussed further in Section G (Available Land for Development) of this Chapter.

Approved development, some of which may not be constructed or is partially built, is the last change affecting the developable area in Kilmarnock since 2006. Some new relatively large or significant projects, in addition to the Grace Hill subdivision mentioned above, include:

- Springwood Planned Unit Development (PUD), located on Yorkshire Road, consists of approximately 40 residential units, of which roughly half are constructed.
- Crossroads at the Chesapeake is a medium density residential development with approval for 128 dwelling units located adjacent to James B. Jones Memorial Highway. This project is undeveloped.
- Kilmarnock Glen is a PUD approved for 423 units with various amenities such as a park and community center. The site, located behind School Street and north of Irvington Road, remains undeveloped.
- Tartan Village is a 38-unit affordable housing government subsidized apartment complex. This project is fully constructed.
- Mercer Place provides much-needed housing for Kilmarnock's work force, such as teachers. The apartment complex has approval for 24 rental units, of which 16 are constructed. This development is located on the east side of Town north of Route 200.

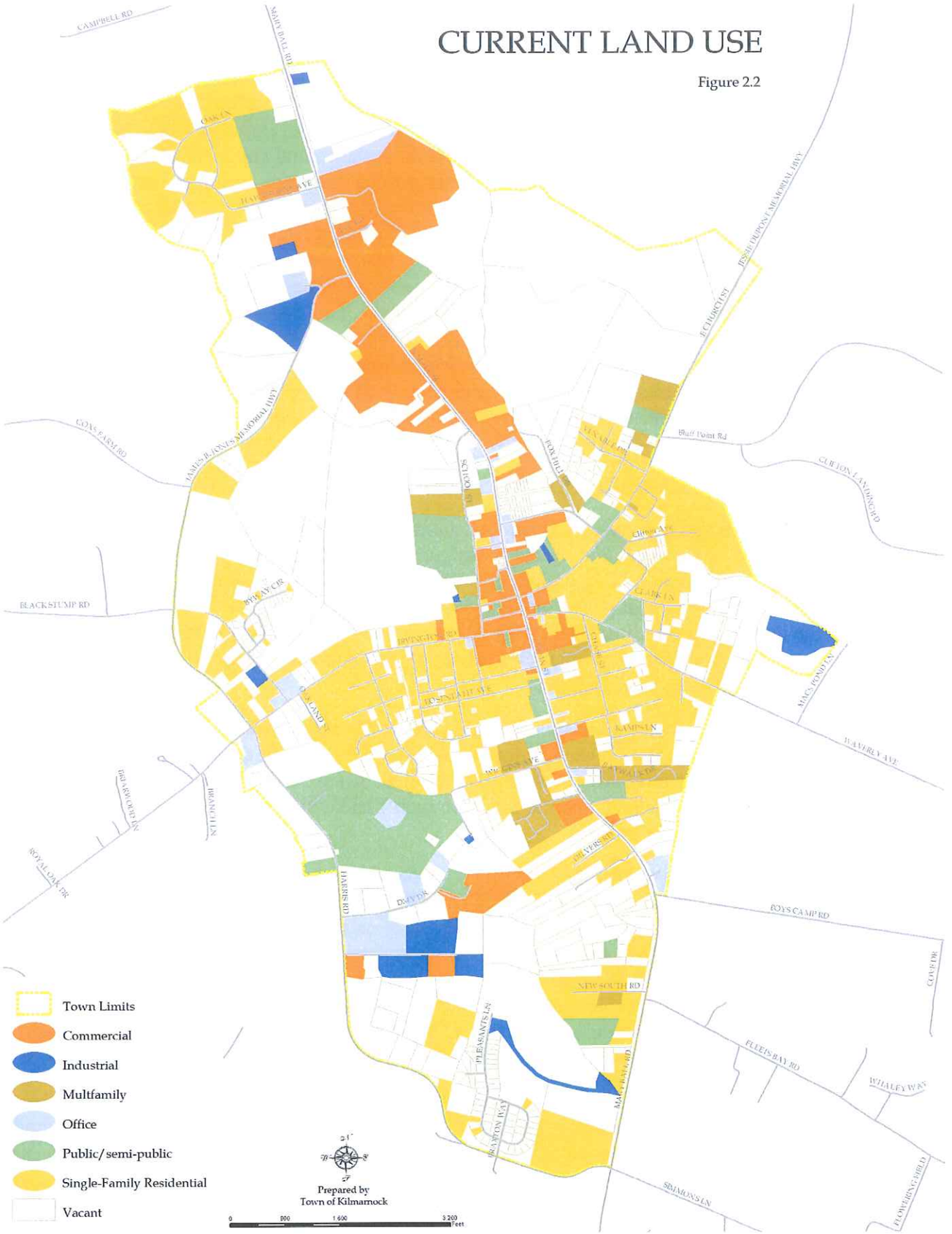
Commercial development along both sides of upper North Main Street dominated recent growth within the town limits between 2006 and 2007. Large commercial projects developed during this time include Walgreens, the Bowling Alley and Grill, and the Wal-Mart shopping complex.

Table 2.1 below summarizes the amount of land in each category described above. This table shows that of the 1,034 acres developed in Kilmarnock the primary land use is residential. Roughly 47 percent of the Town consists of single-family and multi-family residences. Offices, commercial and industrial land uses total approximately 28 percent of the developed area, with the remaining 25 percent developed with public/semi-public uses (e.g., parks) and streets.

Table 2.1
Existing Land Use, 2013
Kilmarnock, Virginia

Type of Land Use	**Acres**
Single-family Residential	436
Multi-family Residential	48
Offices	53
Commercial	220
Industrial	17
Public/Semi-public	151
Streets	109
Total Developed Area	**1,034**
Undevelopable Land	279
Vacant Developable Land	880
Total Town Area	**2,193**

Details showing the vacant and developed land in Kilmarnock are delineated in Figure 2.2.


CURRENT LAND USE
Figure 2.2
Town Limits
Commercial
Industrial
Multfamily
Office
Public/semi-public
Single-Family Residential
Vacant
Prepared by
Town of Kilmarnock
0
800
1,600
3,200
Feet
CAMPBELL RD
MARY BALL RD
OAK LN
HAYES BEACH AVE
JESSE DUPONT MEMORIAL HWY
E CHURCH ST
COXS FARM RD
JAMES B JONES MEMORIAL HWY
Bluff Point Rd
CLIFTON LANDING RD
SCHOOL ST
POX HILL
VIN GILL DR
Clifton Ave
BLACKSTUMP RD
BYWAY CIR
CLARK LN
DWINGLOW RD
CHURCH ST
MACS POND LN
OAKLAND ST
HOSPITALITY AVE
KAMPS LN
WAVERLY AVE
BRIARWOOD LN
BRANCH LN
ROYAL OAK DR
PILVERS RD
HARRIS RD
DAVY DR
BOYS CAMP RD
COVE DR
NEW SOUTH RD
PLEASANTS LN
FLEETS BAY RD
WHALEY WAY
MARY BALL RD
FRANTON WAY
SIMMONS LN
FLOWERING FIELD

This map shows the existing land use in Kilmarnock initially prepared based on a field survey and updated using the latest technology (e.g., Geographical Information System or GIS). Existing land use is shown in seven color-coded categories juxtaposed over a Town parcel map.

Figure 2.2 shows an overall existing pattern of development with various land uses. This pattern essentially establishes the framework around which future development may occur. The core downtown, anchored by several major highways, defines the central commercial area of Kilmarnock. A typical residential development pattern exists around the core business center. This area is predominantly single-family residential, with intermittent higher density residential projects. Forest Hills subdivision, located at the northern end of town, is largely developed and consists of 44 single family residential lots, each of which is larger than lots in other established residential areas of Kilmarnock. At the southern corporate line, development of the Technology and Business Park is underway south of the Rappahannock General Hospital. The east side of Kilmarnock consists of farmland, an apartment complex known as Mercer Place which provides housing for the local workforce, existing residences, and several protected areas consisting of stream basins, steep slopes and conservation easements. Medical and other office related uses, as well as residences, border the town to the west. The west side of Kilmarnock includes the most land with potential for future development.

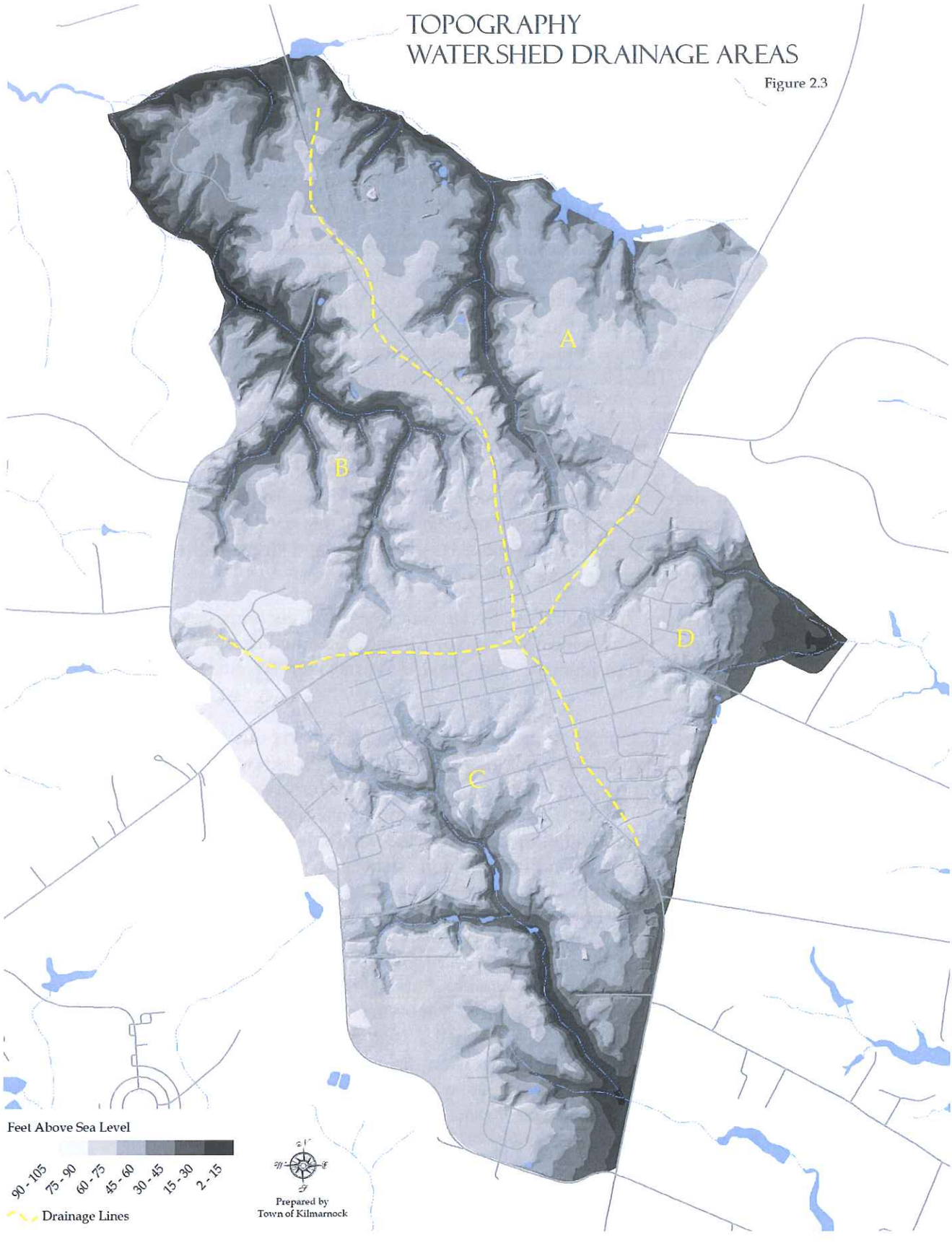
B. TOPOGRAPHY AND DRAINAGE

Topography: The topography of Kilmarnock ranges from approximately 10 to 90 feet above sea level. The steep slope areas are typically designated as a Resource Protection Area or RPA (see discussion below in Section "C" pertaining to the RPA). The RPAs include stream basins and steep banks. These areas are typically no more than 50 feet above sea level.
Within the town limits of Kilmarnock, there are two named streams (Dymer Creek and Norris Prong) as well as several unnamed tributaries. Most of the streams appear to be stable with active floodplains and fully vegetated buffers.

The streambeds vary in elevation. For example, the Norris Prong streambed is about 10-feet above sea level where it leaves the Town of Kilmarnock. However, most of the steep slopes in Kilmarnock lie along the stream basins. These areas have limited, if any, development potential and are best suited for protection and preservation to preclude runoff and siltation of the stream basins, as well as excessive erosion along the banks.

Drainage: The Town is drained by four basins, none of which is tidal. The four drainage basins are part of three larger watersheds. Each drainage basin is divided roughly along a major highway, which indicates that the major road system was initially built on highlands formed by ridge lines between each basin. An updated Watershed Assessment report was prepared for the Town of Kilmarnock in April 2013 by the Center for Watershed Protection and is incorporated by reference in this document. This report identifies each watershed as follows: 1) Drainage Basins A and B shown on Figure 2.3 below drain into the Corrotoman River (a.k.a. Norris Prong) watershed. 2) Drainage basin C is referred to as the Dymer Creek watershed; and 3) Basin D is part of the Indian Creek watershed.

The Watershed Assessment concludes that that "no runoff from other jurisdictions enters the town. [As a result,] the health of streams in Kilmarnock is almost entirely dependent on activities and land uses within its boundaries." **(Source: Kilmarnock Watershed Assessment Report, Section 1 – Introduction, 1.1 Executive Summary, p. 5, April 2013).**
Figure 2.3 illustrates the topography and delineates the approximate location of each of the four drainage basins.


TOPOGRAPHY
WATERSHED DRAINAGE AREAS
Figure 2.3
A
B
C
D
Feet Above Sea Level
90 - 105
75 - 90
60 - 75
45 - 60
30 - 45
15 - 30
2 - 15
Drainage Lines
Prepared by
Town of Kilmarnock

Significant characteristics of each drainage basin are described as follows:

Drainage Basin A is part of the Corrotoman River (a.k.a. Norris Prong) watershed and contains approximately 500 acres. This area drains into Norris Prong, a tributary to the Eastern Branch of the Corrotoman River. This area generally includes the northeastern part of Kilmarnock and is developed with a mix of land uses. Potentially adverse impacts as a result of new development may result from increased storm water runoff and sedimentation. Implementation of development policies during the planning process and construction phase of new development would minimize any impacts.

Drainage Basin B is also a part of the Corrotoman River watershed and includes the land west of Route 3 and north of Irvington Road. Existing development includes housing on the north side of Irvington Road and development west of School Street. A public school, fire station, public library and a nursing home are located in this area as is the commercial development along the west side of North Main Street. The primary potential for development in this basin is the Kilmarnock Glen PUD approved for 423 units. The site, located behind School Street and north of Irvington Road, remains undeveloped.

Drainage Basin C is part of the larger Dymer Creek watershed and contains most of the developed area in the Town south of Irvington Road and west of Main Street. The area is substantially built except for part of the Town between Dymer Creek and Kilmarnock's southern boundary. The Rappahannock General Hospital is the most predominant existing use in this area. Immediately south of the hospital is the developing Technology & Business Park and Grace Hill residential subdivision. This area is fully served by public water and sewer.

Drainage Basin D is part of the Indian Creek watershed and encompasses the southeast part of Kilmarnock, specifically that area located south of Church Street and east of Main Street. This area is substantially developed with residences. The Town's Wastewater Treatment Plant is also located in this drainage basin.

Planning issues for these drainage basins relate to potential impacts due to flood damage, as well as storm water runoff and sediment that drain into the three watersheds, eventually reaching Chesapeake Bay. Also pollutants resulting from the use of land may adversely impact the underground water supply. Implementation of policies in the plan should minimize pollutants in runoff as well as reduce the volume of runoff and sedimentation that reach the tributaries to Chesapeake Bay. These issues and policies in the Comprehensive Plan are consistent with the "Chesapeake Bay Preservation Overlay District" zoning regulations (Chapter 54 "Zoning" Article V of the Town Code) as well as those in the Best Management Practices Handbook, Planning Bulletin 522 published by the Virginia Department of Environmental Quality.

Even though runoff and sedimentation may enter drainage basins in Kilmarnock and eventually reach Chesapeake Bay, it should be noted that that no runoff from other jurisdictions enters the town. This finding is included in the Kilmarnock Watershed Assessment report (April 2013) referenced above and, as such, means that "Kilmarnock's decision-makers and citizens are in a unique position to influence their own destiny with regard to water resources, as well as have an influence on downstream waterways and communities." **(Source: Kilmarnock Watershed Assessment Report, Section 1 – Introduction, 1.1- Executive Summary, p. 5, April 2013).**

Flood Hazards. To protect the public's health and safety relative to flood hazards, Chapter 54 "Zoning", Article VI of the Town Code, sets forth regulations for the Town's "Floodplain Overlay

Districts." These regulations apply to all development and/or activity within the Town of Kilmarnock in the 100-year floodplain. The purpose of these regulations is to "prevent the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, [and] the extraordinary and unnecessary expenditure of public funds for flood protection and relief." **(Section 54-500 (a))**. Regulations require, among other things, flood proofing and elevating structures.

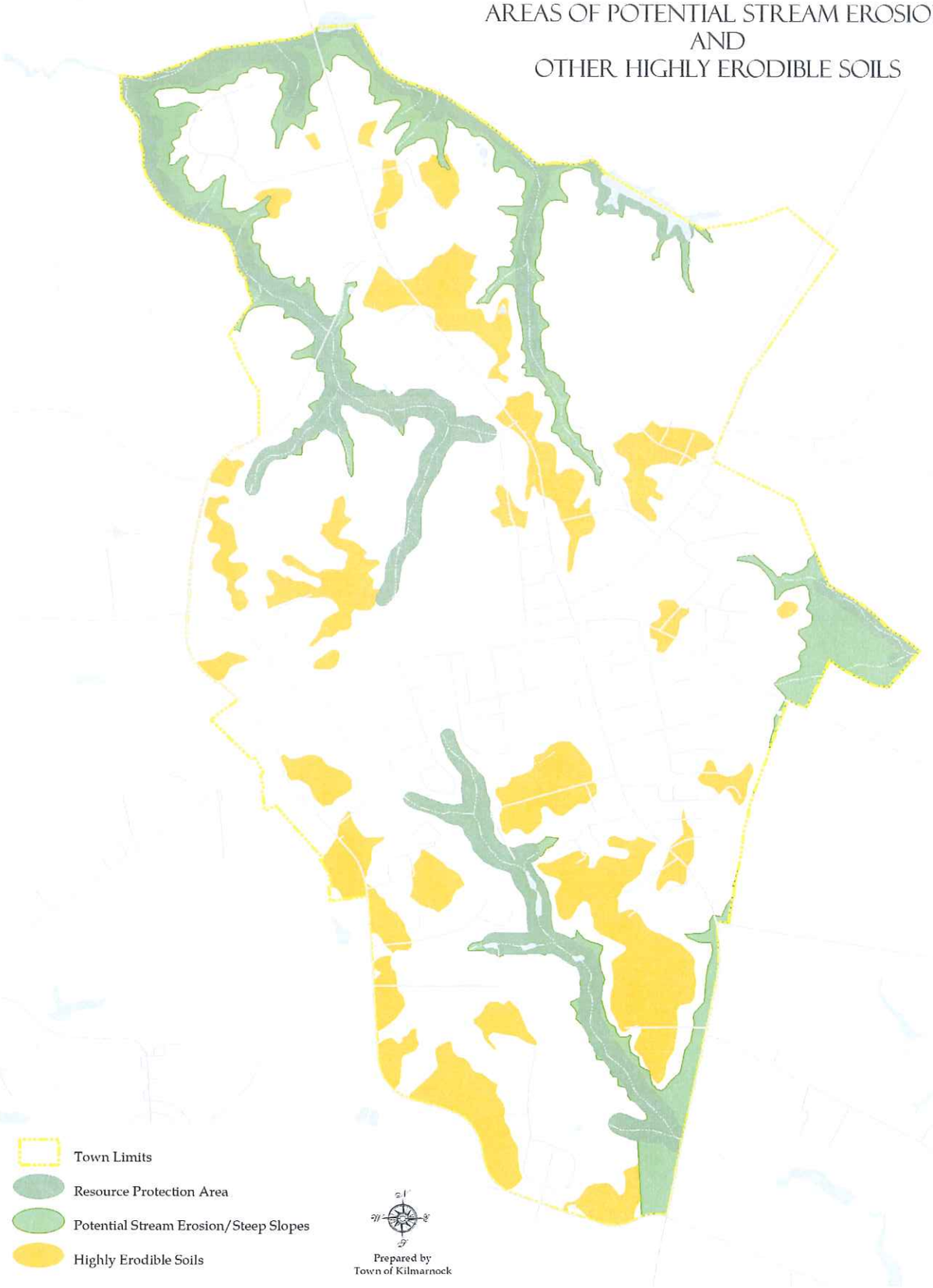
C. RESOURCE PROTECTION AREAS, POTENTIAL STREAM EROSION & HIGHLY ERODIBLE SOILS

Resource Protection Areas. Figure 2.4 delineates the Resource Protection Areas (RPAs) in the Town of Kilmarnock. The RPAs are also delineated on the land use map and are regulated by the zoning ordinance consistent with requirements of the Chesapeake Bay Preservation Act. The RPAs shall remain largely undeveloped according to the regulations in the Town's zoning ordinance and the policies set forth in this Comprehensive Plan.

RPA's include tidal wetlands, non-tidal wetlands that are connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, tidal shores, and a 100ft vegetated buffer area that is located adjacent to and landward of water bodies with perennial flow as well as all the aforesaid components. The total undevelopable area designated as a RPA is roughly 4 percent (or 84 acres) of the Town of Kilmarnock. In addition to the RPAs, this map identifies areas with the potential for stream erosion which are defined as steep slopes below the 50-foot contour. Based on USGS topographic maps, most of the land below this contour level has slopes that range from 12 to 15 percent or more. Such slopes are difficult to develop by most planning standards. In addition, steep slopes are sensitive to erosion when the land is disturbed.

RESOURCE PROTECTION AREA
AREAS OF POTENTIAL STREAM EROSION
AND
OTHER HIGHLY ERODIBLE SOILS

Figure 2.4



Several other maps in this document show that there are other qualities that make the land along the steep stream banks difficult for development. These qualities include poor soils, especially for septic systems, such as rapid permeability and high groundwater tables.

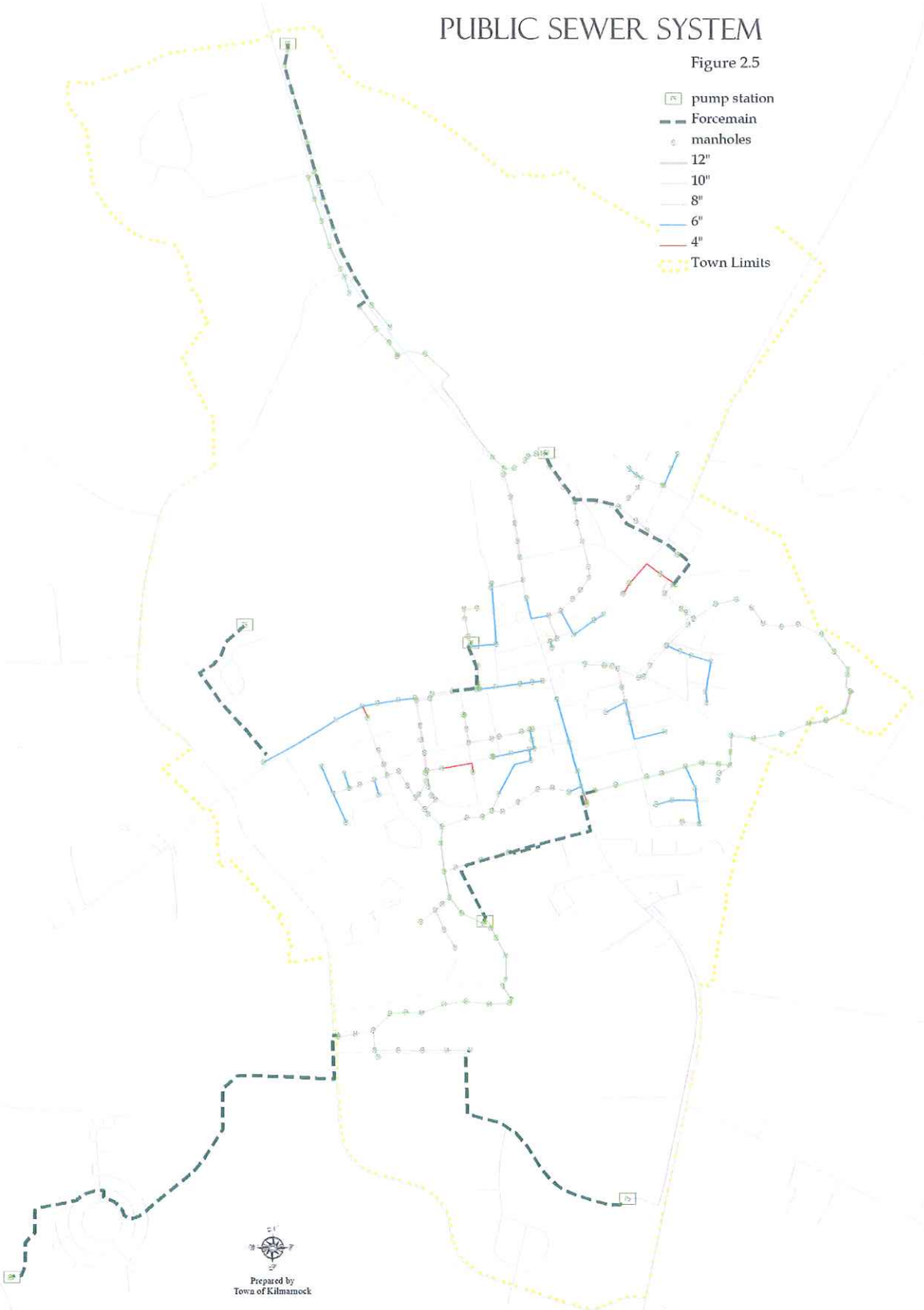
Highly Erodible Soils. Figure 2.4 also includes the County's soil survey and identifies areas with "highly erodible soils." Most of the highly erodible soils are not located on the steep slopes of the stream basins as one might expect, but on higher ground. In highly erodible locations, erosion and sediment control measures, common today for most construction activity, may be required as part of the planning and construction process.

Stream bank erosion also occurs naturally as part of the hydrologic cycle, but the rate of erosion may be accelerated if pre-existing hydrologic conditions are not properly mitigated during the development planning process and adequately enforced during construction. Most development results in an increase in impervious surface coverage which in turn increases the volume and rate of storm water runoff. An increase in runoff may scour stream banks and introduce a significant amount of sedimentation into the stream. For this reason, measures to minimize sedimentation, erosion and runoff must be considered as part of any development proposal.

To mitigate these potential impacts and to comply with federal and state requirements, the Town of Kilmarnock has adopted the "Chesapeake Bay Preservation Overlay District" (Town Code, §54-481). Areas covered by the overlay zoning district include "floodplains, highly erodible soils, steep slopes, highly permeable soils and non-tidal wetlands." Regulations set forth in the ordinance are intended to protect the stream basins and steep banks. In addition to the zoning regulations, policies for the protection of these natural resources are included in Chapter 5 (Preservation of Resources).

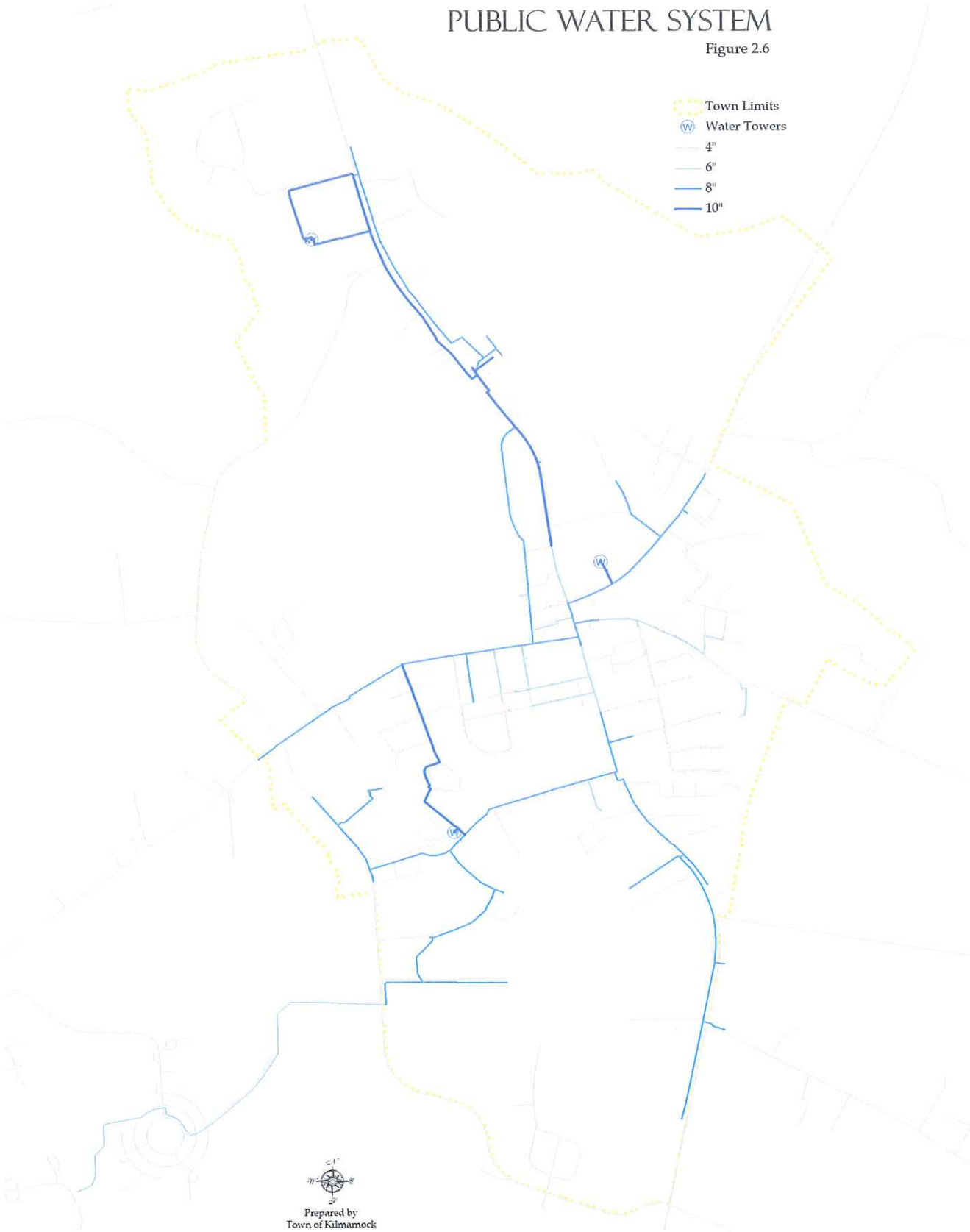
D. SOIL SUITABILITY FOR SEPTIC SYSTEMS & SEWER/WATER INFRASTRUCTURE

Most of the developed area in Kilmarnock is served by a public water and sewer system. Policies (see Chapter 4) and regulations (Chapter 50 "Utilities" of the Town Code) require new development to be served by public sewer and water. This applies specifically to new subdivisions and other major projects. Development of a single vacant lot is also required to connect to the public infrastructure if the property is within 250-feet of a water and sewer line. The infrastructure for the Town's public sewer system and public water system is shown on Figures 2.5 and 2.6, respectively. Public services and facilities related to sewer and water are discussed and analyzed in more detail in Chapter 4.

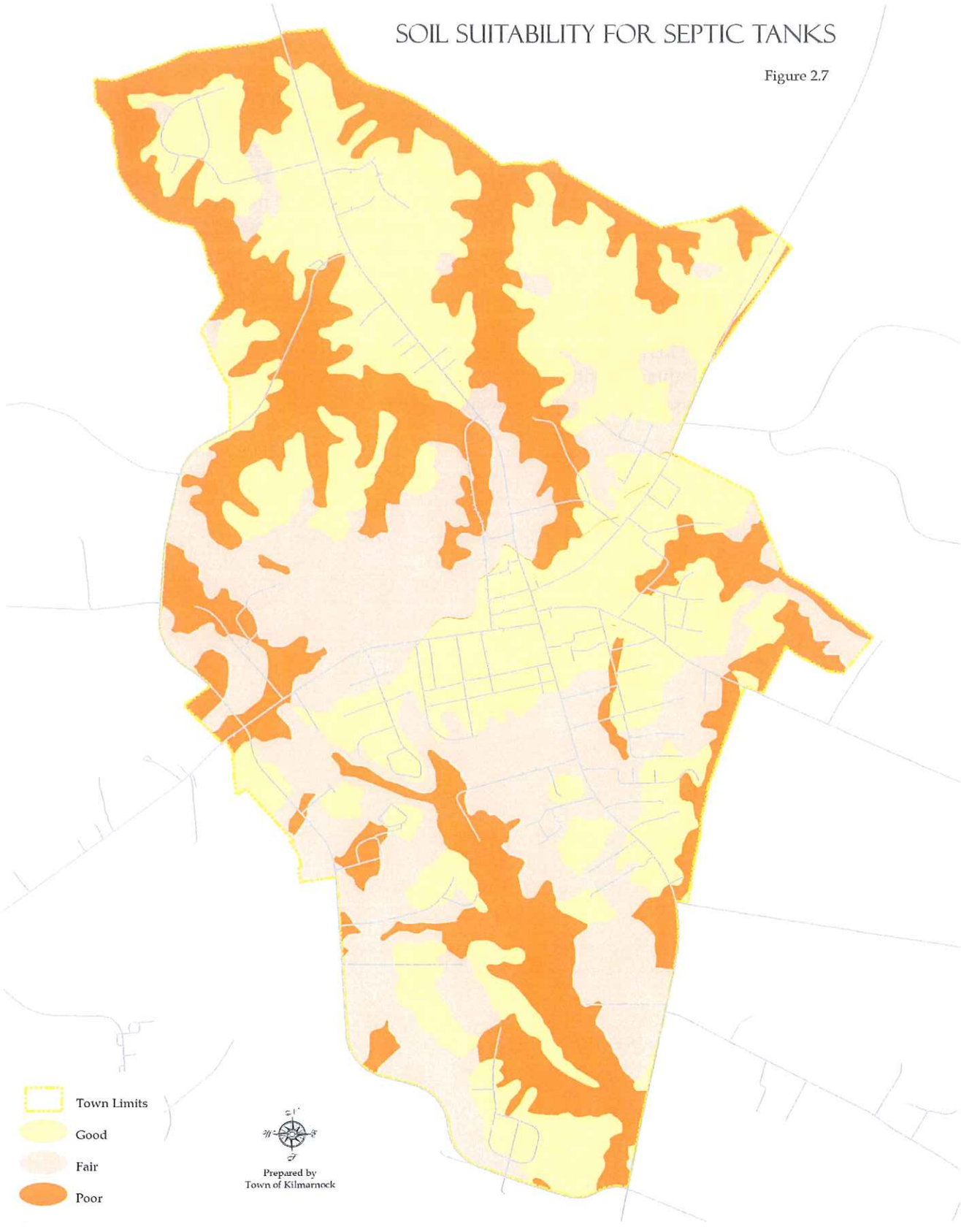

PUBLIC SEWER SYSTEM
Figure 2.5
pump station
Forcemain
manholes
12"
10"
8"
6"
4"
Town Limits
Prepared by
Town of Kilmarnock

PUBLIC WATER SYSTEM

Figure 2.6

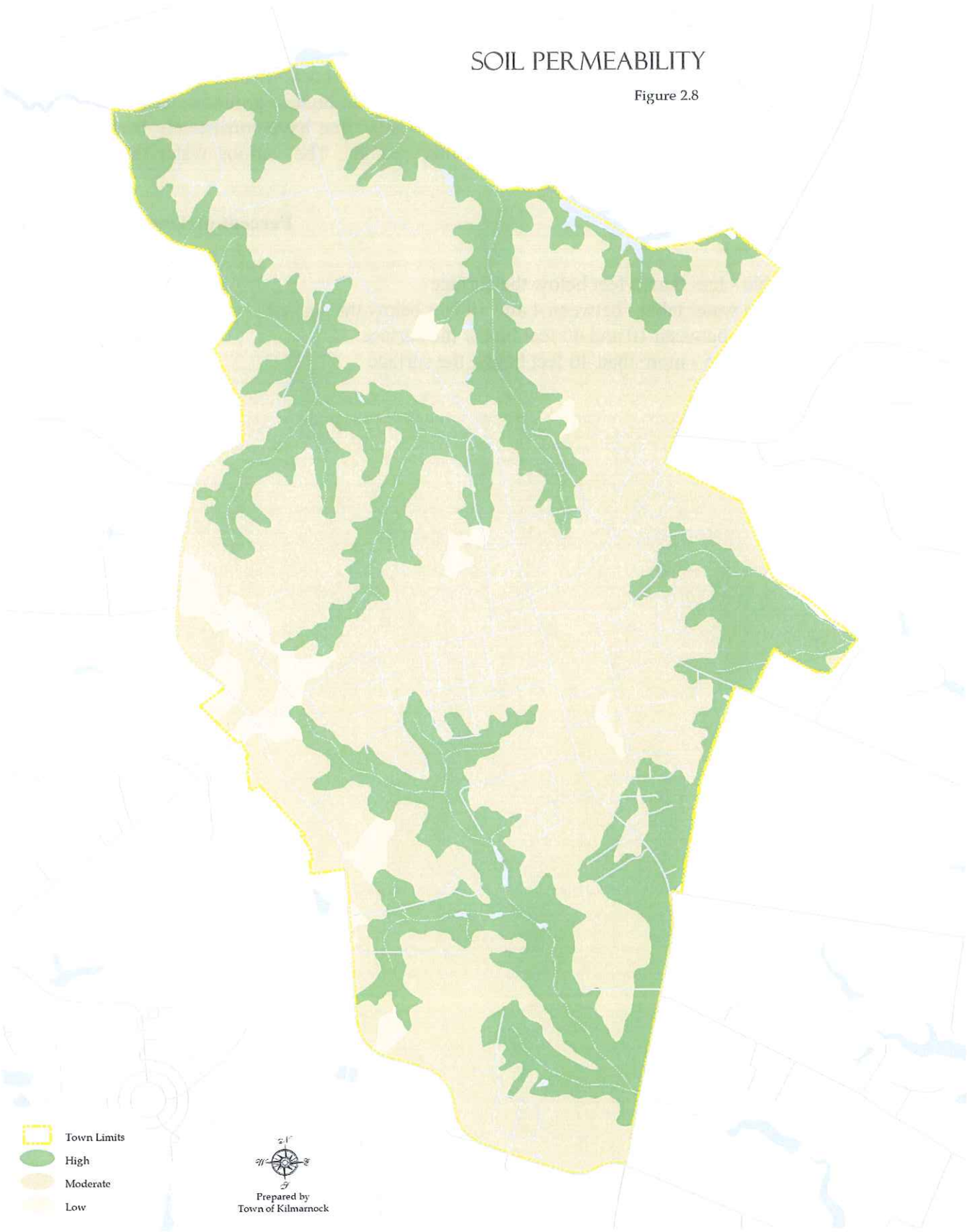


There are roughly 45 developed properties that are currently not connected to the sewer system, but are served by the Town's public water supply. The primary areas in the Town of Kilmarnock which are developed with septic systems include the 44-lot Forest Hills residential subdivision (these lots are larger in size than most of the other residential parcels in Kilmarnock so there is ample area for a septic leach field) at the north end of town, as well as a few commercial properties along North Main Street. For this reason, soil suitability is an issue to address to ensure the soil's ability to digest wastewater if development is to occur in areas not served by public sewers, such as the Forest Hills subdivision. Figure 2.7 identifies those areas within Kilmarnock's corporate limits where soil conditions are considered good, fair or poor for septic systems and related development. Poor soils are typically found where other environmentally sensitive soil conditions (e.g., RPAs) exist. The poor soils more or less follow stream basins and steep slopes. These sensitive areas are discussed throughout this Chapter.


SOIL SUITABILITY FOR SEPTIC TANKS
Figure 2.7
Town Limits
Good
Fair
Poor
Prepared by
Town of Kilmarnock

A major factor in the soil's ability to accommodate septic systems is its permeability. Permeability indicates the speed at which water passes through a particular soil which is also referred to as a "percolation" rate. Soils with extremely slow percolation may result in wastewater standing or slightly below the surface which would ultimately runoff to streams in storm water. On the other hand soils with an extremely fast percolation rate may result in wastewater filtering, undigested, to the water table below, with the possibility that it would mix with and contaminate a potable water source. The acceptable standard established by the Virginia Department of Health is that percolation rates should be no greater than five minutes per inch and no less than 120 minutes per inch. **(Source: Email from Don Alexander of the Virginia Department of Health dated June 7, 2005, quoting from regulations that have been in effect since 1982.)**

The soil permeability map (Figure 2.8) is similar to other maps in this Chapter which show poor soil qualities. Most of the highly permeable soils (those labeled "high" on the map) are located along streambeds and banks. This is, in part, the result of years of erosion from higher ground settling into the lower stream and drainage basins. The map shows most of the soil in Kilmarnock is classified as "moderate" which is acceptable for septic system disposal fields.


SOIL PERMEABILITY
Figure 2.8
Town Limits
High
Moderate
Low
Prepared by
Town of Kilmarnock

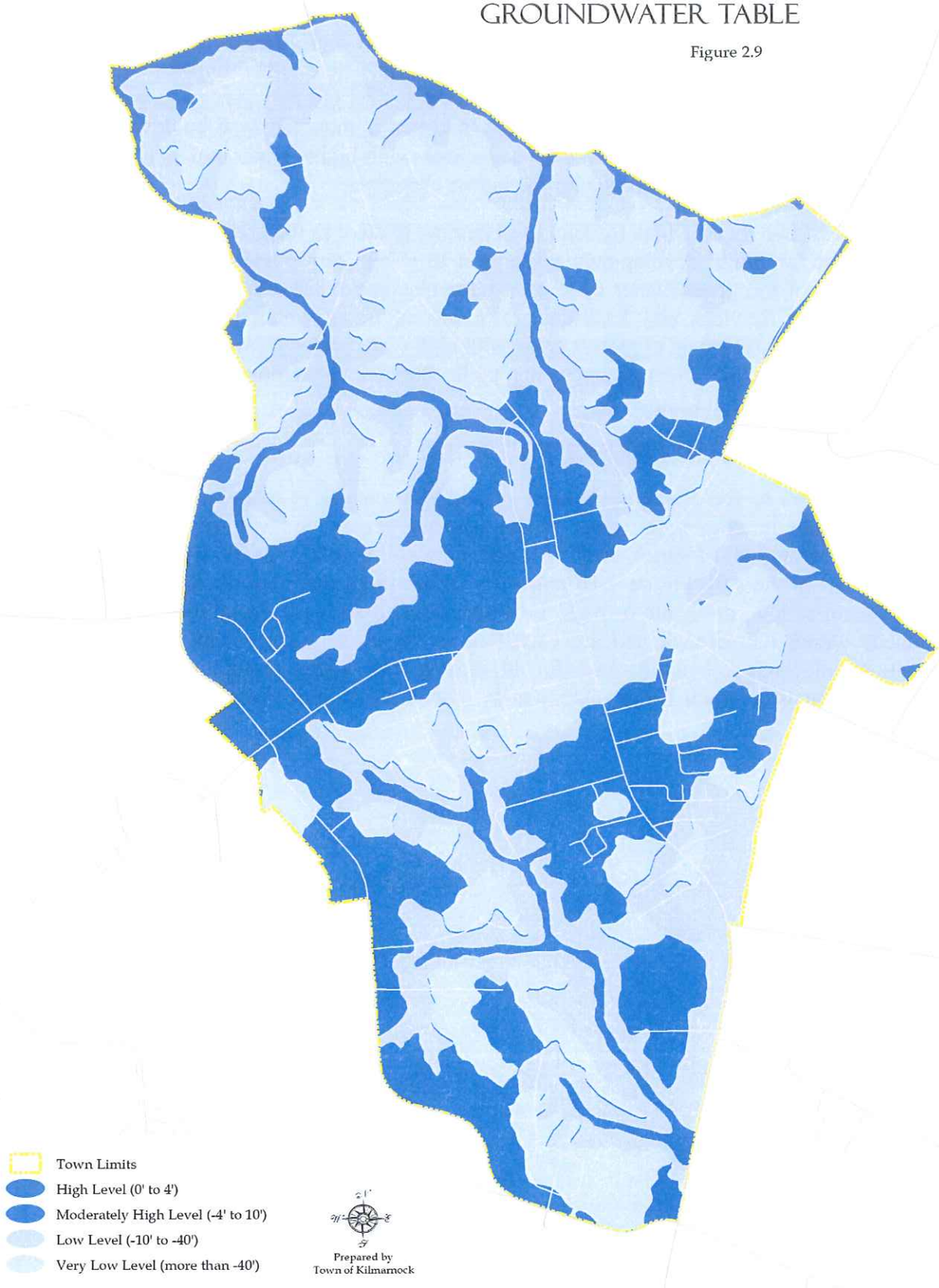
E. GROUNDWATER TABLE

Figure 2.9 shows the various depths of groundwater in Kilmarnock. The designations on the map are from the Lancaster County Soils Survey map. Areas with the highest groundwater are located in and near stream bottoms and basins. These are the same areas that have consistently been identified as having unsuitable soils for development for other reasons. The various water table levels, as a percentage of the Town, are as follows:

Water Table Class	Percent of Town's Area
High water table - less than 4 feet below the surface	11
Moderately high water table - between 4 and 10 feet below the surface	24
Low water table - between 10 and 40 feet below the surface	30
Very low water table - more than 40 feet below the surface	35

GROUNDWATER TABLE

Figure 2.9



Most of the developed land in Kilmarnock is in areas where the groundwater table is 10 to 40 feet below the surface. In fact, roughly two-thirds of the Town of Kilmarnock has a low to very low groundwater table. The remaining third of the Town, with a high to moderately high groundwater table, is located almost exclusively along stream basins where other unfavorable development conditions exist. The higher ground, which also has the lowest groundwater table, is the best quality land for development. A large part of the vacant land that is most likely to be developed has water tables of more than 40 feet although there are some areas with higher water tables. The history of land use in Kilmarnock reflects a preference for the higher elevations.

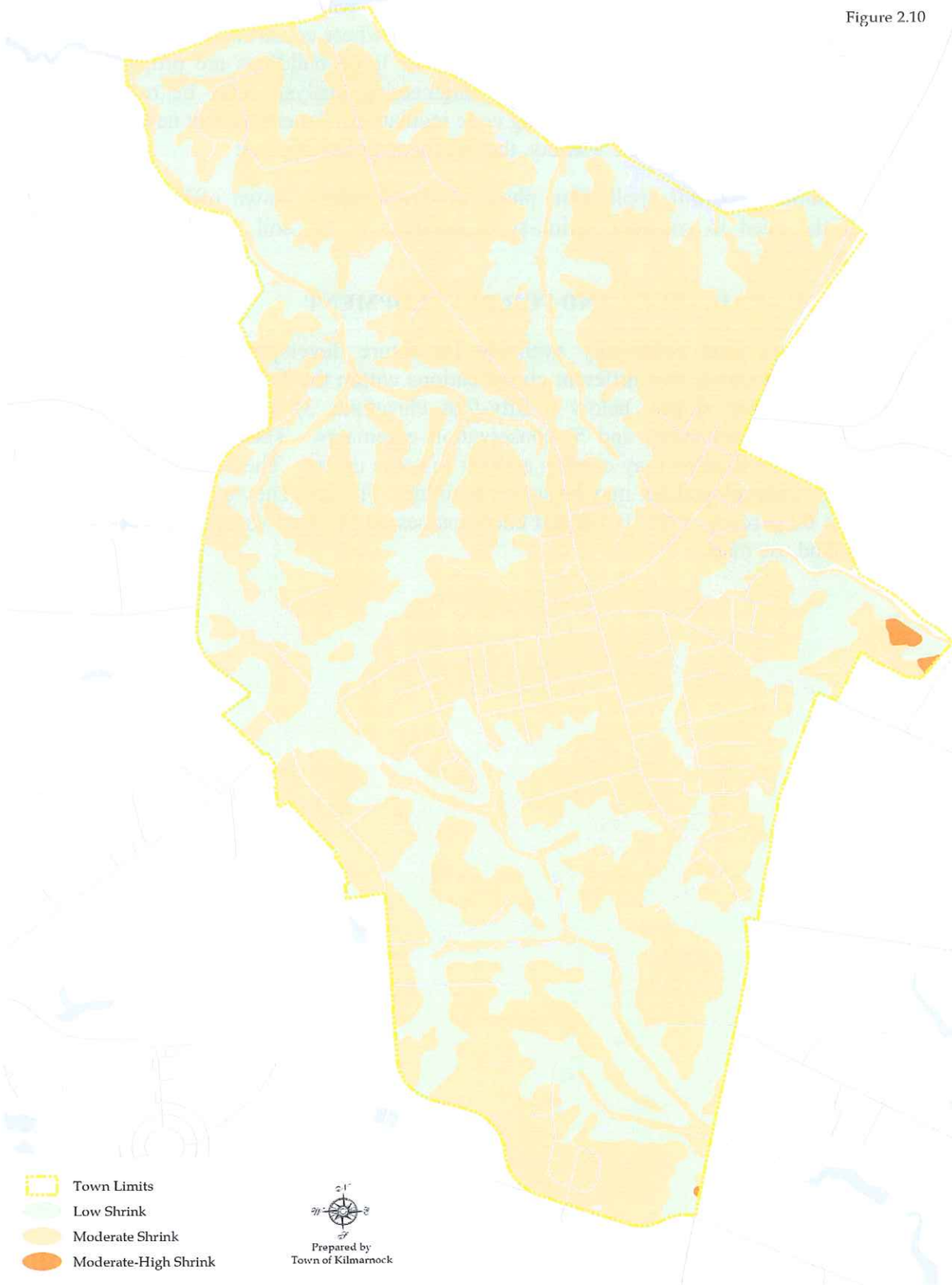
There are at least two implications for land use planning relative to the groundwater level. The first is the requirement for future development to connect to public sewer and water service, particularly given the depth of the groundwater table on a particular site. This subject is discussed in detail in Chapter 4 (Public Services and Facilities). The second issue, which is discussed in Chapter 5 (Preservation of Resources), is to protect areas with high water tables from construction and land uses that may contaminate the underground water table. Policies pertaining to the protection of water quality are also included in Chapter 5.

F. SHRINK-SWELL QUALITIES OF THE SOIL

Shrink-swell refers to the changing volume of soil as moisture is gained or lost. The interaction between minerals in clay with water is the primary reason for volume changes to the soil. Accordingly, the amount of shrink-swell in a particular soil is related to the type and amount of clay minerals found in the soil. Figure 2.10 maps the shrink-swell qualities of soils in Kilmarnock and classifies them as low, moderate or high. Low shrink-swell soils are found mostly in the low-lying streambeds within Kilmarnock and are classified as the most stable of the three classes of soil. Moderate shrink-swell soils are located, for the most part on higher ground, and are virtually in the same area shown as favorable for development by other criteria described in this Chapter.

SHRINK-SWELL QUALITIES OF SOILS

Figure 2.10



The implications of shrink-swell soils for planning and building relate to the design of building foundations. The goal is to ensure that new buildings in areas with shrink-swell soil constraints are constructed with sufficient foundations. Within those areas where construction is proposed on soils with high shrink-swell qualities and/or if multi-storied or large buildings are proposed, a special foundation investigation and design, such as an engineering analysis, may be required. These requirements are also part of the State's building code regulations. To ensure that new construction is properly designed to protect the public's safety, the following policy applies:

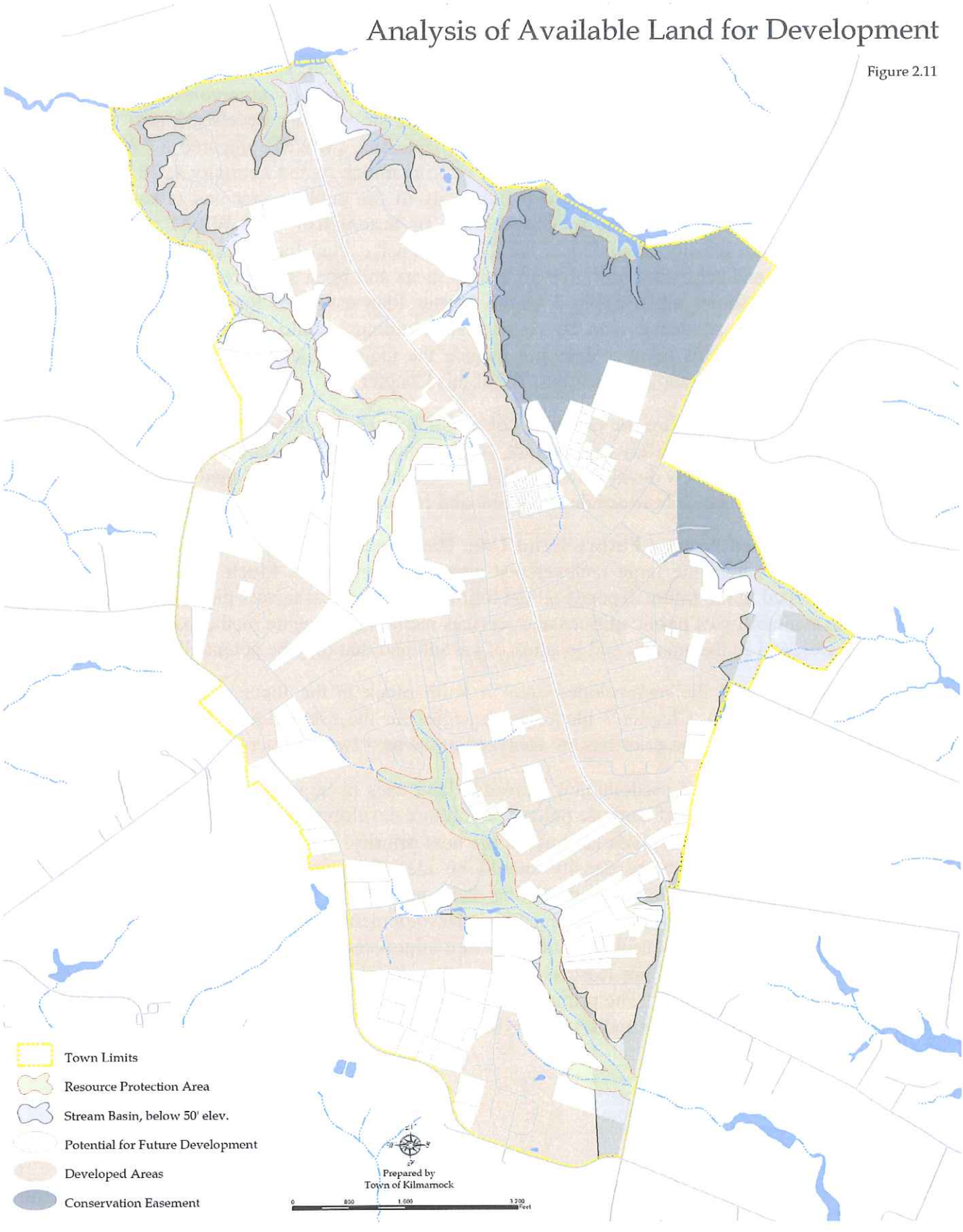
1. During the building permit application phase of development, Town officials should advise builders of the need to consider shrink-swell qualities of the soil when designing building foundations.

G. ANALYSIS OF AVAILABLE LAND FOR DEVELOPMENT

Figure 2.11 illustrates land potentially available for future development within the Town of Kilmarnock. The map shows five different classifications within the Town: 1) designated RPAs; 2) stream basins with steep slopes, below a fifty-foot elevation; 3) areas with the potential for development; 4) developed areas; and 5) conservation easements. These areas are not mutually exclusive, as each classification may overlap another to some extent. The areas on Figure 2.11 that are not shaded are undeveloped but may be so in the future. The area shown as developed on Figure 2.11 totals about 60 percent of the Town and encompasses all the land use classifications portrayed on the existing land use map.

Analysis of Available Land for Development

Figure 2.11



A few of the major issues related to future development of Kilmarnock are described below:

A. **Infill Development:** Vacant land within the developed area is comprised of numerous undeveloped lots of record. Development of these lots is commonly called "infill". A reasonable amount of infill development within the existing developed area in Kilmarnock should be expected. Waste Water Management, Inc., (WWM) prepared a "Water and Sewer Master Plan" (Master Plan) for the Town of Kilmarnock (dated February 4, 2010) to determine build-out potential as it relates to the capacity of the public water and sewer systems. (This specific issue is discussed in Chapter 4.) To accomplish this, WWM used the approved development density identified in the Comprehensive Plan for areas where no development is proposed and subtracted resource protection areas and open space requirements to estimate the number of future units. Table 3 of the Master Plan estimates that a total of 314 infill units (roughly 229 residences and 85 commercial buildings) could be constructed in the future in Kilmarnock. This number does not include the major projects approved but not built. These projects are listed above in Section "A" of this Chapter.

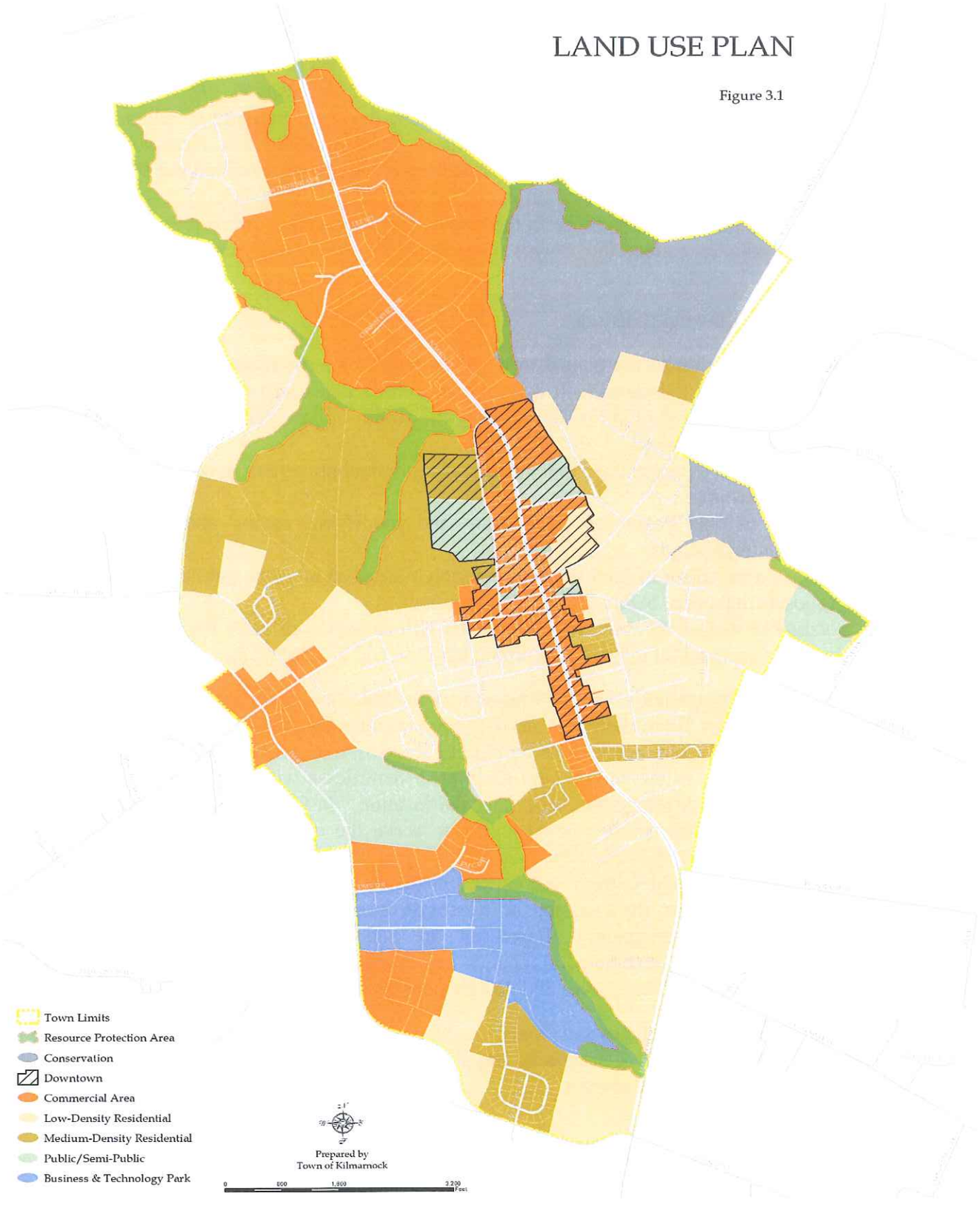
   Zoning regulations are the primary tool to guide infill development to ensure the protection of the public's health, safety and welfare. Implementation of the zoning ordinance also ensures the compatibility of new development with the surrounding established land uses, and establishes an appropriate balance between development and community services.

B. **Undeveloped Areas / Future Land Use:** The second issue concerns how future development should occur in the large undeveloped areas of Kilmarnock. Much of how the community is developed in the future depends on the following 1) physical factors discussed in this Chapter; 2) the availability of public utilities and services including adequate road capacity, public water and sewer; and 3) the amount and location of vacant land that may be potentially developed.

Future land use of the undeveloped area in Kilmarnock is the focus of the next chapter in this Comprehensive Plan. Chapter 3 identifies strategies for the use and/or development of these areas. The following issues and priorities are analyzed in the next two Chapters:

- Identification of predominant allowable land uses in large undeveloped areas is the highest priority in terms of land use policies and future development.
- The intensity of a given land use is the next priority. For example in residentially designated areas the appropriate density should be identified as "low, medium or high" to ensure compatibility with the surrounding land use, while balancing physical factors and the infrastructure capacity. A Planned Unit Development (PUD) and/or cluster development may reduce costs and consolidate infrastructure improvements.
- Last, but certainly not least, is the capacity of Kilmarnock's infrastructure to accommodate future development. The primary issues include, but aren't limited to, roads, and the ability to provide public water and sewer service.

CHAPTER 3
LAND USE PLAN



A. THE ROLE OF THE LAND USE PLAN (LUP)

This chapter focuses on existing and future land use in the Town of Kilmarnock. The LUP establishes the framework for managing future growth and development and contains two major components: 1) the "land use plan map" *(referred to as the LUP Map in this chapter – See Figure 3.1)* which identifies various land use designations based on existing development patterns, and serves as a guide for potential development and land use in the future -- at least for the next decade or more; and 2) a set of general land use and development policies for each classification of land use shown on the LUP Map. These policies are "broad-brush" in nature rather than specific regulations - the latter function reserved for regulations, such as those in the zoning and subdivision ordinances. Together the land use map and policies reflect the town's vision for the future use and/or development of the community.

The LUP has the following functions:

1. Represents the vision of the community and its leaders for future use and development of land within the Town of Kilmarnock. It is important to have consensus within the community so that the vision set forth in the LUP is supported by the public, as well as officially sanctioned by Town Council when it is adopted.
2. Serves as a guide to any change in character of individual properties as they change from one use to another over time.
3. Provides a rational basis for establishing and modifying zoning and other land use and development regulations.
4. Establishes a broad set of land use policies which are used to guide public and private decisions on proposals that come before the local government.
5. Is a valuable tool of communication between Kilmarnock's citizens, applicants/developers and the local government on matters concerning land use and development.

Description of Kilmarnock's LUP: Consistent with State law, preparation of Kilmarnock's LUP involves several steps. First, there is a need to project potential development and identify where it may occur. Chapter 1 examines various build-out scenarios, overall population density, and baseline socioeconomic factors in the community. Chapter 2 identifies a wide range of physical constraints that may affect future development, especially the location. In Chapter 4, development potential is tied to the town's infrastructure and its ability to serve the community. Chapter 5 addresses the protection of resources, in particular the quantity and quality of the Town's long-term water supply to ensure its sustainability for current and future residents. After analyzing all of the above issues, constraints, and resources, the last step is to convert these factors into development policies and appropriate land use designations. Based on the analysis outlined above, general land use designations and related development policies are discussed in this Chapter, consistent with the accompanying LUP Map. These areas and designations are listed below:

1. General Development Policies and Goals
2. Resource Protection Areas, Chesapeake Bay Preservation Act and Conservation Easements
3. Future Land use and Development
4. Commercial Areas
    a. Downtown
    b. North Main Street

c. Partially Undeveloped Commercial Area (generally located at the intersection of Route 200 or Irvington Road, James B. Jones Memorial Highway, and Harris Road extending south of the Business and Technology Park)

5. Residential Areas
   a. Established Residential Neighborhoods
   b. Low Density Residential
   c. Medium Density Residential
6. Public / Semi-Public Uses
7. Business and Technology Park

Sections C, D, E and F: The last four sections of Chapter 3 address: C) development proposed in the unincorporated area adjacent to Kilmarnock; D) housing for Kilmarnock's work force and affordable housing for low-income residents; E) economic development; and F) implementation of the LUP.

B. LAND USE PLAN - DEVELOPMENT POLICIES

1. **Development Policies in General:** Policies in this section reflect the town's vision for development and land use in Kilmarnock, as well as legal mandates for land use in the State of Virginia. The Town's primary policies pertaining to future land use activity in Kilmarnock are to ensure that all development, including redevelopment:

   2. Occurs in an orderly manner and is harmonious with the existing community and surrounding area in which it is located
   3. Protects, enhances or otherwise improves the health, safety and welfare of Kilmarnock's residents and visitors alike
   4. Is consistent with the Town's ability to accommodate the future population in sync with public facilities and services. Future water and sewer demands requiring system upgrades should be coordinated with the town's long-term capital improvement plan to respond to growth and change in land use
   5. Maintains the delicate balance and land use compatibility with the natural environment and that state waters, other sensitive environmental resources, and historical features of the community be protected
   6. Enhances and maintains a strong sustainable economic base by assuring appropriate development policies and designation of sites for the growth and/or expansion of existing businesses, development of new commercial uses and technical industries which also provide an expanding base of quality jobs that pay a living wage for residents of the area.

Specific policies for each area designated on the LUP Map are presented in the sections that follow below:

2. **Resource Protection Areas (RPA), Chesapeake Bay Preservation Act (CBPA) and Conservation Easements:**

Figure 2.1 in Chapter 2 shows that roughly 13 percent of the total acreage (i.e., 2,193 acres) within the Town of Kilmarnock is essentially undevelopable, consisting of RPAs and conservation easements. It is doubtful that this acreage will change or be developed unless or until the existing conservation easements are modified, new easements are dedicated, and/or additional land containing environmentally sensitive areas is annexed to Kilmarnock. In this section three topics are discussed which address land use in environmentally sensitive areas. These are:

a. Resource Protection Areas (RPAs);
b. Chesapeake Bay Preservation Act (CBPA) and related Chesapeake Bay Preservation Overlay District (CPBOD) which covers the entire Town of Kilmarnock, and areas within the 100-year floodplain; and
c. Conservation easements.

Chapter 2 (Physical Conditions Affecting Development) of this document describes the features of the RPAs and the physical factors that limit development. Chapter 5 (Preservation of Resources) addresses protection of these natural resources and the quality of the water/runoff that drains into Kilmarnock's stream basins, ultimately ending up in Chesapeake Bay. Additional policies for preservation of these natural resources are included in Chapter 5.

a. RPA: The RPA shown on the LUP Map is officially defined as "that component of the Chesapeake Bay Preservation Area comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters" (§54-481, Town Code). Based on §54-482 of the Town Code, "the RPA includes: a) Tidal wetlands; b) Non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow; c) Tidal shores; and d) a 100-foot vegetated buffer area located adjacent to and landward of . . . both sides of any . . . water bodies with perennial flow. . . . The full buffer area shall be designated as the landward component of the RPA." In the case of Kilmarnock, the above definition of an RPA primarily applies to the various unnamed stream basins, the two streams known as Dymer Creek and Norris Prong Creek, and that area adjacent to the Indian Creek tributary where the Wastewater Treatment Plant is located. RPAs also include highly erodible soils, particularly on the steep slopes, which are part of the 100-foot vegetated buffer.

Several maps in Chapter 2 show that the RPAs and soil conditions, in all practicality, render these areas unbuildable. Nearly 13 percent (roughly 279 acres) of Kilmarnock is within an area that is essentially undevelopable. Practically no development has occurred within these areas in the past (see Figure 2.1 – Existing Land Use), which is a factor that protects the stream banks and basins from erosion. Soil erosion control measures and the CBPA regulations are intended to prevent further damage to the stream environment as a result of construction and land use activity.

While erosion and runoff occurs naturally, development and land use activities may exacerbate the process, as well as introduce contaminants to protected areas. These issues must be properly addressed and implemented during the planning and construction phase of any new development proposal, especially those located in proximity to a designated RPA. Most development results in an increase in impervious surface coverage which, in turn, typically increases the volume and rate of storm water runoff and pollutants. The increased rate and volume of runoff, in turn, may scour stream banks and introduce a significant amount of sediment and contaminants into the stream. In addition, construction activity and development in proximity to an environmentally sensitive area may result in an adverse impact to these sensitive resources, especially stream banks, if not adequately mitigated.

With these issues in mind, the following policies apply to the RPAs in Kilmarnock in order to protect steep slopes, minimize surface runoff, soil erosion and the amount of pollutants entering the surface water as a result of development or other land use activities. These policies apply to a specific project if a portion of the property contains an area designated for resource protection as shown on the LUP Map and/or based on staff's on-site inspection.

7. Protect steep slopes along creek banks and other sensitive areas designated for resource protection from soil erosion and construction activity by implementing water quality Best Management Practices (BMP) during the planning and construction phase of all new development. These practices include, but aren't limited to, provision for an adequate setback for new development located in proximity or adjacent to a stream bank, and other protected areas. In addition to the permanent setback, designation of an adequate buffer using natural (e.g., hay bales) or man-made (e.g., fencing) materials to protect the sensitive area and stream basin during grading activity, construction and staging of heavy equipment is appropriate.
8. As part of the planning process, encourage developers to utilize innovative land use designs and techniques, such as clustering development, designation of conservation easements, etc., to provide a natural buffer from steep slopes and environmentally sensitive areas.
9. Discourage development on highly erodible soils and/or slopes greater than 15%. Generally, development on steep slopes 25% or more is not allowed. Exceptions to this policy may be appropriate under certain circumstances.
10. Encourage residents to establish adequately vegetated buffers (as opposed to grass lawns) with native, drought tolerant, low maintenance, and/or riparian plant species adjacent to streams, stream banks, and other environmentally sensitive areas, in order to reduce the potential for erosion and runoff. The use of environmentally safe products for maintenance of the landscaped buffer, until established, can decrease contaminants in runoff that may impact streams, rivers and the Chesapeake Bay. (Please refer to policies in Chapter 5 and the discussion related to groundwater protection and the use of herbicides, etc.)
11. Encourage developers and residents to minimize impervious surface coverage by reducing paved surfaces or using an alternative method. One example is to use gravel or some other pervious surface for driveways as opposed to asphalt or concrete. The size of a structural footprint adjacent to a sensitive area may also be reduced. Reduction in impervious surfaces should be encouraged throughout the Town of Kilmarnock but is especially important adjacent to protected and/or sensitive areas. (Please refer to Town Code §54-481, "Chesapeake Bay Preservation Overlay District," for specific requirements pertaining to impervious surface coverage.)
12. Continue to work with the Virginia Department of Transportation (VDOT) to rectify any existing drainage, storm water management and/or erosion problems arising from existing roads, new road construction and storm drain maintenance.

There is no underlying zoning classification for the RPAs as shown on the LUP Map. This is primarily due to two factors: 1) almost all of the parcels with an RPA designation are privately owned with, for the most part, an underlying zoning classification of either residential or commercial; and 2) the RPAs shown on the LUP Map are not considered precise delineations of the environmentally sensitive areas and, as such, do not follow property lines. The RPA boundaries meander and change over time due to natural causes. As a result, development on parcels in proximity to an RPA must be evaluated on a case-by-case basis as part of the planning and site review process.

b. CBPA and Kilmarnock's "Chesapeake Bay Preservation Overlay District" (CBPOD): The Town of Kilmarnock is subject to the Chesapeake Bay Preservation Act (CBPA) primarily because it is located within the Chesapeake Bay Watershed. A description of the regional watershed is included in Chapter 5. To ensure compliance with the CBPA, Kilmarnock adopted the "Chesapeake Bay Preservation Overlay District" or CBPOD (Town Code, §54-481). The entire Town is located within this "Overlay District." In addition to the RPAs, defined in the above section, all the remaining land within the town is designated as a Resource Management Area or RMA pursuant to the CBPOD. The RMA includes all lands within the town that are not designated as RPA. Regulations for the RMA

address "land types that, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area" (§54-482, Town Code).

Based on the above, all development in Kilmarnock is subject to the zoning regulations contained in the Town's CBPOD. These regulations address, among other things, new construction, redevelopment, land disturbance, and land use activity. Requirements include, but aren't limited to, an overall reduction in impervious surface coverage; an overall decrease in non-point source pollution; and installation of landscaped buffers, especially adjacent to environmentally sensitive areas. No additional land use policy is required for the RMA in this chapter since existing zoning regulations for the "Overlay District," adopted in compliance with the CBPA, adequately address new development.

100-Year Floodplain: There are also areas within the Town of Kilmarnock located within the 100-year floodplain. These are, for the most part, in proximity to stream basins and RPAs. Flooding and runoff in these locations may also have the potential to cause water quality degradation if development is not properly planned and constructed. To protect these sensitive resources as well as the public's health and safety during a flood event, the Town adopted a "Floodplain Overlay District." Chapter 54 "Zoning", Article VI of the Town Code, sets forth regulations for development within the 100-year floodplain in Kilmarnock. Regulations require, among other things, flood proofing and elevating structures. No additional policy is required for development located within the 100-year floodplain, as defined in the "Floodplain Overlay District," since existing zoning regulations, adopted in compliance with the Federal Emergency Management Agency or FEMA standards, adequately address new development.

Rare or Endangered Animal and Plant Species: Since this section addresses environmentally sensitive areas, it is important to note that there are no documented rare, threatened or endangered animal or plant species within the town's limits based on a review provided by the Virginia Department of Conservation and Recreation Natural Heritage Program.

c. Conservation Easements: There are two areas on the LUP Map designated for "Conservation." These areas consist of two conservation easements: a 195-acre easement dedicated to the Virginia Outdoors Foundation and a 27-acre easement held by the Northern Neck Land Conservancy. In exchange for dedication of the easement, the landowner may receive certain income, or estate and property tax benefits while still maintaining ownership of the property. In one case the property is currently farmed and the agricultural use on that site may continue. The other property is forested; the only allowable use, pursuant to the language in the deed restriction for the easement on that parcel, is timber harvesting.

In each case language in the deed restriction for the conservation easement specifies what the property owner(s) may or may not do on the property in terms of development and land use activity. As such, regulation of the "type" of land use and/or development is beyond the purview of the Town of Kilmarnock. However, when and if development is proposed on either parcel or in the event the easement(s) is revoked or removed, regulations for the underlying zoning district would apply. In both cases the parcels are zoned for an "Agricultural" use. There are no other areas in the Town of Kilmarnock designated for "Agriculture."

3. Future Land Use and Development:

How much of Kilmarnock is undeveloped but buildable? Where should development be located? What types of land use are likely to be developed? The following sections of this Chapter address these questions and include policies for new development in areas that are currently vacant but potentially buildable. Roughly 40 percent (880 acres) of the land in Kilmarnock falls into this category, with the potential to be developed in the future. The types of land use that may be developed in Kilmarnock, as shown on the LUP Map, include commercial, residential, public /semi-public and business / technology. Areas currently undeveloped in Kilmarnock are shown on Figure 2.2 "Existing Land Use" in Chapter 2. This map, when reviewed in conjunction with the LUP Map in this chapter, shows that most of the undeveloped acreage is designated for a residential use (the largest amount of undeveloped land falls into this category), followed by commercial, and with a smaller clearly defined undeveloped area for the Town's "Business and Technology Park." Figure 2.2 also shows that the bulk of developable land is located on the west side and south end of Kilmarnock.

4. Commercial Areas

Table 2.1 in Chapter 2 shows that, of the 1,034 acres developed in Kilmarnock, offices and commercial land uses total approximately 28 percent of the developed area. Table 3 of the Town's "Water and Sewer Master Plan" dated February 2010 estimates there are roughly 75 commercially designated vacant lots, some of which are much larger in size when compared to a residential parcel. Many of these are interspersed throughout the various developed commercial areas in the community. The area with the greatest potential for commercial development in the future is described in item "c" below.

There are three primary commercial areas in Kilmarnock discussed in this section. These are:

a. Downtown Commercial Area/Steptoe's District;
b. North Main Street Commercial Area; and the
c. partially undeveloped commercial area generally located at the intersection of Route 200 (Irvington Road), James B. Jones Memorial Highway, and Harris Road extending south of the Business and Technology Park. Perhaps the most undeveloped commercial acreage is located in this area along with the "Business and Technology Park." As a result, a major concentration of businesses may be developed in this area in the future.

It is important to clarify that section "E" of this document addresses economic development in the Town of Kilmarnock. This section and the "Economic Development" piece are closely related. This section addresses commercial (i.e., structural) development and land use whereas the "Economic Development" section focuses on incentives that encourage property investment, business expansion, increased revenue and job creation.

a. Downtown Commercial Land Use - Steptoe's District: The downtown commercial area is Kilmarnock's original business and commercial center. This area is largely built-out with the exception of a few vacant lots interspersed throughout downtown. As a result, new commercial projects are likely to consist of changes in use within existing structures and redevelopment.

The downtown commercial district includes a mixture of retail shops, offices, restaurants, banks, an Inn and Town Hall, as well as a few detached single family homes. The buildings in the core of the downtown are typically one and two-story constructed without side yards and abutting alleys on the back side. They comprise a mixture of original structures constructed around the turn of the 20th century and replacement or "infill" buildings built in recent decades. More information about

potentially historic structures in downtown Kilmarnock is included in Chapter 5 (Preservation of Resources). Parking space is at a premium consisting predominantly of on-street parking and four off-street public parking lots.

The core downtown area is a classic "mixed-use" (i.e., commercial and residential) development since many of the business establishments have residential apartments on the second-story. This aspect of the downtown area is important and should be encouraged since this residential use provides housing adjacent to places of employment and business establishments. This is particularly important for those who may be employed in an establishment located downtown. There are many additional benefits to having residential units in the downtown area including, but not limited to: 1) a reduction in traffic impacts since those who live downtown may be more likely to work and shop there; and 2) a residential presence downtown helps to establish a sense of community, particularly when shops and businesses are closed.

A lot has occurred downtown since adoption of the last Comprehensive Plan in February 2006. Some of the major public projects that have been implemented under the auspices of Town Council and the Town's local government include:

- Implementation of the "Downtown Revitalization Plan;"
- Designation and adoption of the "Steptoe's Overlay District" which covers most of the downtown commercial area;
- Zoning Ordinance update (Chapter 54, Town Code) to include, among other things, design and architectural guidelines for development and redevelopment of structures in commercially designated areas;
- Relocation of Town Hall to the center of the downtown commercial "Steptoe's" district;
- Acquisition and use of the "Town Lot" for public use including community events, farmers' market, and a dog park, etc. Plans are currently underway for development of the "Town Lot" to expand opportunities for recreational use by the public.

Downtown Revitalization Plan: Implementation of the Downtown Revitalization Plan has upgraded both the appearance and function of downtown Kilmarnock. This in turn has made downtown Kilmarnock more attractive as a place to shop as well as to invest in new business opportunities. Some of the major improvements that have occurred include: 1) placement of overhead utility lines underground; 2) new sidewalks with benches, landscaping and street lights; 3) designation of pedestrian crosswalks; 4) new directional signs for public parking areas and local attractions; 5) landscaped median strips; 6) various other landscaping projects including a program for hanging flower baskets; and 7) seasonal/holiday decorations.

Steptoe's Overlay District: The Steptoe's Overlay (Zoning) District, or SOD, was adopted by Town Council in March 2006, roughly one month after adoption of the last Comprehensive Plan. The stated purpose of this overlay designation is to recognize and promote the unique character of the town's downtown area. The SOD is intended to preserve the character and fabric of Kilmarnock's original trade center, as well as allow for flexibility of the underlying commercial zoning regulations by relaxing standards for parking, setbacks, and other development requirements. This flexibility makes it easier for new businesses to obtain appropriate permits while maintaining the charm and appeal of downtown Kilmarnock. The Steptoe's Overlay District covers the portion of the downtown intended for the conduct of mixed use commerce. Upper floor residential uses are also encouraged. (See § 54-601, Town Code).

General Commercial Land Use Designation & Design Guidelines: The underlying commercial designation for downtown Kilmarnock is intended for general business activity which requires direct and frequent access by the public, but which is not characterized either by constant heavy trucking, other than stocking and delivery of retail goods, or by any nuisance other than the incidental congregation of people and passenger vehicles.

While commercial establishments are critical to the continued economic vitality of the downtown area and to the well-being of Kilmarnock's citizens, they can also have significant aesthetic, traffic-related and other adverse impacts upon the community. The viability of commercial establishments located downtown depends in large part upon high visibility from public streets in busy areas of the town. As a result, the building and site design may have a significant impact upon the character and attractiveness of the town in general and its streetscapes. The protection and enhancement of the positive aesthetic qualities of the town, specifically the commercially developed areas, have a direct and substantial bearing upon the Town's continued economic vitality. This is especially important in Kilmarnock in light of the town's reliance upon economic benefits provided by tourism. (See § 54-338, Town Code).

In light of the above, the Town's goal is to promote commercial development which utilizes high-quality design and building features in such a manner as to enhance the function and aesthetic attributes of downtown Kilmarnock in order to maintain its small town rural charm and appeal. To accomplish this, the Town adopted design guidelines, several months following adoption of the last Comprehensive Plan in 2006, for development in commercial land use designations. One key provision in the guidelines that relates specifically to the "Steptoe's Overlay District" encourages reduction of the footprint of a commercial establishment through the use of multiple levels. A sample of a few other architectural features and design elements addressed in the guidelines, which apply to certain development proposals located within all general commercial areas, include: 1) roof design; 2) screening of rooftop mechanical equipment from street level view; 3) building materials and colors including facades, trim and accent areas; 4) entryway design; 5) display windows; 6) integration of architectural details such as, tile work or moldings into building design; 8) incorporation of landscaped areas and/or public places for sitting, etc.; 9) outdoor display areas and exterior lighting fixtures. (See § 54-340, Town Code)

Based on the existing conditions outlined above, land use and development policies applicable to the downtown commercial "Steptoe's" area are as follows:

Establishment of a variety of visitor-serving, general commercial, service related, and office uses, integrated with public spaces and amenities, are encouraged within the downtown area. Upper floor residential uses above business establishments are also encouraged.

13. Establishment of a variety of visitor-serving, general commercial, service related, and office uses, integrated with public spaces and amenities, are encouraged within the downtown area. Upper floor residential uses above business establishments are also encouraged.
14. Maintain and expand improvements in the downtown area in order to continue to revitalize and upgrade the appearance and function of downtown Kilmarnock to include, but not be limited to, landscaping, installation of public amenities such as bicycle racks, park benches, picnic tables, public spaces, etc.
15. Continue to identify appropriate areas for off-street public parking.
16. Ensure that the downtown area retains its unique small town appeal and charm in order to enhance and maintain the economic vitality of the area for residents of Kilmarnock and the

region, tourists, and businesses. One way to do this is to continue to implement and enforce the building design guidelines, outlined above, as set forth in § 54-340, "Building Design," of the Town Code.

b. North Main Street "General" Commercial Land Use: The North Main Street commercial corridor is also classified as a "general" commercial area because of the range of existing uses requiring direct and frequent access by the public. The underlying zoning designation for North Main Street is the same as that for the downtown area. This commercial area includes shopping centers and a variety of businesses and offices ranging from banks, car dealerships, to fast food restaurants.

The North Main Street commercial designation extends from the downtown commercial district along both sides of North Main Street (Route 3) to the northern end of town. Overall this commercial area is about 1.5 miles in length and ranges in width from roughly 200 to 1,500 feet on each side of North Main Street. Shopping complexes are established in the wider sections of this commercial corridor while the frontage in the narrow part is developed with a mixture of smaller shops and original residences. Two major streambeds, located on the east and west side of the North Main Street commercial corridor, are identified on the LUP Map as Resource Protection Areas.

While much of the frontage has been developed, there is more vacant land, as well as unoccupied commercial establishments, when compared to the downtown commercial district. This is primarily due to the fact that the North Main Street commercial area is larger in size. Many of these undeveloped commercial lots are individually owned and/or developed with single family residences, making it more difficult to develop a master plan for build-out of the area. Most of the lots have direct access to North Main Street along the front, as well as additional acreage to the rear that would potentially serve as a buffer between commercial development and protected resources areas. In addition to commercial facilities, these parcels might also be developed with a mixed-use residential project such as multi-family residential units provided a project is properly planned to address "site-specific" conditions.

Similar to the downtown commercial area, a lot has occurred in the North Main Street commercial corridor since adoption of the last Comprehensive Plan in February 2006. However, in this case most of the changes involve new commercial development as opposed to public / government projects, with the exception of the new Rappahannock Community College / Kilmarnock campus (a non-profit, educational facility), established at the beginning of 2012 in the "Chesapeake Commons" complex.

Private commercial development in the North Main Street commercial area since 2006 includes the development of the Wal-Mart shopping complex and Walgreens. There are also several existing vacant buildings where new commercial uses have been established. Most of the recent commercial development occurred between 2006 and the beginning of 2008. After that time new commercial development in Kilmarnock dropped precipitously in sync with the nationwide economic downturn. Currently there are no plans proposed for new large-scale commercial projects.

In light of the above, land use development policies for the North Main Street commercial corridor are as follows:

17. Establishment of a variety of visitor-serving, general commercial, service related, and office uses, integrated with public spaces and amenities (e.g., bicycle racks and picnic tables) are encouraged within the North Main Street commercial area with emphasis on retail trade, restaurants, offices, and other compatible establishments.

18. The development strategy within the North Main Street area should focus on the following issues: a) identify the most appropriate mix of land uses (e.g., commercial and residential) for the area to meet the needs of Kilmarnock's residents and the region's population, consistent with the Town's economic goals; b) ensure that the capacity of the Town's water and sewer services is consistent with commercial growth demand; c) extend applicable improvements, completed as part of the Downtown Revitalization Plan, to North Main Street; and d) in conjunction with the Virginia Department of Transportation (VDOT), improve both vehicular traffic circulation and pedestrian access along the North Main Street commercial corridor.
19. Access to commercial establishments should be coordinated to reduce the number of vehicular access points along both sides of the entire North Main Street frontage. This may be accomplished by requiring adjacent businesses to share one access point to interconnected parking areas with the potential use of turning lanes from the main thoroughfare.
20. Lots with excess depth beyond that needed for commercial frontage development and/or are adjacent to a Resource Protection Area should include an adequate vegetated buffer between the commercial development and the protected area.
21. Continue to implement and enforce the town's building design guidelines, outlined above, as set forth in § 54-340, "Building Design," of the Town Code. These regulations apply to the North Main Street Commercial district and help to ensure an aesthetically appealing area when new development and/or redevelopment occur.
22. Encourage construction of "mixed use" commercial and residential consistent with the Town's Zoning Ordinance (Chapter 54) regulations for the "General Commercial" district. With careful planning and oversight, some sites along North Main Street may be appropriate for development of townhouses or multi-family housing facilities.

c. **Partially Undeveloped Commercial Area:** This area is generally located at the intersection of Route 200 (Irvington Road), James B. Jones Memorial Highway, and Harris Road extending south of the Business and Technology Park. Perhaps the most undeveloped commercial acreage is located in this area along with the "Business and Technology Park." A major concentration of business uses may be developed in this area in the future. In addition the Rappahannock General Hospital (RGH), Northern Neck Free Health Clinic and the YMCA are located in this area. These facilities, especially RGH, are major employers and are accessed on a regular basis by the general public. Because of this any development in this area should incorporate bicycle paths and sidewalks to encourage pedestrian and bicycle access.

Unsightly commercial "strip" development in this area should not be allowed. This is particularly important since the area generally located at the intersection of Route 200 (Irvington Road), James B. Jones Memorial Highway and Harris Road is considered a "Gateway" to Kilmarnock and, as such, development of this area should be in keeping with the goal to preserve and enhance Kilmarnock's rural small town charm.

Unlike the downtown and North Main Street commercial areas, which are designated for a "general" commercial use, this area is, for the most part, classified for "limited" commercial development. The "limited" commercial designation is intended to provide a business area that is compatible with the transition between the more densely developed commercial areas in downtown Kilmarnock and along North Main Street, as well as nearby residential neighborhoods. In contrast to the regulations for downtown Kilmarnock and the North Main Street corridor, there are no building design guidelines in the "limited" commercial zone. Therefore, it is important that new commercial development in this area is reviewed carefully during the planning process to ensure proper design and architectural styles

in keeping with the Town's goals for the "Gateway" approach to Kilmarnock, as well as to enhance and retain Kilmarnock's charm.

In light of the above issues, the following policies apply:

23. Consider installation of sidewalks, designated bicycle lanes and other related pedestrian/bicycle improvements in this area to encourage bicycle and pedestrian access to major employment centers and areas with a high concentration of development offering community and public services. These improvements could be required as a condition of permit approval when development is proposed, as part of the Town's Capital Improvement Plan, and/or in conjunction with the Virginia Department of Transportation when road improvements are proposed.
24. When new development is proposed, ensure proper design review, using compatible architectural styles and innovative design techniques, to allow for responsible and aesthetically compatible commercial growth in keeping with the "Gateway" approach to town, adjacent residential areas, and the rural small town charm of Kilmarnock.

5. Residential Areas

This Section addresses residential land use. Table 2.1 in Chapter 2 shows that, of the 1,034 acres developed in Kilmarnock, the primary land use is residential with roughly 47 percent of the Town developed with single-family and multi-family residences. As noted above (see Section "3") approximately 40 percent of Kilmarnock consists of vacant but developable land, the majority of which is designated for a residential use.

Chapter 1 identifies various scenarios for the full residential build-out of Kilmarnock. One such scenario includes approved but not developed or partially constructed projects, coupled with vacant residential lots of record interspersed throughout the established community (i.e., infill), as well as larger tracts of land designated for a residential use for which no development is proposed at this time. All of these projects and vacant lots could be developed in the future. Development projects approved but not constructed -- or partially constructed -- are listed in Chapter 2, Section "A." Currently there are approximately 642 residential units that fall into this category. These units are in addition to potential development of vacant lots of record (i.e., infill) interspersed throughout the established residential areas of Kilmarnock, as well as the larger undeveloped tracts of land. Based on the approved development density for the undeveloped residential acreage, minus the resource protection areas and open space requirements, roughly 229 residences (in addition to those approved but not constructed) could be built in Kilmarnock in the future. This amounts to a combined total of potentially 941 new residences.

There are three residential areas in Kilmarnock discussed in this section, two of which are shown on the LUP Map. These are:

a. established residential neighborhoods which, for the most part, are designated as "low density residential;"
b. undeveloped Low Density Residential areas; and
c. undeveloped Medium Density Residential designations.

a. Established Residential Neighborhoods: The established residential areas in Kilmarnock for the most part surround the downtown commercial area on the east, south and west. Currently there are roughly 795 existing single family and multi-family residential units in Kilmarnock. Most of the established residential community is built-out with the exception of random vacant lots located

throughout the residential community. Many of these vacant lots are likely to be developed in the future with single-family dwellings, similar to those located in the surrounding neighborhood.

The existing residential neighborhoods are typically designated for a "low density residential" use and are developed with single-family homes on separate lots. Most of the lot sizes in the established residential community average roughly one-half acre in size or less, which translates into an average density of 2 units per acre. Higher-density residential projects ranging from assisted living facilities to apartment projects and townhomes (e.g., Heatherfield Court Townhomes) are interspersed throughout the residential community. The area annexed to the Town of Kilmarnock in 2007, which extended the town limits in a southerly direction beyond the downtown commercial area, is also largely developed with single family homes. Some public and semi-public uses are located in the established residential community. This is discussed further in the following section. These uses, such as churches, schools and playgrounds, are considered ancillary to and support residential neighborhoods.

Of course there are residential developments that are exceptions to the above existing conditions. There are two relatively new residential subdivisions which are separated from the downtown commercial area and consist of lots that are either larger or smaller than those in Kilmarnock's established residential neighborhoods. The Forest Hills subdivision, located in the northwest corner of Kilmarnock, is one residentially developed area that is set apart from the downtown commercial district and has lots in size of one acre or more. This 44-lot subdivision is primarily the only residential area in Kilmarnock developed with septic systems so the lots must be larger to accommodate the drain field for each septic system. The other project is the Grace Hill 66-lot Planned Unit Development, which is also set apart from the downtown commercial area and is located at the southern end of town west of Route 3. This development consists of smaller lots and, as such, is designated as "medium density residential." To date, 3 of the 66 approved lots are developed with single family units.

One final issue applicable to the established residential community is that some existing residences located along Kilmarnock's major thoroughfares (i.e., Routes 3 and 200) are being converted to non-residential uses, such as professional offices, service related businesses, and visitor serving accommodations (e.g., a Bed and Breakfast). This trend is likely to continue in the future since the location of these homes along major roads provides maximum exposure to potential clients and customers. To address this issue, there are "Gateways" along the main roads (i.e., Routes 3 and 200) that provide access to Kilmarnock. The purpose of the "Gateway" is to provide an aesthetically pleasing entrance to the community that "sets the stage" for Kilmarnock's small town charm and appeal.

Land use and development policies applicable to the established residential area are as follows:

25. Continue to ensure that new residential development within the established residential community (i.e., infill and/or redevelopment) is compatible with the residential characteristics of the surrounding neighborhood.
26. When it can be determined that an existing residence can better serve the community and adjacent neighborhood as some other use because of its age, size, location or other factor, a limited conversion of the dwelling may be allowed. In general when such conversions are proposed, the project shall be reviewed for compatibility with existing uses in the immediate vicinity and the neighborhood in general to ensure that no adverse impacts to the residential neighborhood would occur and that the proposal is consistent with the intent of the zoning classification for the site. A

converted residence is limited to activities that would not require modifications to the external appearance of the original single family dwelling. Examples of appropriate conversions include, but aren't limited to, a professional office, a service related establishment, and visitor serving accommodations such as a Bed and Breakfast.

27. "Gateways" to the Town of Kilmarnock along major roads should be attractive entrances. The "Gateways" that are predominantly residential in character should remain, although limited conversion of existing residences may be allowed provided the resulting use does not adversely affect the existing character of the area and is consistent with the intent of the zoning classification for the site. Redevelopment of a few areas within the "Gateways" may be appropriate to improve and enhance the appearance of the entrances to Kilmarnock.

b. Low Density Residential Areas: As noted above, many of the areas shown on the LUP Map designated for a low density residential are built-out with the exception of vacant lots of record interspersed throughout existing residential neighborhoods. Currently there are approximately 585 existing single family detached homes in Kilmarnock. There are a few large essentially undeveloped tracts of land designated for low density residential use that may be subdivided in the future. These areas are generally located on the east side and southern end of Kilmarnock, specifically north of Waverly Avenue and Church Street, and in the south end of town, west of Route 3. (Please refer to Figure 2.2 "Current Land Use" in Chapter 2 and Figure 3.1 "Land Use Plan" in this Chapter.)

It is likely that the undeveloped areas designated for a low density residential use would be developed with detached single family residences, each on a separate parcel. Residential density in these areas would be similar to the established residential community and consistent with neighboring development patterns. Connection to the Town's public water and sewer systems would likely be required.

Based on the above, the following development policies apply to areas designated for a "Low Density Residential" use:

28. The low density residential designation is composed of quiet undeveloped areas where similar residential construction may occur. The purpose is to stabilize and protect the essential character of the area, as well as to promote and encourage a suitable living environment for all of Kilmarnock's residents. Development in this residential designation is limited to relatively low concentration single-unit dwellings, plus selected additional uses such as schools, parks, churches and certain public facilities that serve the residents of the neighborhood. Mobile homes, rooming houses, and commercial activities are not allowed pursuant to the zoning regulations but could be approved subject to a Variance.
29. New residential development in Kilmarnock should be served by the town's public water and sewer systems. Infrastructure for public water and sewer services shall be extended to each development by the developer. Development may take place only if there is adequate capacity to serve the development by Kilmarnock's public water and sewer systems.
30. Identify the general locations of "feeder" streets which connect to major thoroughfares for larger residential subdivisions and encourage the incorporation of pedestrian-friendly amenities (i.e., sidewalks and bicycle paths) open space, preservation of natural resources and creative design techniques as part of the subdivision.
31. An owner may submit a plan for an alternative residential dwelling use of a parcel in cases where a tract of land is: a) vacant; b) contains more than five acres; c) has not previously been subdivided into residential lots; and d) because of its location, frontage, shape, adjoining uses, or

other relevant physical features, it can be demonstrated by the applicant that the parcel is better suited for a use other than a single-family residential lot subdivision. The plan for an alternative residential use shall be evaluated on a case-by-case basis to determine the proposal's compatibility with the community at large and existing development located in proximity to the site. This policy may be appropriate in a case where a site abuts an environmentally sensitive or protected area and clustered development, as opposed to individual single family residential lots, may be more appropriate in order to provide an adequate buffer from the protected area.

c. **Medium Density Residential Areas**: The largest undeveloped area in Kilmarnock, with the potential for residential development, is designated for a medium density residential use. These sites are primarily located on the west side of town. (Please refer to Figure 2.2 "Current Land Use" in Chapter 2 and Figure 3.1 "Land Use Plan" in this Chapter.)

Planned Unit Development (PUD) Overlay: The PUD zoning regulations were adopted by Town Council in 2005. A "PUD" classification has been placed on three of the larger tracts, two of which are partially developed and the third remains undeveloped. The two partially developed projects include the 66-unit (3 of which are developed) Grace Hills PUD and Springwood PUD, located on Yorkshire Road, consisting of approximately 40 residential units half of which are constructed. Both projects are developed with infrastructure improvements (e.g., public water, sewer and roads). The third medium density residential site classified as a "PUD" is called "Kilmarnock Glen" which was approved for 423 units. This site, located behind School Street and north of Irvington Road, remains undeveloped but could be constructed in the future.

Other undeveloped areas designated for a "Medium Density Residential" use could be reclassified as a "PUD" in the future when and if development of this type is proposed. In the case of a PUD residential density, the type of dwelling units, and support facilities may be customized based on the special circumstances of each area. The previous Comprehensive Plan adopted by Town Council in 2006 includes several policies stressing the Town's preference for Planned Unit Development. That document states that a PUD with its own open space and recreational facilities operated and maintained by a homeowner's association is the Town's preference and such developments are strongly encouraged.

Developed Areas: There are several other developed areas within the Town of Kilmarnock designated as medium density residential but not classified as a "PUD." A few of these include, the townhomes located on Heatherfield Court and Fox Hill Drive; the recently developed multi-family housing complex known as Mercer Place; Lancashire Nursing Home; the assisted living facility on South Main Street along with the adjacent senior community located on Bay Walk Drive, as well as the apartment complexes west of South Main Street known as Indian Creek and Tartan Village, just to name a few.

Undeveloped Areas: The largest undeveloped area designated for medium density residential is generally located north of Irvington Road, east of James B. Jones Memorial Highway, abutting the public school, library and nursing home to the west and bordered on the north by a Resource Protection Area. Like the other medium density residential designations, the density for this area is roughly 4 units per acre.

A portion of this site is combined with a "PUD" classification which was adopted as part of the 423-unit "Kilmarnock Glen" project. This project remains undeveloped. "Crossroads at the Chesapeake" is the other medium density residential development (not classified as a PUD) with approval for 128

dwelling units located adjacent to James B. Jones Memorial Highway. This project is also undeveloped. These specific proposals may or may not move forward. If not, other developments could be proposed on these sites in the future. The area in between both of these projects is essentially undeveloped; there are no proposals pending for development of this particular area.

Based on the development potential outlined above, the following development policies apply to areas designated for a "Medium Density Residential" use:

32. The medium density residential designation is intended to allow residential development at a higher density as well as certain compatible public, semi-public and limited commercial land uses. This designation is intended to provide a suitable environment for those who desire the amenities of townhomes, condominiums, multifamily dwellings and/ or apartment living along with the convenience of being closest to shopping and employment centers and other community facilities. Examples of the limited commercial uses allowed in this land use designation, subject to appropriate permit approvals, include: tourist homes; boardinghouses; professional offices; office buildings; nursing homes; and bed and breakfasts.
33. Planned Unit Development located within a medium density residential land use designation is encouraged. This type of development typically includes a cluster of residential dwelling units based on an innovative design to provide for a neighborhood with a variety of housing types and densities. A PUD may also include neighborhood shopping facilities, parks, open space and recreational amenities such as bicycle paths and playgrounds for residents. This policy is intended to allow for greater flexibility in terms of design to ensure quality development while preserving areas designated for resource protection. A clustered development would help to avoid encroachment into these sensitive areas. Mixed-use residential land uses are appropriate consistent with the overall density limitation of the entire site's acreage.
34. New residential development in Kilmarnock should be served by the town's public water and sewer systems with infrastructure extended by the developer. Please refer to policy #29 above which also applies in its entirety to new development in Medium Density Residential land use designation.
35 Identify the general locations of "feeder" streets which connect to major thoroughfares and encourage the incorporation of pedestrian-friendly amenities (i.e., sidewalks and bicycle paths). Please refer to policy #30 above which also applies in its entirety to new development in Medium Density Residential land use designation.

6. Public / Semi-Public Uses

The Town of Kilmarnock is a major center for the region providing many public services for both its residents and the region's population. The LUP Map designates several developed sites for public / semi public use. These include, but aren't limited to, the: wastewater treatment plant; fairgrounds; Town Lot; four public parking lots in the downtown commercial area; Waverly Avenue playground; public school and library; fire station; Rappahannock General Hospital (RGH) and the adjacent medical office complex. There are also other uses of a public / semi public nature in Kilmarnock such as churches; the U.S. Post Office; YMCA; Northern Neck Free Health Clinic; Boys and Girls Club; Town Hall; the State Division of Motor Vehicles; the Volunteer Rescue Squad; and Baylor Park Nature Trail, just to name a few.

Land use in the area around RGH is under the jurisdiction of the hospital, subject to applicable permit approval by the Town of Kilmarnock if necessary. New uses in this area are selected based on the

hospital's criteria, the bulk of which are likely to provide medical services, such as offices for physicians.

Public /semi public uses are allowed, subject to applicable permit approval, within all land use designations, as well as the underlying zoning district regulations. This is the case for most jurisdictions. These uses are generally defined as those that provide a public service such as a non-profit and/or volunteer organization, as well as facilities owned and/or operated by local, state and the federal government. Section 54-1 (4) of the Town Code stresses the importance of public land use, stating that the Town shall "expedite the provision of adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, schools, parks, forests, playgrounds, recreational facilities, airports, and other public requirements" in order to promote the health, safety and general welfare of the public.

Consistent with the above, the town's goal is to enhance and maintain Kilmarnock's strong community service base by assuring the Town's dominance as a major center for public services for its residents and the region's population. Since public/semi-public uses may be allowed within any land use designation, the following development policy applies to this type of land use:

36. New "public/semi public" land uses shall be reviewed for compatibility with the existing land use and development in the surrounding area. Uses that are acceptable in residential areas include some public/semi public uses and facilities that are typically located in residential neighborhoods, such as schools, churches, and playgrounds, provided such uses have access to a principal circulating street and there is sufficient area to accommodate required off street parking.

7. Business and Technology Park

The area designated as a "Business and Technology Park" (Technology Park) on the LUP Map is located in the southwestern part of Kilmarnock, adjacent to Harris Road with DMV Drive bordering the site to the north and the headwaters of Dymer Creek to the east. The Technology Park is owned by the Town of Kilmarnock and is intended to offer sites for qualified "expanding" technology businesses pursuant to the Town's "Technology Zone" regulations. A 60-acre portion of the Technology Park remains undeveloped although the Town proposes to complete certain infrastructure improvements, such as road construction, in the future. Not all of the 60 acres is developable since portions of the site include designated Resource Protection Areas.

The primary purpose of the "Technology Zone," which is not part of the Town's zoning ordinance, but codified in Chapter 43 of the Town Code, is to improve economic conditions within the "Technology Park" by offering incentives to developers, in the form of a tax rebate, for the establishment of a variety of technologically related land uses such as information technology, telecommunications and medical research / product development. See Section "E" (Economic Development) below for discussion and related policy pertaining to the economic incentives set forth in the "Technology [Enterprise] Zone" regulations.

The underlying zoning classification for a portion of the Technology Park is "M-1" or Industrial. These regulations establish development standards (e.g., height, coverage, setbacks, parking, etc) for the area. The primary purpose of this classification is to permit certain industries that do not detract from the desirability of residential uses that may be located adjacent to the Technology Park. These regulations adequately address standards for new development. There are no other areas in Kilmarnock designated for an industrial and/or manufacturing land use.

To ensure compliance with the Town's economic goals for the Technology Park the following policy applies:

37. Continue infrastructure improvements to allow for the development of the "Business and Technology Park." A few examples of projects include, but aren't limited to: complete a survey of the undeveloped portion of the property; identify appropriate building sites; construct a new access road with drainage improvements and install appropriate signage.

Much of how Kilmarnock is developed in the future will depend upon the availability of public services and the capacity of the town's infrastructure to accommodate growth. The next Chapter (Public Services and Facilities) addresses these issues including, but not limited to, the town's public water and sewer system, as well as Kilmarnock's major thoroughfares and their ability to accommodate additional traffic that would occur as a result of new development.

C. DEVELOPMENT PROPOSED ADJACENT TO KILMARNOCK IN THE UNINCORPORATED AREAS

Development is proposed in the unincorporated areas adjacent and/or in proximity to the Town of Kilmarnock. Even though these proposals are not located in Kilmarnock, they should be identified in the town's LUP. Consideration of development proposed directly adjacent to Kilmarnock's town limits is especially important to ensure compatibility with existing and future land use activity within the town. In addition, any development in proximity to Kilmarnock may directly impact the Town's resources and infrastructure as well as generate additional vehicular traffic in areas that are currently congested. On the flip side, development of these proposals may benefit the local economy by increasing business activity, tax revenue, and consumer spending in Kilmarnock.

A few of the more significant developments and/or conceptual proposals are as follows:

- Northumberland County – Village of North Kilmarnock: The Land Use Plan (LUP) component of Northumberland County's Comprehensive Plan includes a conceptual plan for the "Village of North Kilmarnock" PUD. The area proposed for this development abuts the Town of Kilmarnock to the east and is generally proposed north of Route 608 (Bluff Point Road) to Route 607 (Ditchley Road), and east of Route 200. In Chapter 3 (page 30) the LUP for Northumberland County describes the development concept stating that the "potential exists for the establishment of a major village in this area . . . to develop around a small commercial hub. . . . In addition to its commercial potential, the North Kilmarnock Village could also be developed as a . . . modern planned unit development mixed with residential, recreation and commercial facilities." The small commercial "hub" mentioned in the above conceptual outline is shown south of Route 200 generally across from the new Mercer Place residential complex.
- Lancaster County – "Planned Growth Area" (PGA): Lancaster County's LUP component of its Comprehensive Plan identifies one PGA in the County which is roughly a triangular shaped area located between the towns of Kilmarnock, White Stone and Irvington. The PGA is generally located south of Kilmarnock between Routes 3 and 200 and is bordered on the south by Irvington Road between the towns of White Stone and Irvington. The Lancaster County LUP explains that this PGA is proposed since it provides the highest concentration of residential, commercial, employment, and industrial activity combined with public infrastructure, including public water/sewer, and community services. The LUP states that higher density residential, such as medium density single family and multi-family housing, as well as commercial activity will be directed to the PGA. Incorporated towns may propose a contiguous expansion of their boundaries

to areas within the PGA. (The above summary is taken from Lancaster County Comprehensive Plan, Chapter 7 – "Land Use and the Economy" Section II – "Quality Growth," page 15.)

- Virginia Department of Transportation (VDOT): VDOT has prepared the "Southern Lancaster County: Sub-Area Planning Study" dated May 2009. This report identifies two major road/transportation projects which, if developed, would likely generate commercial and residential development in the long-term. These projects, identified as "Recommendations" in the "Executive Summary" (p. i) of the study, are as follows:
  - Widen Route 3 from two lanes to four lanes beginning 1.5 miles northwest of Kilmarnock connecting to the existing 4-lane section 4.8 miles northwest of Kilmarnock.
  - Replacement of the Norris Bridge with a 4-lane span bridge. The report states that the Norris Bridge is "functionally obsolete."

D. HOUSING

Like most jurisdictions across the United States, Kilmarnock's goal is to ensure that the town has an adequate housing balance to meet the needs of all of its residents. This housing mix includes market rate residences, rental units, housing for Kilmarnock's work force, as well as affordable housing for low income residents. The goal is to allow for a range of choice in housing type, design, density, and price.

Data provided by the U.S. Census Bureau described in Chapter 1 show that the bulk of housing units in Kilmarnock are "market rate" detached single family residences with a median price of $200,000. There are also several government subsidized (Section 8) affordable housing developments in Kilmarnock for low income residents. A few examples of this type of affordable housing include various apartment complexes such as Indian Creek, Tartan Village, New Horizons, and the townhomes located on Fox Hill Drive. In 2013 two of the three single family homes constructed in Kilmarnock were developed by "Habitat for Humanity" which provides affordable housing for low income families and individuals.

In addition to housing for low income residents, housing for the community's work force is critical. One project intended specifically to provide housing for the community's work force is the recently constructed "Mercer Place" complex located on the east side of Kilmarnock north of Route 200. To date, 16 of the 24 approved units have been constructed. Development of this project was funded by a non-profit foundation to provide hosing for professionals such as teachers in the community. Also, in Section "B.4" of this Chapter (Commercial Areas) it is noted that "mixed-use" development, i.e., combining residential and commercial uses, is encouraged, specifically in the downtown and North Main Street commercial areas. Development of housing for the community's work force is especially appropriate in these areas since services and places of employment are mixed with residential uses. The downtown commercial district is largely built-out with existing businesses and residential units located above. However, opportunities exist in the North Main Street commercial corridor for future development of mixed use commercial and residential projects.

To ensure an innovative well-designed diverse housing stock that meets the needs of all of Kilmarnock's residents, the following policies apply:

38. Continue to seek opportunities and encourage developers to provide an adequate range of choices in housing type, design, density, and price in order to meet various needs of Kilmarnock's population. The housing mix includes market rate residences, rental units, housing for Kilmarnock's work force, as well as affordable housing for low income residents.

39. Encourage diverse and innovative housing and subdivision design which includes a range of affordable housing styles utilizing high quality design, construction and architectural techniques to create an aesthetically appealing development. Open space and amenities for pedestrians and bicyclists should be incorporated in the project design.
40. During the planning process for a market-rate residential subdivision, encourage a developer to designate a certain number of units below market-rate to provide opportunities for home ownership to those who could not otherwise afford to purchase a home.
41. Support the efforts of private and nonprofit groups to improve and provide housing for the work force and low income residents.
42. Coordinate with neighboring jurisdictions to develop a regional approach to meet the need for adequate housing for the work force and low income residents. This approach would include an inventory of existing housing of this type and a needs assessment.

E. ECONOMIC DEVELOPMENT

The Town of Kilmarnock's goal is to enhance and maintain a strong sustainable economic base by assuring the dominance of the Town as a major business, community service, and visitor serving center for its residents, businesses, and visitors. Programs are underway to increase business activity in Kilmarnock. The opportunity for economic growth exists since the community is already established as the commercial and trade center for part of the Northern Neck region and parts of Middlesex County to the south. In addition, expansion of visitor-serving commercial uses continues to draw tourists to the area for shopping, dining and overnight accommodations.

Another key component of economic development in Kilmarnock is to provide opportunities for full-time year-round jobs that provide living wages in both the private and public sectors of the Town's economy including commercial, technological, and visitor serving enterprises. The Town continues to utilize available tools, such as regulations for the economic and technological enterprise zones, to provide incentives for new and existing businesses, as well as to encourage job expansion. Employment opportunities that pay at a higher level than the types typically offered by retail and service establishments are encouraged.

The Town has implemented several innovative economic development programs, since adoption of the Comprehensive Plan in 2006, which are beneficial to both the community and the region's economy. In addition to the programs listed below, the Town lowered business license fees and adopted the "Steptoe's Overlay District" which allows for flexibility of zoning regulations in the downtown area for commercial development and/or changes in use. This flexibility is important since it would be difficult at best for an applicant to meet certain requirements, such as parking, given the historic lay-out of downtown Kilmarnock. These incentives are intended to encourage relocation and/or establishment of new businesses in this area. Some of the more major initiatives are described below:

Branding Concept: The town is currently working on developing a branding concept for Kilmarnock as a prime location for businesses, visitors and residents. The key target audiences for this new Kilmarnock brand will include potential business start-ups, relocations, and expansions as well as existing businesses, residents and visitors. The town's Economic Development Committee and town staff are leading this effort. The Town's primary focus is creating a unique brand message for Kilmarnock that enables it to be a focal point for economic and community development in the county, Northern Neck and Commonwealth of Virginia.

Economic Enterprise Zones: Kilmarnock has been awarded an economic "Enterprise Zone" designation by the Northern Neck Planning District from the Virginia Department of Housing and Community Development. The purpose of the economic "Enterprise Zone" is to stimulate business and industrial growth by providing state and local tax incentives. These incentives are intended to encourage property investment, business expansion and job creation. Therefore, it is the Town's goal to continue to maintain the "Enterprise Zone" designation to provide incentives for increased investment in the Town's economic infrastructure and labor force.

Technology (Enterprise) Zone: Town Council updated its regulations for the "Technology Zone" (see Chapter 43, Town Code) since adoption of the last Comprehensive Plan in 2006. The primary purpose of this designation is to improve economic conditions within the "Technology Park" by offering incentives to developers, in the form of a consumer utility tax rebate, for the establishment of a variety of technologically related land uses such as information technology and telecommunications. In exchange a "qualified expanding technology business" must hire a certain number of employees each of whom receives an annual wage that meets or exceeds the average annual wage of the state or county work force. In addition to providing jobs, the "qualified business establishment" must meet certain criteria set forth in the "Technology Zone" ordinance including, but not limited to, making an additional capital investment to maintain status as an "expanding" business to qualify for the tax incentive.

The following policy applies to ensure compliance with the Town's economic goals for the "Technology Zone:"

43. Promote the "Technology Park" on a regional, national and international level, consistent with the intent of Town Council and subject to the advice and assistance of various economic development entities in the community and the region including, but not limited to, local businesses in the technology zone.

Northern Neck Region - Economic Development Strategies: Efforts are also ongoing on a regional level in terms of economic development. For example, the Northern Neck Planning District Commission adopted the Northern Neck Comprehensive Economic Development Strategy in April 2013. This document was prepared in collaboration with various municipalities and stakeholders located in the Northern Neck.

The regional economic base is changing with a decline in traditional industries and a growth in a retired populace. Similar trends are evident in the Town of Kilmarnock (see discussion in Chapter 1). Since these trends are similar, regional goals pertaining to economic development and land use are generally applicable to Kilmarnock as well. A few of these goals particularly applicable to Kilmarnock are:

- Expand and diversify the economic / tax base while maintaining the rural small town charm of the area and quality of life;
- Support and encourage tourism and the businesses serving this market;
- Develop effective job training and placement programs in collaboration with the local and county government, the public school system, vocational school, Rappahannock Community College and the local business community; and
- Support programs that contribute to the success of new entrepreneurs, as well as encourage and assist entrepreneurs to move from employment to ownership in local business.

In order to develop and implement the above goals, it is the Town's policy to:

44. Continue to collaborate with various economic development entities; local, regional and state governmental agencies; non-profit organizations; local businesses/stakeholders; and major employers in both Kilmarnock and throughout the region. These organizations include, but aren't limited to: Lancaster County; Northumberland County; the incorporated towns of Irvington and White Stone; public school system; various non-profit organizations such as the Rappahannock Community College Educational Foundation, Inc. and the public library; Rappahannock General Hospital; Lancaster County Partnership for Economic Development; Lancaster, Northumberland and Kilmarnock Chambers of Commerce; VISIONS Economic Development Committee; Virginia's River Country; the Northern Neck Planning District Commission; Virginia Economic Development Partnership; Northern Neck Tourism Commission; local banks and businesses, just to name a few.

F. IMPLEMENTATION OF THE LAND USE PLAN

Once a land use plan is adopted as part of a Comprehensive Plan, it attains certain legal status as set forth in Section 15.2-2232 of the Virginia Code. This section states that when *a comprehensive plan has been adopted, it shall control the general or approximate location, character and extent of each feature shown on the plan.* This section of the state law, when read in its entirety, requires a "conformity review" by the Planning Commission. This process ensures that certain proposals for development, subdivision and land use activity are consistent with the comprehensive plan.

Establishing Consistency between the Comprehensive Plan and the Town Code Regulations: After a comprehensive plan is adopted, or updated, the Town should take steps to coordinate its development regulations with the vision of the future community as defined in the plan. The primary regulatory tools are Kilmarnock's zoning and subdivision regulations contained in the Town Code. The Zoning Ordinance establishes specific requirements pertaining to how land may be used or developed and the subdivision ordinance focuses on dividing property and specifies project improvements (e.g., roads and related infrastructure) necessary to provide adequate public services. It is important that both ordinances, as well as any other sections of the Code that affect land use, reflect the policies of the comprehensive plan. Several other ordinances and/or adopted plans may also play a role in implementing the goals and policies of the comprehensive plan, such as those regulating or managing storm water, soil erosion and sediment. After the comprehensive plan has been adopted, it is appropriate to review various applicable ordinances that pertain to implementation of its policies for consistency.

CHAPTER 4
PUBLIC SERVICES AND FACILITIES

Public services and facilities, discussed in this Chapter, represent a combination of Federal, State, County and Town services, as well as those provided by non-profit organizations and the private sector. Under Virginia's form of government, towns are not required to provide schools, courts, health and social services. As a result, the dominant services provided by the Town of Kilmarnock requiring physical facilities, are public water and sewer, police protection, utility maintenance, and local government administration.

In addition to water and sewer issues and local government, other topics in this Chapter address downtown improvements, traffic circulation, recreation, as well as community services and facilities. The information presented in this Chapter helps to identify opportunities and potential resources for developing additional community services and also ties potential future development to the capacity of the town's infrastructure. There are several areas in which Kilmarnock could be involved in terms of initiating, supporting or promoting the establishment of supplementary public services.

A. WASTEWATER DISPOSAL AND WATER SUPPLY

1. Wastewater

A map showing the general location of areas in Kilmarnock served by the existing public sewer system is included in Chapter 2 (see Figure 2.5). Specific information regarding Kilmarnock's sewer infrastructure including, but not limited to, areas served by the town's public sewer are identified in the Town Code and the "Water and Sewer Master Plan." Kilmarnock's "Water and Sewer Master Plan" (Master Plan) was prepared for the town by Waste Water Management, Inc., and is dated February 4, 2010. The Master Plan is incorporated by reference in this document.

The Town of Kilmarnock's sewer system was originally constructed in the middle of the last century and consists of 9 miles of gravity sewer lines, five main sewage pump stations, two small pump stations, and a wastewater treatment plant with a permit to discharge 500,000 gallons per day of treated effluent.

Wastewater and effluent (or sewage) are transported primarily through gravity fed piping, flowing downhill unaided to the treatment plant. Additionally, there are collection points, each served by a lift station, where sewage is pumped and gravity fed to the plant. At the treatment plant, the wastewater is cleaned by removing harmful bacteria, letting the solid mater settle and the chemical balance restored to allow the treated water to be released into a tributary of Indian Creek.

Based on current records, the town's sewer system serves a total of 1,106 residential and commercial customers both in-town (940 connections) and outside (166 connections) the town limits. The only area currently served by Kilmarnock's public sewer system outside of town is the Hills Quarter golf course development, located on Route 200 between Irvington and Kilmarnock, which is roughly 20 percent developed at this time according to the Master Plan. To gauge changes there were roughly 893 residential and commercial connections in 2005 at the time the last Comprehensive Plan was updated which increased to 1,010 in 2010 based on data in the Town's "Water and Sewer Master Plan."

Certified to treat 500,000 gallons of wastewater per day, the treatment plant is currently processing an average of about 200,000 gallons per day (GPD). This shows that the Town's wastewater treatment

plant is operating at about 40 percent of its capacity. The current treatment level of 200,000 GPD is an increase of roughly 20,000 GPD of wastewater when compared to data in the 2006 Comprehensive Plan. Of course, the amount of wastewater treated fluctuates depending on dry weather flow as opposed to the volume generated during heavy periods of rain. Currently the average daily flow of wastewater per connection is approximately 190 gallons per day which takes into account both dry and wet weather conditions. It should be noted that the Town's ongoing infiltration and inflow (I/I) reduction program continues to achieve substantive results in the overall reduction of flow through the treatment plant.

Several issues determine the amount of wastewater treatment required in the future. Factors include: 1) several approved, but not constructed, plans for undeveloped properties in town; 2) several large areas in the Town of Kilmarnock without current development plans; and 3) build-out of the Hills Quarter project located outside the town's corporate limits but served by Kilmarnock's sewer system.

The type of development is another important factor to determine the amount of wastewater that will require treatment in the future. Many businesses and uses generate higher amounts of wastewater that must be taken into consideration. High-volume water users and/or those that generate significantly higher volumes of wastewater should be reviewed carefully during the planning process, particularly if most of the water consumed is discharged into the public sewage system. Rappahannock General Hospital is one example where a wastewater recycling system is in place and its implementation is successful in terms of reducing wastewater discharge into the public sewer system, as well as reducing water use. In contrast, residential uses are generally more predictable in terms of water consumption and wastewater generation rates.

The consulting firm responsible for preparation of the Master Plan analyzed these various scenarios to assess the future demand for wastewater treatment. It should be noted that unlike the water system, which was evaluated in the Master Plan for its existing capacity and ability to serve additional development, the nature of the sewer system does not lend itself to a comprehensive analysis until such time as specific development plans are submitted for detailed analysis.

Based on the above analysis, the Master Plan concludes that Kilmarnock's wastewater treatment plant has the capacity to serve existing customers plus the projected build out of the undeveloped areas in town, as well as Hills Quarter. However, the plant may not have capacity to serve additional out-of-town customers without sacrificing capacity for future customers in the Town of Kilmarnock.

It is safe to assume that the Town may expect the State to require an upgrade to the wastewater treatment plant well before full build out of Kilmarnock may occur. An assessment of the plant's capacity to serve additional development beyond that identified in the preceding paragraph, including the potential need for a plant expansion, may be appropriate at the time upgrades are required and/or during the next Comprehensive Plan update. The Master Plan does state that the treatment plant could be modified and upgraded to provide greater treatment capacity without having to construct major equipment.

As development in Kilmarnock continues, the Town should consider innovative ways of funding infrastructure improvements including expansion of the treatment plant. For example, some municipalities have agreements with developers to pay for upgraded facilities sized to serve an entire major development. Communities have come to realize it is the developers who should be paying for the upgrades and not the municipalities themselves. This is particularly true with smaller utilities that often struggle to maintain financial viability and balanced budgets.

Associated with the wastewater issue is the town's policy pertaining to septic systems, which are discouraged. New development, such as subdivisions, buildings and other facilities intended for human occupancy, requires connection to the town's public sewer system at the owner's expense, with a few minor exceptions. Chapter 50 (Utilities), Article IV (Sanitary Sewers) of the Town Code requires that all new development within 250-feet of a sewer line connect to the public sewer system. By focusing on serving new development with public water and sewer and discontinuing the use of septic systems and private wells, the town's goals, as well as those pertaining to protection of water resources, are well served.

In addition to identifying areas served by sewer lines, Figure 2.5 in Chapter 2 shows -- by omission -- areas where sewer lines may be required in the future. Given that much of the land to be developed in the future is not near existing sewer lines, the policies listed below are intended to promote orderly development of land within the Town of Kilmarnock by ensuring connection to the public wastewater system. This will also help to minimize potential groundwater pollution, among other things.

The following policies pertain to wastewater treatment in the Town of Kilmarnock:

45. New development of buildings, structures or subdivision of land designed or intended for human occupancy/ use shall be connected to the Town's public sewage system whenever feasible.
46. For buildings and structures that currently and lawfully utilize septic systems for wastewater disposal, such septic systems shall be connected to the town's public sewage system if practical and when public sewer lines are accessible.
47. The existing wastewater treatment plant may not have capacity to serve additional out-of-town customers, beyond the undeveloped portion of Hills Quarter, without sacrificing capacity for future residents of Kilmarnock. Connection to Kilmarnock's wastewater treatment plant by new development located outside of the town's corporate limits should be discouraged unless expansion of the wastewater treatment plant allows for additional capacity.
48. The Town should consider innovative ways of funding upgrades and/or expansion of the wastewater treatment plant. One example would be for the Town to enter into an agreement with a developer of a major project to pay the cost to upgrade and/or expand the wastewater treatment plant to serve the development.
49. New development that has the potential to generate a significantly higher volume of wastewater should be reviewed carefully during the planning process, prior to construction and/or establishment of the use, particularly if most of the wastewater is discharged into the public sewage system. Various programs (e.g., an on-site recycling/reuse wastewater system) may be implemented to reduce the volume of discharge. Rappahannock General Hospital has implemented such a system and is successful in terms of reducing its wastewater and water use.

2. Water Supply

The public water system serving Kilmarnock is delineated in Figure 2.6 in Chapter 2. Specific information regarding Kilmarnock's water system including, but not limited to, areas served by the town, are identified in the Town Code and the "Water and Sewer Master Plan." Kilmarnock's "Water and Sewer Master Plan" (Master Plan) was prepared for the town by Waste Water Management, Inc., and is dated February 4, 2010. The Master Plan is incorporated by reference in this document.

Kilmarnock's water system was created in 1916. When Kilmarnock was incorporated in 1930, ownership, maintenance and operation of the water system were transferred from the privately owned company to the Town. Kilmarnock's water system consists of: 1) three wells, each of which is 800

feet in depth, with a combined capacity to pump approximately 854,000 gallons of potable water per day* from an underground aquifer; 2) three water towers with a combined capacity to store 560,000 gallons of water; and 3) roughly 9 miles of piping. From the wells, water is pumped to the three storage towers where it is stored until needed. Gravity moves the water from storage through piping, under pressure, to homes and businesses. The water wells and storage towers are located in proximity to Radio Road, Church Street and adjacent to the Rappahannock General Hospital. **(*Note: This figure was taken from the "Comprehensive Plan: 2006 - Town of Kilmarnock, VA" adopted February 27, 2006, Chapter 4, page 5).**

The water storage tanks, located in proximity to the three wells, are generally located as follows:

Existing Water Storage - Kilmarnock, VA

General Location	Capacity
Near Downtown and North of Church Street	60,000 gallons
Near the RGH	250,000 gallons
Near Radio Road	250,000 gallons

Water lines generally follow development patterns and virtually duplicate the sewer line pattern. For this reason, Figure 2.5 (Chapter 2) delineating areas served by the Town's public sewer system, is a reasonable representation of the area served by water lines. One notable exception is the Forest Hills residential subdivision, located in the northwest corner of Kilmarnock, which is developed with septic systems but served by the Town's public water system.

The Town Code prohibits drilling or digging of private wells except in unusual circumstances, subject to the approval of Town Council. Similar to the public sewer system, new development, such as subdivisions, buildings and other facilities intended for human occupancy, requires connection to the town's public water system at the owner's expense, with a few minor exceptions. Chapter 50 (Utilities), Article II (Water System) of the Town Code requires that all new development within 250-feet of a water line connect to the public water system.

Within the Town's corporate limits, Kilmarnock's water system connects to approximately 695 residences and 278 commercial establishments. Outside of the Town's boundaries, (i.e., Hills Quarter) there are an additional 171 residential and 7 commercial connections to the water system for a total of 1,151 connections. By way of comparison, the Master Plan states there were a total 1,059 water connections in January 2009 and the 2006 Comprehensive Plan identifies 944 connections at that time The town's records indicate that the existing system is currently pumping about 200,000 gallons of water per day, or about 190 to 200 gallons per day per connection. A "reserve" water supply is also required for fire protection.

The consulting firm responsible for preparation of the Master Plan analyzed various scenarios to assess future water demand in Kilmarnock. These scenarios are the same as those described in the "Wastewater Disposal" section above. Based on the analysis, the study concludes that the proposed peak water demand would total 340,000 gallons of water per day **(Source: "Water and Sewer Master Plan," February 4, 2010, p. 23).** Proposed water demand at full build out coupled with existing water usage of roughly 200,000 gallons of water per day results in a future demand of roughly 540,000 gallons per day of water.

Based on the above findings, Kilmarnock's water system has the capacity to serve existing customers plus projected build out of the undeveloped property in town, as well as Hills Quarter. However, the system may not have the capacity, particularly in terms of storage and an adequate reserve for fire protection, to serve additional out-of-town customers without sacrificing capacity for future residents of Kilmarnock.

The Town is likely to upgrade its water system well before full build out of Kilmarnock may occur. An assessment of the system's capacity, both in terms of water production and storage, to serve additional development beyond that identified in the preceding paragraph, would be appropriate at the time an upgrade is required and/or during the next Comprehensive Plan update.

Similar to the discussion in the above "Wastewater Disposal" section, as development in Kilmarnock continues, the Town should consider innovative ways of funding infrastructure improvements including expansion of the water system. For example, the town may consider an agreement with a developer to pay for additional water storage to serve an entire major development. Communities have come to realize it is the developers who should be paying for the upgrades and not the municipalities themselves. This is particularly true with smaller utilities which often struggle to maintain financial viability and balanced budgets.

Other factors, in addition to build out projections, need to be incorporated to accurately estimate both the Town's current and projected water usage. These factors include, but aren't necessarily limited to, the following: (a) the reserve capacity necessary to provide back-up during times of unusually high water usage (e.g., drought), fire protection or other emergency; and (b) potential development, such as certain commercial/industrial uses, that may have high water consumption requirements. Careful evaluation of new businesses and industrial uses during the planning process would enable the town to avoid (or at least mitigate) a development that would require an unusually large amount of potable water.

Policies, similar to those that apply to sewer connections and extensions, also apply to the town's water system. Specifically, new development is required to connect to the Town's water system. Potable water connections serving new lots are installed at the owner or developer's expense. Once this is complete, the extensions are dedicated to the Town which assumes responsibility for operation and maintenance.

The following policies apply to the Town's water supply system:

50. Continue existing polices to require new buildings and facilities intended for human occupancy or use to connect to the Town's public water system. Under such policies, developers (owners) are required to extend water lines from the public water system to new construction at their own expense. Once complete and approved by the Town, the water lines, associated equipment, as well as utility easements, shall be dedicated to the Town of Kilmarnock.
51. The existing water system may not have the capacity to serve additional out-of-town customers, beyond the undeveloped portion of Hills Quarter, without sacrificing capacity for future residents of Kilmarnock. Connection to Kilmarnock's water system by new development located outside of the town's corporate limits should be discouraged unless expansion of the water system (e.g., construction of an additional well(s) and/or water storage facility) allows for additional capacity.
52. The Town should consider innovative ways of funding upgrades and/or expansion of the water system. One example would be for the Town to enter into an agreement with a developer of a major project to pay the cost to upgrade and/or expand the water system to serve the development.

53. New development that may potentially require a high volume of water should be reviewed carefully during the planning process prior to construction and/or establishment of the use. Various programs (e.g., an on-site water recycling/reuse system) may be implemented to reduce the high water demand. Rappahannock General Hospital has implemented such a system and is successful in terms of reducing its wastewater and water use.

3. Additional Water Quantity Issues and Policies

Water conservation measures are important to ensure the long-term viability of Kilmarnock's public water supply. These conservation efforts are discussed further in the following Chapter 5 (Preservation of Resources).

The Town has taken steps to address these issues to include adoption of a "Drought Management Plan," incorporated by reference in this document, and implementation of an ongoing program to repair failing and leaking sewer mains. These repairs have greatly reduced the infiltration and inflow rates (I/I) resulting in a lower volume of wastewater at the sewage plant.

In addition, a "Northern Neck Water Supply Plan" has been prepared for the Northern Neck Planning District by EEE Consulting Inc., (2010) and is incorporated by reference in this document. Preparation of the plan was funded by the Virginia Department of Environmental Quality (DEQ). The report addresses regional water supply issues for the Counties of Lancaster, Northumberland, Richmond and Westmoreland, as well as the incorporated towns of Colonial Beach, Irvington, Kilmarnock, Montross, Warsaw, and White Stone, all of which encompasses the Northern Neck Planning District region.

The purpose of the study is to depict and assess current and future water supply conditions in the Northern Neck and contribute to the development of a comprehensive statewide water supply planning process that would: 1) ensure that adequate and safe drinking water is available to all citizens; 2) encourage, promote, and protect all other beneficial uses of water resources; and 3) encourage, promote, and develop incentives for alternative water sources. The Town of Kilmarnock continues to participate in this regional water supply planning effort.

Policies to help ensure the long-term sustainability of Kilmarnock's public water supply, relative to water conservation, are included in the next Chapter 5 (Preservation of Resources) in the section titled "Preservation of Water Quantity."

4. Water Quality

Kilmarnock's goal is to provide the general public with a safe and dependable supply of drinking water. The quality of the Town's potable water supply must meet state and federal requirements, administered by the Virginia Department of Health, consistent with the federal Safe Drinking Water Act. Kilmarnock's water supply is continually monitored for various contaminants to ensure compliance with regulatory requirements. An annual "Consumer Confidence Report" is published by the Town of Kilmarnock. The most recent report for 2012 (as well as annual reports prepared previously) concludes that "all identified containments are within the limits established by the Virginia Department of Health. No items require actions to be taken." **(Source: "2012 Consumer Confidence Report: Your Guide to Your Drinking Water, Town of Kilmarnock, June 2013.)**

B. TRANSPORTATION: STREETS AND HIGHWAYS

The primary mode of transportation in Kilmarnock is by automobile on roads owned and maintained by the Virginia Department of Transportation (VDOT). State roads are generally classified as primary or secondary. Primary roads (those with numbers lower than 600) carry the majority of vehicular traffic and receive the highest priority for improvements. Two such primary traffic arteries are Routes 3 and 200 which intersect in downtown Kilmarnock and link the town to other communities in the region.

Secondary roads are those with numbers 600 or higher. For the most part, roads with numbers from 600 to 999 are rural roads. In a few cases, these rural roads carry traffic volumes at levels similar to primary roads. The primary and secondary road classification used by VDOT does not necessarily reflect the amount of traffic that may use a particular road. Roads with numbers 1000 and above usually designate local streets in towns, villages and subdivisions.

While VDOT roads are identified based on the above numerical classifications, most local governments have named the roads and streets to comply with 911 emergency operations. Except for new subdivisions, roads are constructed and maintained by VDOT. In new subdivisions, roads are built by the developer to state standards and dedicated to VDOT, at which time the state assumes responsibility for their operation and maintenance.

State highways establish the framework for vehicular circulation in Kilmarnock. Practically all traffic flows through Kilmarnock on Routes 3 and 200, connecting the town with other communities. The town's highway network includes:

Route 200: (Irvington Road) extends from the westerly corporate town limits to Main Street (a.k.a Route 3). At this intersection, Route 200 follows Main Street or Route 3 for approximately two blocks, connects to Church Street, and extends to the Town's corporate limits on the east.

Route 3: (Main Street – North and South) extends in a north and south direction through the entire Town of Kilmarnock.

Route 608: (Waverly Avenue) extends from downtown at Main Street in a southeast direction to and beyond the town limits.

Route 688: (James B. Jones Memorial Highway) from Irvington Road north connecting to Route 3 (North Main Street).

Route 1026: (School Street) extends north from Irvington Road to North Main Street.

Route 1036: (Harris Road) extends from Irvington Road to Route 3 at the southern end of town.

Route 3 – Truck Bypass: The "Route 3 thru Truck Restriction" bypass directs truck traffic away from the downtown commercial area (Main Street) from Route 3 at the southern edge of Town to Harris Road and James B. Memorial Highway, ultimately connecting to the North Main Street commercial business district to the north. VDOT has installed truck route signage identifying the bypass at various locations along Route 3, Harris Road and James B. Jones Memorial Highway.

Traffic volumes and circulation patterns are described in detail in the final traffic report prepared for VDOT titled "Southern Lancaster County: Sub-Area Planning Study" dated May 2009. VDOT's traffic study is incorporated by reference in this document.

The VDOT traffic report finds that based on historical data the volume of traffic has increased within the study area by roughly 4 percent per year. The level of traffic using a particular road is the result of its location in relation to establishments that generate high traffic volumes and/or where primary highways intersect.

Routes 3 and 200 intersect on Main Street, within the downtown business district of Kilmarnock, between Irvington Road and Church Street resulting in through traffic converging and increased congestion. According to VDOT's 2009 study, the only area in Kilmarnock where congestion is particularly noticeable during AM and PM peak traffic flow hours is in this area of downtown Kilmarnock. Based on projected development, VDOT concludes that by 2030, many of the east bound and north bound lanes at the two intersections will operate at a Level of Service (LOS) D to F. VDOT defines a LOS "C" or better as an acceptable threshold for major intersections. If the LOS falls below the allowable threshold to LOS D – F, improvements are required to increase the capacity of the intersection. Improvements proposed by VDOT to mitigate congestion at these intersections include: 1) remove the bump out and parking spaces on southbound Route 3 to provide a southbound right-turn lane to Irvington Road; and 2) remove the bump out and parking on northbound Route 3 to provide receiving lanes for dual left-turn from north/eastbound Route 200 or Church Street. **(Source: VDOT Study, "Recommended Improvements," p. 29, May 2009).**

In addition to VDOT's study and recommendations, the vision statement adopted by Town Council for Kilmarnock also addresses transportation issues with the intent of establishing a workable transportation pattern throughout the community. The Town's stated "vision" is "to provide a network of streets accommodating a compatible relationship among various forms of traffic [to include] vehicular, pedestrian, and bicycle [and to] supplement traffic routes with adequate parking facilities." **(Source: Comprehensive Plan: 2006, A Vision for Kilmarnock, adopted by Town Council on February 27, 2006.)**

Consistent with Council's vision statement, implementation of several local programs and policies are ongoing, some of which have occurred since adoption of the Comprehensive Plan in 2006. These ongoing efforts include:

Downtown Revitalization Plan: Adoption and ongoing implementation of the Town's Downtown Revitalization Plan. Downtown improvements, pursuant to the Revitalization Plan, are directed toward upgrading the function and appearance of the commercial district as well as ensuring that the community is "pedestrian friendly." The recent work in downtown enhanced the streetscape, pedestrian circulation, and included adjustments to on-street parking. In addition four public parking areas are now located in the downtown commercial district to alleviate parking and traffic congestion on Main Street and in the downtown business district as a whole.

Steptoe's Overlay District: Steptoe's Overlay District includes the downtown area of Kilmarnock. The primary purpose of this zoning overlay designation is to recognize and promote the unique character of the town's downtown area. However, for the purpose of this discussion, the regulations for the overlay district allow for flexibility specifically in terms of parking requirements. Compliance with off-street parking requirements for a specific business may be problematic, particularly for those establishments along Main Street since they front on the street with alleys located to the rear for deliveries, etc. Sidewalks are also required for new development in this district if a structure is within 75-feet of an existing sidewalk.

Community Development Block Grant (CDBG): Funding pursuant to a CDBG has been provided to extend the infrastructure and sidewalks along South Main Street to, among other things, connect pedestrian access to the downtown business district.

Virginia Department of Transportation (VDOT) Coordination: The Town of Kilmarnock continues to coordinate planning issues regarding roads, traffic and congestion management with VDOT. The Town's goal is to continue to improve traffic circulation, establish appropriate signage, and consider improvements (i.e., sidewalks and bicycle lanes) that reduce traffic flow and provide non-vehicular public access to community services.

The Town, in conjunction with VDOT, recently established a truck bypass (described above) to remove as much unrelated truck traffic as possible from the downtown business district. The purpose of the bypass is to mitigate traffic congestion, as well as minimize parking and pedestrian conflicts with truck traffic.

In addition to the ongoing implementation of the programs and policies described above, the following policies apply consistent with Town Council's vision statement:

54. Continue to identify the need for and develop new sidewalks and areas for bicyclists as part of the annual review process. Particular emphasis should be placed on areas that:
    - Connect residential areas with public and semi-public facilities as well as commercial districts including restaurants, shops and venues for public entertainment;
    - Connect residential areas to major employers in Kilmarnock thereby providing an opportunity for residents to walk and / or bicycle to work;
    - Fill in the gaps between areas that are partially developed with sidewalks, particularly those areas that provide access to public facilities such as the public school, library, fairgrounds, etc.
55. Continue to improve traffic circulation and parking in the downtown area. This can be accomplished in part by identifying new locations for public parking spaces within the downtown business area particularly where on-site parking is limited. There will be an ongoing need for off-street parking to keep pace with growth, as well as changing uses downtown. Visibility and directional signage is an essential part of public parking.
56. Continue to work with VDOT to improve traffic circulation, ingress/egress, parking, and safety for both vehicular and pedestrian traffic within the North Main Street commercial area. Consider extending streetscape, parking and pedestrian facilities beyond the downtown commercial district to North Main Street.
57. Ensure adequate traffic circulation within major undeveloped areas by establishing general routes for a feeder street system, connecting to major rights-of-way. Feeder streets would be designed as part of the planning process and implemented as new subdivisions are developed. Feeder roads are expected to carry more traffic than residential streets (e.g., cul-de-sacs) and should be planned accordingly.

C. OTHER PUBLIC SERVICES AND FACILITIES

As presently structured, services offered by the town government are focused primarily on providing and maintaining a public water and sewerage system, police protection, a utilities department and town government/administrative services. Administrative services consist of the Town Manager, Town Treasurer, Town Planner and Town Clerk. The utilities department operates and maintains the town's water and sewer systems. The Town is also responsible for the ongoing implementation of improvements outlined in the "Downtown Revitalization Plan" including, but not limited to,

maintenance of: public parking lots; community parks; landscaping in the downtown commercial area including the island median strips; and seasonal decorations. The police department consists of a Chief and officers. Jail facilities are provided through arrangements with Lancaster and Northumberland Counties. Many other community services, available to the citizens of Kilmarnock, are provided by other governmental agencies or by non-profit organizations, semi-public and the private sector.

Some of the more significant public services and facilities in Kilmarnock are identified below:

School: Educational services and facilities are provided by the Lancaster and Northumberland County Public School Systems under the administration of an elected school board. The Lancaster County Middle School, located on School Street, is the only public school facility located within the corporate limits of Kilmarnock. While the town government has no role in the operation or financing of the local school, the school does provide resources that are beneficial to the citizens of Kilmarnock. The Middle School has facilities that may be utilized by the community for non-school functions. For example, the playground and gym offer recreational resources when not in use by the school and the auditorium may be used by the public for performing arts programs.

Community College: The Rappahannock Community College (RCC) – Kilmarnock Campus officially opened in 2012. The campus is located in the Chesapeake Commons complex west of North Main Street. RCC is a non-profit organization offering both traditional college courses and a workforce development training program for the region's residents.

Recreational and Environmental Resources: The Town of Kilmarnock does not operate a recreational program of its own. However, within the near future the town will begin developing such a program. Currently, the town owns and operates several amenities such as the children's playground on Waverly Avenue, the Baylor Park Nature Trail at Norris Pond, and the dog park on the "Town Lot" off North Main Street. The "Town Lot" also serves as a space for different events, shows, festivals, and other gatherings, and is planned to be developed for a public use.

State recreational sites, such as Hughlett Point, Dameron Marsh, Belle Isle State Park and various public boat landings are located in proximity to the Town of Kilmarnock. These areas, along with local and community parks, provide recreational opportunities to county and town residents. Various private or non-profit groups also provide recreational services. A few of these facilities are described below:

a. The Fair Grounds on Waverly Avenue at Bellview Drive is a five-acre site owned by the Kilmarnock Volunteer Fire Department. Permanent fixtures on the site include a number of carnival rides and small buildings. The fire department operates a carnival here during mid-summer with rides, games and food.
b. The Lancaster County Middle School on School Street has a sports field equipped for playing soccer and other field games. There is also a small children's area with swings, climbers, and playground equipment.
c. The YMCA on Harris Road includes amenities such as a gym, swimming pool and facilities for youth programs. Activities include swimming, roller-blading, T-ball, volleyball, basketball, karate, and soccer. The YMCA also operates a variety of other programs at many locations throughout the County. The association sponsors a summer camp and coordinates programs with social services to reach youth, teens and adults.

d. The Gloria L. Goodman Youth Park (Dream Fields), located about one-half mile west of the town limits on Route 200, has six baseball fields, four of which are lighted. This park is owned by the Youth Club of Lancaster County, Inc. (Lancaster County Little League) and sponsors baseball programs during the spring and summer seasons.
e. The Chesapeake Boat Basin, a private marina located on Indian Creek approximately one mile east of Kilmarnock at the end of Route 608 (Waverly Avenue), has a boat launching ramp with fuel and other boating supplies.
f. The conservation areas in Kilmarnock, defined by stream basins and their banks, provide a large area of open space which has the potential for passive recreational use, such as nature study and walking trails. One example is the Baylor Park Nature Trail at Norris Pond.

The town continues to consider the establishment of new recreational areas. There are opportunities for neighborhood parks in areas that are not extensively developed. The classic method of acquiring a public park is by direct acquisition of a site. A property owner may also choose to donate a specific parcel to the Town for public use or dedicate an easement for public access over a portion of a specific parcel. Another way is to incorporate a recreational area as part of the planning process for major new development.

Dedication of a public access easement would be particularly appropriate within designated resource protection areas that include portions of stream basins. Since these areas have qualities that are adverse to development, they could be used for passive recreational purposes such as nature trails and bird watching. One example is the recently established Baylor Park Nature Trail.

The following policy applies to new recreational opportunities within the Town of Kilmarnock:

58. The Town should continue to seek new and innovative opportunities for public recreational use. These may include: designated bicycle paths; picnic tables; development of existing/publicly owned open space; designation of a local park as part of the planning/subdivision review process for major new development; and dedication of public access easements for passive recreation, such as a walking trail, over resource protection areas which are otherwise undevelopable.

Emergency Services: Non-profit volunteer fire and rescue organizations provide fire protection and ambulance services. The Kilmarnock Volunteer Fire Department, located on School Street, serves the Town and portions of Lancaster County and Northumberland County. The Kilmarnock Volunteer Rescue Squad, located on Route 1036 (Harris Road) near the Rappahannock General Hospital serves an area similar to that served by the Fire Department.

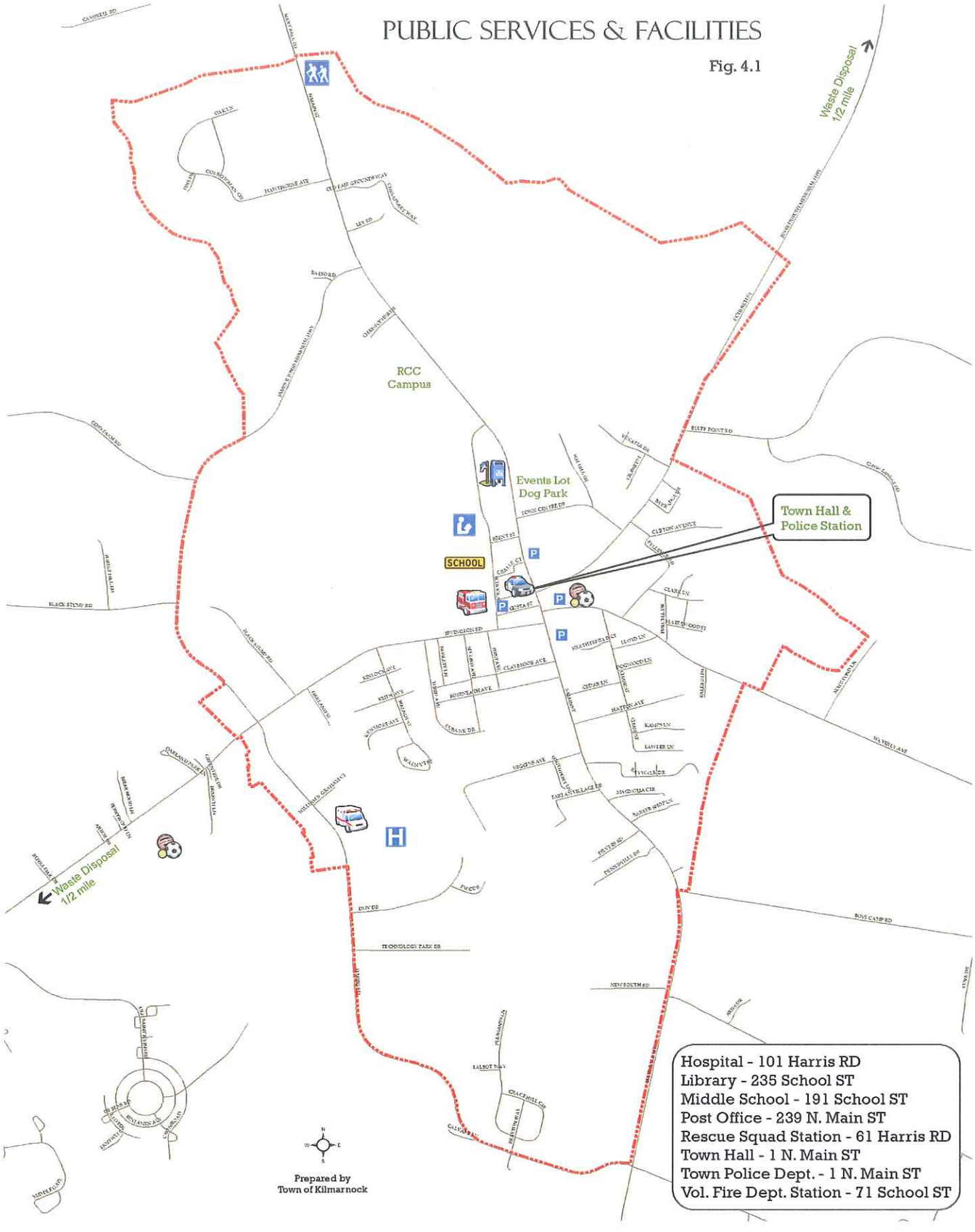
Library: The Lancaster Community Library is located on School Street north of the Lancaster County Middle School. The library is operated by the non-profit organization, Lancaster Community Library, Inc. Financial support is provided by a combination of state and local government funding, as well as community contributions. The library also has a meeting room for community functions.

Medical Services: Hospital, emergency room and related medical services are provided by the 76-bed Rappahannock General Hospital (RGH). Established in 1977, RGH serves approximately 35,000 people from the Northern Neck region and Middlesex County. Services at the Hospital include, but aren't limited to, cancer treatment, cardiac care, mental health treatment, maternity and infant care, and home health care services. The hospital is located within the southeastern area of Kilmarnock on Route 1036 (Harris Road). Doctor's offices, the Northern Neck Free Health Clinic and a rehabilitation center are also located along this route. A variety of other medical offices are also interspersed throughout the Town of Kilmarnock.

Solid Waste and Recycling Services: These services are provided by private contractors and Lancaster County.

Virginia Department of Motor Vehicles (DMV): A DMV branch is located on DMV Drive, northeast of the developing business and technology park. All services associated with the State's DMV are provided in this facility.

Town Administration: Town administration and operational facilities are located in Town Hall in the center of Town at 1 North Main Street within the designated "Downtown Commercial District." Offices of the Town Manager, Planning Director, administrative staff, as well as police and utility departments are located in this facility.


PUBLIC SERVICES & FACILITIES
Fig. 4.1
Waste Disposal 1/2 mile
RCC Campus
Events Lot Dog Park
SCHOOL
Town Hall & Police Station
Waste Disposal 1/2 mile
Hospital - 101 Harris RD
Library - 235 School ST
Middle School - 191 School ST
Post Office - 239 N. Main ST
Rescue Squad Station - 61 Harris RD
Town Hall - 1 N. Main ST
Town Police Dept. - 1 N. Main ST
Vol. Fire Dept. Station - 71 School ST
Prepared by
Town of Kilmarnock

CHAPTER 5
PRESERVATION OF RESOURCES

This Chapter addresses the preservation of natural and cultural resources within the Town of Kilmarnock consistent with federal, state, regional and local mandates. Kilmarnock's Town Council recognizes the importance of preserving the community's resources. The Town's vision, articulated in the Comprehensive Plan, states the importance of protecting the delicate balance and land use compatibility between existing/future development with the natural environment and the community's historic resources. To accomplish this, the Town's long-term goal is to incorporate the preservation of natural environmental and historical features in the community into the planning and implementation of all public and private activities. **(Source: "A Vision for Kilmarnock," Comprehensive Plan: 2006 - Town of Kilmarnock, VA)**

Significant resources in the community are identified as well as policies to ensure implementation of the Town's vision for their preservation. Topics analyzed in this Chapter include historic resources, preservation of water quality and quantity, protection of surface and groundwater resources and stream bank protection, especially in areas designated for resource protection. Some of the resources discussed in this Chapter, such as water quality/quantity and stream bank stabilization, are similar to topics analyzed in preceding Chapters 2 and 4 since the subjects are the same; however, this Chapter focuses on the protection and preservation of these natural resources.

A. HISTORIC RESOURCES

Kilmarnock has a long and rich history, briefly summarized in Chapter 1. Because of its small-town rural appeal, the Town continues to build upon its role as a "destination" for both residents of the region and visitors to the Northern Neck. As part of planning for the future, the Town's goal is to preserve the past by maintaining and enhancing Kilmarnock's charm as a small town. One way to retain a viable sense of community with a small-town appeal, while enhancing the town's economic base by attracting consumers, is to identify and preserve existing historic structures, especially those located in the downtown commercial district.

Downtown Commercial District: The architectural style in Kilmarnock, especially the downtown area, is eclectic with structures developed during various time periods. Many of the town's original structures were lost when the town was ravaged by two fires in the early and mid 1900s. In addition, new structures have been built during the past few decades which are interspersed throughout the downtown area.

A "Master Plan Report: Kilmarnock Town Study" was prepared by the University of Virginia, School of Architecture in May 1992 (UVA Master Plan). This report is incorporated by reference in this document. The report states that "many of the downtown storefronts can be described as typical American 'Main Street' architecture – displaying decorative brick work and large expanses of glass frontage" **(p. 40)**.

The Town of Kilmarnock recognizes and promotes the unique character of the downtown area and in so doing adopted the "Steptoe's Overlay District" as part of its zoning ordinance. A primary objective of the overlay district is to preserve the character and fabric of the Town's original trade center **(Chapter 54, Article VIII, Sec. 54-601 of the Town Code).**

Residential Areas: In addition to the downtown commercial area, the UVA Master Plan describes potentially historic structures located within Kilmarnock's established residential areas. The report

states that, based on preliminary architectural heritage residential surveys in Kilmarnock, "three dominant housing types were observed: the traditional I-house, the Queen Anne style and the bungalow style.

- **The I-House Type:** "The I-house type, used from 1850 to 1890 . . . is a common British folk form particularly seen in the Tidewater south. . . . This type [of residence] is usually seen as a farmhouse. An example of an I-house exists at 222 Main Street" **(p. 39).**
- **Queen Anne Style:** Another type of historic architecture in Kilmarnock is the Queen Anne style which typically "exhibits a variation in massing with distinctive decorative detailing, including shingle siding, spindle work, stained glass, Palladian windows, finials and turrets. The style was dominant from 1880 to 1900 and later" **(p. 40).** An example of the Queen Anne style is located at 125 South Main Street.
- **Bungalows:** The third historic architectural style in Kilmarnock is the bungalow. Bungalows exist along most of Kilmarnock's streets within established residential areas. The UVA Master Plan describes these homes as typically a one-story home with a gently pitched roof, front porch, and large piers to support the roof overhang. Bungalows are often covered in stucco and have sash or casement windows **(p. 40)**. This architectural style was dominant in Virginia beginning in 1905 through 1930.

Gateways to Kilmarnock along Routes 3 and 200: Kilmarnock is a vital community on the Northern Neck. Maintaining and enhancing the small-town charm upon entering Kilmarnock via Routes 3 and 200 is important. Potentially significant historic structures exist along these gateways to the community. The UVA Master Plan states that the "Northern Neck [is] one of the most historically important areas in the state. . . . In recognition of this fact Route 3 has been designated a 'Historyland Highway'" **(page 40)**. Protection of the gateway approaches to town helps to foster pride in Kilmarnock's heritage while enhancing the Town's economic base by enticing visitor's and tourists to stop in the Town of Kilmarnock.

There are several recommendations in the UVA Master Plan. Most importantly, the report concludes that the small sampling of Kilmarnock's historic structures produced impressive results in terms of the Town's architectural heritage. On page 40 of the document the authors state that "this sampling indicates that there is much architectural fabric within the town that should be investigated further." A survey of historic structures in Kilmarnock may help to establish the framework for a potential program in the future to protect the community's historical assets and conserve the charm and appeal of the existing rural small-town. As demonstrated in other historical communities, these measures may also augment Kilmarnock's economy, especially tourism, by maintaining the charm and viability of shops as a basis for ongoing economic development.

Technical and financial assistance to complete an historic survey of Kilmarnock's structures is available through a variety of state and federal programs. One such program is offered by the Virginia Department of Historic Resources (DHR). Through this program, localities may receive partial funding and partner with DHR to take stock of their historic resources. Further information about incentives and grants can be found at www.dhr.virginia.gov. In addition to state and federal programs, the Town may coordinate efforts with several volunteer and/or non-profit organizations including, but not limited to, the Kilmarnock Museum.

Consistent with the Town's vision to protect the community's historical features, coupled with recommendations in the "UVA Master Plan," Kilmarnock's policy is as follows:

59. Conduct a survey of historic structures within the Town of Kilmarnock. Solicit technical and financial assistance to complete the survey and coordinate efforts with local volunteer and/or non-profit organizations including, but not limited to, the Kilmarnock Museum. A survey may help to establish the framework for a potential program in the future to protect the community's historical assets, conserve the charm and appeal of the existing rural small-town, as well as provide an opportunity to educate the public about the Town's historic resources and their protection.

B. PRESERVATION OF WATER QUALITY

The purpose of this Section is to identify policies and programs that protect groundwater from potential contamination to ensure the long-term sustainability of the Town's water supply. The goal is to ultimately eliminate as many contaminants as possible to preserve the underlying water table.

The Town of Kilmarnock relies 100 percent on groundwater for its drinking/potable water supply. In addition, the population of the four Northern Neck counties and incorporated towns (all of which constitute the Northern Neck Planning District) is either served by private residential wells or community public water systems that rely upon deep wells for water supply. For this reason, the ongoing protection of quality groundwater is vital to ensure the public's health, safety and welfare both on a regional and local level. In addition, there are regional, state and federal mandates that require localities to protect surface and ground water to minimize impacts to this essential resource.

1. GROUNDWATER RESOURCES

On a regional level, there are seven major confined aquifers and one unconfined aquifer that reflect the geology of the Coastal Plain Region of Virginia. All of these water tables are at different depths. Kilmarnock is located in the eastern part of the Coastal Plain and obtains its potable water from the unconfined aquifer. This aquifer is essentially replenished by rain and snow melt. Appendix I of the 2010 "Northern Neck Water Supply Plan" or WSP, incorporated by reference in this document, states that "studies conducted by SAIF Water Wells, Inc., in Lancaster and Northumberland counties, utilizing hundreds of laboratory analyses indicate that the surficial aquifer has, for the most part, good quality water" **(p. 290).**

Current potable water quality standards in Kilmarnock are also in compliance with established standards. The quality of Kilmarnock's water supply and these standards are described in Chapter 4. However, ongoing protection of the quality of the town's water supply is a priority, both for the current population and future generations. Since the water in our region comes from the unconfined aquifer, it is also vulnerable to contaminants and pollution that may seep below the surface. Regional activities outside of the Town limits also affect the underlying unconfined aquifer and have the potential to adversely impact the quality of the Town's water supply. While these activities are not within the Town's regulatory purview, coordination with applicable federal, state, regional, and local regulatory agencies is critical to ensure the long-term quality of the water for the region as well as for Kilmarnock. For this reason two policies are included below to ensure the ongoing coordination with applicable agencies to protect the quality of ground water that serves the Town and the region.

60. Continue coordination with applicable agencies to include: 1) federal (Environmental Protection Agency or EPA/Clean Water Act) and the Chesapeake Bay Preservation Act; 2) state (Virginia Department of Environmental Quality or DEQ / initiatives for protection of the groundwater quality, including establishment of a Groundwater Management Area for this region and the ongoing Source Water Assessment Program or SWAP); 3) regional (Northern Neck Planning District Commission or NNPDC to implement recommendations in the 2003 "Northern Neck

Ground Water Quality Management Plan" and the 2010 "Northern Neck Water Supply Plan;" and 4) Lancaster and Northumberland counties to ensure protection of the regional and local groundwater supply including, but not limited to development and implementation of the Storm Water Management Plan for the area and the Sediment and Erosion Control Act regulations which are part of the Chesapeake Bay Preservation Act.

61. Consider development of a "Water Quality Plan" for the Town of Kilmarnock to minimize threats to local groundwater, including water quality and quantity. The plan should identify current informational gaps (e.g., inventory of abandoned wells and underground storage tanks) as well as educate the public about protection of the water supply. Development and implementation of many of the policies identified in this Chapter would constitute a "Water Quality Plan" for the Town of Kilmarnock.

There are several potential threats to the groundwater, all of which could potentially impact the Town's drinking water supply at some point in the future. Because of aquifer's vulnerability to contaminants, there are certain programs underway and/or proposed in the Town of Kilmarnock to preserve and protect water quality. These are listed below:

Potential Threats to Groundwater Resources: Pollutants can easily find their way into the groundwater. Potential sources of pollution to the region's groundwater quality include, but aren't limited to: chemical leaching; residential lawn care; auto pollutants; bio-solid (e.g., fertilizer) applications; abandoned wells; underground storage tanks; improperly disposed household hazardous waste; nonconforming septic systems*; landfills; and/or private waste dumps. In all cases, education of the public regarding these potential threats is paramount. Potential hazards that specifically apply to the Town of Kilmarnock are described below:

***Note:** Groundwater contamination as a result of older outdated septic systems is not a major issue in Kilmarnock. Most of the developed area within the Town is connected to the public sewer system and new development is required to connect if the site is located within 250-feet of a sewer line. Major development such as a large subdivision is also required to provide sewer service. The only areas currently utilizing septic systems are the Forest Hills residential subdivision (with larger lots for adequate leach fields) which is a relatively new development so the septic systems are up-to-date and several legal nonconforming uses interspersed along North Main Street. Future adjustments to the Town's corporate limits may include existing development served by septic systems. Annexation(s) to Kilmarnock may be an issue, when and if this occurs, especially if the area is large and fully developed with septic systems.

Insecticides, Pesticides and Herbicides: Very little land within the Town of Kilmarnock is being farmed. Therefore the use of fertilizers high in nitrogen, commonly used on crops grown locally, is not within the regulatory purview of Kilmarnock. However, products that should be addressed in Kilmarnock include insecticides, pesticides and herbicides. Many people use these contaminants to maintain residential lawns and gardens. The relationship between the use of these contaminants and groundwater pollution is well known. These products can be washed into drainage ditches and/or absorbed into the ground resulting in an adverse impact to the groundwater.

The purpose of the following policy is to minimize adverse impacts to the quality of groundwater as a result of the use of insecticides, pesticides and herbicides primarily used for landscaping purposes:

62. Increase public awareness about the cumulative effect of these contaminants on our water quality. Information may be posted on a web site and/or included in a handout that identifies the following:

- list the various contaminants, as well as their impacts, typically used for landscaping maintenance;
- recommend environmentally safe products and/or alternative methods that do not require the use of harmful chemicals for landscaping;
- include a list of native drought-tolerant low maintenance landscaping species that require minimal use of chemicals;
- educate the public about their use and the timing of application.

(Please also refer to policies and related discussion below regarding "Surface Water".)

Underground Gasoline and Oil Storage Tanks: Another potential source of contamination to groundwater may be underground gasoline and/or heating oil tanks. Older homes in Kilmarnock may not have been updated and the use of underground storage tanks over the years may be contaminating the soil. Environmental Protection Agency (EPA) regulations required replacement of single-walled underground storage tanks with double-walled tanks by 1999. **(2003 Northern Neck Ground Water Quality Management Plan, page 13).** These tanks, if not upgraded or removed, may contaminate the groundwater if they leak and/or collapse.

The Town has completed an assessment of underground storage tanks and has identified ways to mitigate potential contaminants to protect water quality. Implementation of the "Downtown Revitalization Plan" resulted in the removal of many commercial and industrial underground storage tanks. Primarily the only storage tanks that exist in the town, related to this type of land use activity, serve existing gas stations currently in operation. Since underground tanks for commercial and industrial land uses are addressed no further policy is required. However, some of the older residences may have underground tanks for storage of heating fuel. These may not be updated to EPA standards effective in 1999. As a result, the following policy is included to address this issue. This policy is also a recommendation in the 2010 Northern Neck WSP.

63. Consider a requirement to register all residential underground storage tanks, primarily used for heating fuel. At this time, it is not a requirement to register these tanks nor are they monitored by the State. However, leaks from these tanks may pose a potential threat to groundwater quality and an inventory of their location may be useful in the event of any contamination events. Removal and/or upgrading underground tanks may occur when redevelopment of a property is proposed.

(Please also refer to the discussion below related to "Redevelopment.")

In addition, the "Kilmarnock Watershed Assessment Report, April 2013" (incorporated by reference in this document) identifies "hot spots" within the Town that have the potential to contaminate groundwater. These include certain commercial, industrial, institutional and transportation-related operations that tend to produce higher concentrations of pollution and/or have a higher risk for spills. These "hot spots" include auto repair shops, public works yards, restaurants, and other related land uses **(p. 19).** Recommendations are included in the report to reduce potential threats and are incorporated in the following policy:

64. Continue to implement recommendations included in the "Kilmarnock Watershed Assessment Report, April 2013." Specific recommendations for on-site maintenance combined with pollution prevention practices can significantly reduce the occurrence of "hotspot" threats. In addition, areas with high water tables (as shown in Chapter 2) should be protected from construction activity and potentially problematic land uses, especially the types described above that have the

potential to contaminate the underground water table. (Please refer to policies below and the "Surface Water" discussion relating to runoff.)

Household Hazardous Waste: Household hazardous waste, particularly from products used to maintain vehicles, is also an issue pertaining to the protection of water quality. Proper disposal of paint, batteries, oil, cleaners, tires, etc., is necessary. According to the "Northern Neck Ground Water Quality Management Plan," there are no known locally operated private waste dumps in Kilmarnock. However, the Northern Neck Soil and Water Conservation District does provide a program for hazardous waste collection twice a year.

65. Increase public awareness about the program for hazardous waste collection. This could be accomplished by including notification in the local newspaper, on the web site and/or in a flyer distributed with the Town's water and sewer bill or annual property tax statement.

Well Abandonment: Since much of the developed area within the Town of Kilmarnock is connected to the public water system and new construction must also be served by public water, the issue of abandoned wells is not major within the town limits. However, it is important for citizens to know that there are proper procedures for abandonment of wells. This is particularly important in the event the town annexes additional land and expands its corporate limits to include areas currently served by private wells. In addition, existing shallow wells often do not have as many minerals in the water, and, as such, may be used to maintain local environments and landscapes. These shallow wells, if not abandoned properly, are also a source of possible contamination.

66. Consider inventorying abandoned wells within the Town of Kilmarnock and establish a means to ensure proper abandonment. According to authorities, these wells could be filled with non-toxic materials (e.g., stone or dirt) and capped. This approach may be less costly. In addition, developed properties, currently served by wells, which connect to the public water system in the future, should be required to follow proper procedures for the abandonment of an on-site well. Funding from a variety of sources may be available to implement a well abandonment program.

Protection of Public Wells: Protection of public wells that are part of a water system is paramount. Public wells are defined as a well with 15 or more connections and/or 25 people using the source for 8 months a year. In Kilmarnock there are three wells which are part of the town's water system. In addition, there are other small privately owned water systems that serve the public within the Town of Kilmarnock. The State of Virginia Department of Environmental Quality conducts a "Source" Water Assessment Program (SWAP) for all public wells by testing a 1,050 foot area for contamination around each public well. The SWAP stresses the importance of protecting land around public wells from contaminants. Kilmarnock officials are continually cognizant of land use and related activities around public wells so that contamination of these areas can be avoided. One way to protect the quality of water in Kilmarnock is to adopt and implement a wellhead protection program for the Town's public wells. The "Northern Neck Water Supply Plan, 2010" strongly encourages local jurisdictions in the region to adopt such a program for protection of public wells. The Town of Warsaw adopted a wellhead protection program in 2005 so procedures for development and implementation are available.

67. Consider adoption of a wellhead protection program to protect the Town's public (water supply) wells.

2. SURFACE WATER RESOURCES:

There are primarily two general topics addressed in this section: 1) the Chesapeake Bay Preservation Act (CBPA) and Resource Management Area as they relate to protection of water quality; and 2) runoff (i.e., storm water and pollutants), storm water management and redevelopment. In this section of the Comprehensive Plan, potential impacts to water quality as a result of runoff, new development, land use activities and the natural erosion process are evaluated. Policies, consistent with state and local requirements, are identified to protect the quality of water entering Kilmarnock's watersheds, which ultimately drains into the Chesapeake Bay. The policies are also intended to minimize pollutants in surface water (e.g., runoff) which may seep into the underlying groundwater table.

A. Chesapeake Bay Preservation Act (CBPA) / Resource Management Area (RMA) & Local Resource Protection Areas (RPA):

Chesapeake Bay Preservation Act (CBPA) / Resource Management Area (RMA): The Town of Kilmarnock, as well as other areas within the Chesapeake Bay watershed, is subject to provisions of the CBPA. The primary purpose of the CBPA is to improve the quality of water entering the Bay. Because of this, the Town adopted the "Chesapeake Bay Preservation Overlay District" (Town Code, §54-481). The entire Town of Kilmarnock is located within this "Overlay District" which is also referred to as Kilmarnock's Resource Management Area or RMA. Regulations for the RMA address "land types that, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area" (§54-482, Town Code). As such, regulations for the "Overlay District" apply to all development and land use activity in Kilmarnock. The RMA includes all lands within the town that are not designated as a Resource Protection Area or RPA.

Even though Kilmarnock is not located adjacent to the Chesapeake Bay, it is within the Bay's watershed and, as such, the quality of water entering Kilmarnock's watersheds (see Chapter 2 for a description of the town's three watersheds) must be protected. The source of pollution entering the Bay is typically referred to as a "point or non-point source." Point source pollution, as it relates to the Town of Kilmarnock, is a facility that discharges municipal wastewater directly into a water body which can be traced to a single identifiable source. If this occurs, a National Pollutant Discharge Elimination System (NPDES) permit is required from the U.S. Environmental Protection Agency. In Kilmarnock, the Wastewater Treatment Plant is the only facility in town classified as a "point source" with a "minor" NPDES permit to discharge treated wastewater directly into a tributary to Indian Creek.

With the exception of the Wastewater Treatment Plant, all other sources of water pollution in Kilmarnock are classified as "non-point." The "Kilmarnock Watershed Assessment Report, April 2013" concludes that that "no runoff from other jurisdictions enters the town. [As a result,] the health of streams in Kilmarnock is almost entirely dependent on activities and land uses within its boundaries." **(Source: Section 1 – Introduction, 1.1 Executive Summary, p. 5).**

Local Resource Protection Areas (RPA): Perhaps the most important areas requiring protection in the Town of Kilmarnock are the stream banks and basins. These tributaries are typically identified as a "Resource Protection Area" (RPA) on various maps including those in Chapter 2 of this document, as well as the Land Use Plan map. The RPA is officially defined as "that component of the Chesapeake Bay Preservation Area comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters" (§54-481, Town Code). In the case of Kilmarnock, the definition of an RPA specifically applies to "a

100-foot vegetated buffer area located adjacent to and landward of . . . both sides of any . . . water bodies with perennial flow. . . . The full buffer area shall be designated as the landward component of the RPA" (§54-482, Town Code). This definition applies to the various unnamed stream basins, the two streams known as Dymer Creek and Norris Prong Creek, and that area adjacent to the Indian Creek tributary where the Wastewater Treatment Plant is located. These areas also include highly erodible soils particularly on the steep slopes.

Development and Land Use: While erosion and runoff occurs naturally, development and land use activities may exacerbate this process, as well as introduce contaminants to environmentally sensitive areas. These issues must be properly addressed and implemented during the planning and construction phase of any new development proposal, especially those located in proximity to a protected area.

Policies pertaining to new development and land use activity which are intended to protect environmentally sensitive areas and natural resources by minimizing surface runoff, soil erosion and the quantity of pollutants entering the tributary stream basins that flow into the Chesapeake Bay are included in Chapter 3 (Land Use Plan). Please refer to Section "B" (Development Policies) sub-section "2" (Resource Protection Areas) of that Chapter.

In addition, zoning regulations in the "Chesapeake Bay Preservation Overlay District," which apply to all new development and land use activity within the Town of Kilmarnock, address all aspects of development including, but not limited to, land disturbance and redevelopment.

B. Erosion Control, Runoff, Storm Water Management and Redevelopment:

Erosion Control and Protected Areas: Kilmarnock's goal is to protect both groundwater and surface water resources from any increased pollutant loads as a result of stream bank erosion or other means of sediment transport. Erosion of stream banks and runoff occur naturally, although, as described above, the rate of erosion may be accelerated as a result of land use activities. To minimize and mitigate erosion, runoff and sedimentation, as well as prevent potential slope failure, the following policies apply:

68. Continue to identify and monitor areas where erosion appears to be a critical issue. If there is an area where stream bank erosion is problematic, the Town should delineate the drainage area of that stream bank and implement measures to reduce the rate and volume of storm water runoff for that specific drainage area.
69. Identify funding opportunities to implement stream bank restoration projects.
70. Continue to enforce the Erosion and Sediment Control Act requirements of the Chesapeake Bay Preservation Act to minimize sedimentation and erosion within the three watersheds located in Kilmarnock.

Runoff (Storm Water & Contaminants): The second part of the "Surface Water" section in this chapter focuses on impacts to the quality of water as a result of storm water runoff and contaminants. There are three topics addressed below: 1) issues and "hot spots" identified in the "Kilmarnock Watershed Assessment Report, April 2013;" 2) storm water management; and 3) redevelopment of older buildings and infrastructure. The purpose of this discussion is to identify policies that protect the underlying water table from pollutants which may seep into the aquifer and/or drain into vulnerable or protected areas.

- **Kilmarnock's Watershed Assessment Report (April 2013):** Several topics are analyzed in the "Kilmarnock Watershed Assessment Report, April 2013," to protect and improve the quality of surface water runoff. Some of these issues also relate to the following "Redevelopment" section. Specific recommendations for improvements to the town's watersheds are included in the report and are part of the following policy:

71. Continue to implement recommendations in the "Kilmarnock Watershed Assessment Report" dated April 2013. Recommendations in the report address: 1) redevelopment; 2) the use of household contaminants for landscaping; and 3) repair, retrofit and redevelop the town's aging infrastructure in specific locations to include storm drains and improperly designed storm water outfalls. (Please refer to policies above in the "Groundwater" and "Stream Bank" protection/restoration sections.)

Storm Water Management: Kilmarnock's goal is to improve and protect water quality by properly managing storm water drainage and runoff. This goal and implementation measures are discussed throughout this section of the chapter. The "Chesapeake Bay Preservation Overlay District" encompasses the entire Town of Kilmarnock. Regulations in this part of the zoning ordinance state that "storm water runoff shall be controlled by the use of water quality BMPs that . . . are consistent with the water quality protection provisions of the Virginia storm water Management Regulations (4 VAC 3-20-10 et seq.)." (Town Code, §54-485(e)).

In addition, the state has adopted a requirement for each county to develop and implement a new Storm Water Management Program effective July 1, 2014. Kilmarnock officials continue to work with Lancaster and Northumberland counties on development of this program. As a result, no policy is required for this issue since the existing zoning regulations, coupled with the recommendations in the town's "Watershed Assessment Report" and the state's mandate to develop and implement a Storm Water Management Plan, adequately address storm water management.

Redevelopment: The Town's goal is to improve surface (i.e., runoff) water quality, as well as protect water resources, when redevelopment occurs. Many developed sites within Kilmarnock, especially those for commercial and industrial use, were constructed prior to consideration of storm water runoff and its impacts to water quality. Improvements that may be implemented as redevelopment occurs include: 1) reduction in the amount of existing impervious surface coverage (this is also described above under "New Development"); 2) replacement of inefficient sewer lines and proper maintenance; and 3) redevelopment of the town's aging infrastructure in specific locations identified in the "Watershed Assessment Report" referenced above.

As stated above, the "Chesapeake Bay Preservation Overlay District" is part of the Town Code and affects the entire Town of Kilmarnock. These regulations address, among other things, redevelopment. Requirements for redevelopment include, but aren't limited to, an overall reduction in impervious surface coverage; an overall decrease in non-point source pollution; and installation of landscaped buffers, especially adjacent to environmentally sensitive areas. Again, no policy is required for this section since the existing zoning regulations pursuant to the CBPA adequately address redevelopment.

C. PRESERVATION OF WATER QUANTITY

Regional Water Quantity: Important as water quality is the issue of water quantity in our area. All of the potable water in our region comes from the unconfined aquifer which is used by numerous localities. According to the Town's 2006 Comprehensive Plan these localities extend beyond the

Northern Neck to include southern Maryland and some of the Tidewater region. The 2006 Plan **(p. 72)** states that the entire Northern Neck uses far fewer gallons of water per day (roughly 5.5 million) than the paper mill in West Point (19 million gallons) and the southern Maryland region (26 million gallons). The aquifers that provide drinking water to the region, specifically to the Town of Kilmarnock, are described at the beginning of the "Groundwater Resources" section above.

Because numerous localities in the region draw water from the same aquifer as the Town of Kilmarnock, preservation of the water supply is both a regional and local issue. The Northern Neck WSP prepared in 2010, under the direction of the Northern Neck Planning District, includes an extensive work program for continuous improvements to the area's water supply and to ensure a sustainable long-term water source in the region **(see pages 172 – 173)**. The purpose of the study is to assess current and future water supply conditions in the Northern Neck and contribute to the development of a comprehensive statewide water supply planning process that would: 1) ensure the availability of adequate and safe drinking water; 2) encourage, promote, and protect all other beneficial uses of water resources; and 3) encourage, promote, and develop incentives for alternative water sources. The Town of Kilmarnock continues to participate in this regional water supply planning effort.

A few of the key recommendations in the WSP include, but aren't limited to: 1) development of a surface water reservoir(s) in the region; 2) use of reclaimed water; 3) desalination; 4) rain harvesting; 5) designation of the Northern Neck as a "Ground Water Management Area;" 6) implementation of water conservation measures throughout the Northern Neck; 7) development of well head protection programs for all counties and towns in the region; 8) intra-regional water planning negotiations to reduce the impact of extra-regional water uses on the Northern Neck's groundwater supply; and 9) ongoing assessment of aquifers' capacity and groundwater quality.

In order to maintain a sustainable water supply in the future for both the region and the Town of Kilmarnock, the following policies apply:

72. Continue to coordinate and participate with applicable governmental agencies, specifically the regional Northern Neck Planning District and its member jurisdictions to implement recommendations in the 2010 WSP (see pages 172-173) to ensure a sustainable long-term water supply for Kilmarnock's residents and the region's population.

Town of Kilmarnock - Water Quantity: Kilmarnock's goal is to also ensure the long-term viability and sustainability of its public water supply. The 2010 WSP "Statement of Need" **(p. 169)** states that "no current or projected water supply deficits were identified for community sources [i.e., public water systems such as Kilmarnock's] in the [Northern Neck] Planning Region. Therefore, a formal water supply alternatives analysis is not required for this WSP."

However, water conservation measures are important for the Town of Kilmarnock and its residents to implement in order to ensure a long-term public water supply for its residents and future generations. Development of water conservation measures is also a recommendation in the WSP for all water users in the region. The town continues to develop and implement measures for water conservation. One recent example is the adoption of a "Drought Management Plan" to restrict water use particularly in emergency situations.

Certain policies pertaining to water conservation are included above and require, among other things, development of a "Water Quality Plan" for the Town of Kilmarnock. The Water Quality Plan would include, but not be limited to, water conservation policies below.

The following policies are included to help ensure the long-term sustainability of Kilmarnock's public water supply, particularly as it relates to water conservation:

73. Continue implementation of the Town's "Drought Management Plan" and requirements to restrict water use in emergency situations. During an emergency situation, such as a fire or drought, restrictions on watering lawns, car washing, and other nonessential uses of water could be implemented.
74. Prevent excessive waste of water from plumbing failures such as broken water lines that are privately owned.
75. Continue to maintain an active infiltration and inflow (I/I) program to identify and repair broken or leaking pipes that are part of the public water and sewage system.
76. Create a water conservation brochure for Town residents and applicants proposing new construction. The brochure could address, among other things, landscaping with native drought tolerant species, new plumbing fixtures and retrofitting older plumbing fixtures with low-flow devices.

The above issues are also discussed briefly in Chapter 4 (Public Services and Facilities) Section A (Water Supply) 3 (Additional Water Quantity Issues and Policies) of this Comprehensive Plan.

Individual property owners are also taking steps to conserve water. One recent example involved the installation of two underground cisterns in 2013 on a property located at 125 South Main Street. The site, designated for commercial use, is developed with an older potentially historic structure that was recently restored. The purpose of the project is to capture storm water runoff in the cisterns for irrigation of landscaping, thereby eliminating the need to rely on potable drinking water from Kilmarnock's water system for that purpose.

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
2	1	**Soil: Shrink-Swell Qualities Foundation Design for Safe Structures**	During the building permit application phase of development, Town officials should advise builders of the need to consider shrink-swell qualities of the soil when designing building foundations.
3	2	**Compatible & harmonious development & land use**	Development occurs in an orderly manner and is harmonious with the existing community and surrounding area in which it is located.
3	3	**Protection of the public's health, safety & welfare**	Development protects, enhances or otherwise improves the health, safety and welfare of Kilmarnock's residents and visitors alike.
3	4	**Water & sewer demand in sync with public system availability & capacity**	Development is consistent with the Town's ability to accommodate the future population in sync with public facilities and services. Future water and sewer demands requiring system upgrades should be coordinated with the town's long-term capital improvement plan to respond to growth and change in land use.
3	5	**Natural & cultural resource protection & compatibility with development / land use**	Development maintains the delicate balance and land use compatibility with the natural environment and that state waters, other sensitive environmental resources, and historical features of the community be protected.
3	6	**Economy: Future land uses to enhance & maintain a strong sustainable economic base in Kilmarnock**	Development enhances and maintains a strong sustainable economic base by assuring appropriate development policies and designation of sites for the growth and/or expansion of existing businesses, development of new commercial uses and technical industries which also provide an expanding base of quality jobs that pay a living wage for residents of the area.
3	7	**Resource Protection Areas (RPA): Protect steep slopes, stream basins & other sensitive areas from soil erosion**	Protect steep slopes along creek banks and other sensitive areas designated for resource protection from soil erosion and construction activity by implementing water quality Best Management Practices (BMP) during the planning and construction phase of all new development. These practices include, but aren't limited to, provision for an adequate setback for new development located in proximity or adjacent to a stream bank, and other protected areas. In addition to the permanent setback, designation of an adequate buffer using natural (e.g., hay bales) or man-made (e.g., fencing) materials to protect the sensitive area and stream basin during grading activity, construction and staging of heavy equipment is appropriate.
3	8	**RPA: Provide a natural buffer / setback between environmentally sensitive areas & development**	As part of the planning process, encourage developers to utilize innovative land use designs and techniques, such as clustering development, designation of conservation easements, etc., to provide a natural buffer from steep slopes and environmentally sensitive areas.
3	9	**Steep Slopes: Development on slopes 25% or > generally not allowed. Development on slopes 15% or > is discouraged.**	Discourage development on highly erodible soils and/or slopes greater than 15%. Generally, development on steep slopes 25% or more is not allowed. Exceptions to this policy may be appropriate under certain circumstances.
3	10	**RPA & Appropriate Landscape Buffers: Encourage residents living next to stream banks to establish a riparian or other appropriate landscape buffer using**	Encourage residents to establish adequately vegetated buffers (as opposed to grass lawns) with native, drought tolerant, low maintenance, and/or riparian plant species adjacent to streams, stream banks, and other environmentally sensitive areas, in order to reduce the potential for erosion and runoff. The use of environmentally safe products for maintenance of the landscaped buffer, until established, can decrease

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
		environmentally safe products.	contaminants in runoff that may impact streams, rivers and the Chesapeake Bay. (Please refer to policies in Chapter 5 and the discussion related to groundwater protection and the use of herbicides, etc.)
3	11	**Resource Management Area: Minimize impervious surface coverage by reducing the size of paved surfaces & structural footprints to reduce storm water runoff (containing contaminants) & erosion**	Encourage developers and residents to minimize impervious surface coverage by reducing paved surfaces or using an alternative method. One example is to use gravel or some other pervious surface for driveways as opposed to asphalt or concrete. The size of a structural footprint adjacent to a sensitive area may also be reduced. Reduction in impervious surfaces should be encouraged throughout the Town of Kilmarnock but is especially important adjacent to protected and/or sensitive areas. (Please refer to Town Code §54-481, "Chesapeake Bay Preservation Overlay District," for specific requirements pertaining to impervious surface coverage.)
3	12	**Correct storm water runoff & erosion issues due to roads & storm drains, in conjunction w/ VDOT**	Continue to work with the Virginia Department of Transportation (VDOT) to rectify any existing drainage, storm water management and/or erosion problems arising from existing roads, new road construction and storm drain maintenance.
	13	**Downtown to include a variety of commercial, office & tourist related uses w/ public spaces/amenities. Residential uses are encouraged**	Establishment of a variety of visitor-serving, general commercial, service related, and office uses, integrated with public spaces and amenities, are encouraged within the downtown area. Upper floor residential uses above business establishments are also encouraged.
3	14	**Downtown: Maintain/expand improvements to upgrade appearance & function. Emphasis on pedestrian friendly & amenities for the public**	Maintain and expand improvements in the downtown area in order to continue to revitalize and upgrade the appearance and function of downtown Kilmarnock to include, but not be limited to, landscaping, installation of public amenities such as bicycle racks, park benches, picnic tables, public spaces, etc.
3	15	**Downtown: Provide for off-street public parking in downtown Kilmarnock**	Continue to identify appropriate areas for off-street public parking
3	16	**Downtown to retain its small town appeal, partly to enhance its economic vitality. One way to do this is to implement & enforce the building design guidelines for this commercial district**	Ensure that the downtown area retains its unique small town appeal and charm in order to enhance and maintain the economic vitality of the area for residents of Kilmarnock and the region, tourists, and businesses. One way to do this is to continue to implement and enforce the building design guidelines, outlined in the text, as set forth in § 54-340, "Building Design," of the Town Code.
3	17	**N. Main St. commercial area to include a variety of commercial, office & tourist related uses w/ public spaces & amenities. Residential uses are encouraged**	Establishment of a variety of visitor-serving, general commercial, service related, and office uses, integrated with public spaces and amenities (e.g., bicycle racks and picnic tables) are encouraged within the North Main Street commercial area with emphasis on retail trade, restaurants, offices, and other compatible establishments.
3	18	**N. Main St. commercial area development strategy to include: a) appropriate mix of land use; b) in sync w/ public water & sewer capacity; c) extend improvements from downtown to this area; & improve traffic circulation & pedestrian access**	The development strategy within the North Main Street area should focus on the following issues: a) identify the most appropriate mix of land uses (e.g., commercial and residential) for the area to meet the needs of Kilmarnock's residents and the region's population, consistent with the Town's economic goals; b) ensure that the capacity of the Town's water and sewer services is consistent with commercial growth demand; c) extend applicable improvements, completed as part of the Downtown Revitalization Plan, to North Main Street; and d) in conjunction with the Virginia Department of Transportation (VDOT), improve both vehicular traffic circulation and pedestrian access along the North Main Street commercial corridor.

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
3	19	**N. Main St. commercial area – reduce the # of vehicular access points by requiring adjacent businesses to share one access point to interconnected parking areas**	Access to commercial establishments should be coordinated to reduce the number of vehicular access points along both sides of the entire North Main Street frontage. This may be accomplished by requiring adjacent businesses to share one access point to interconnected parking areas with the potential use of turning lanes from the main thoroughfare.
3	20	**Commercial development on N. Main St. abutting an RPA to include an adequate buffer between the project & protected area**	Lots with excess depth beyond that needed for commercial frontage development and/or are adjacent to a Resource Protection Area should include an adequate vegetated buffer between the commercial development and the protected area
3	21	**N. Main St. commercial area – improve appearance when new development and/or redevelopment occur by implementing building design guidelines for this district.**	Continue to implement and enforce the town's building design guidelines, outlined above, as set forth in § 54-340, "Building Design," of the Town Code. These regulations apply to the North Main Street Commercial district and help to ensure an aesthetically appealing area when new development and/or redevelopment occur.
3	22	**"Mixed Use" commercial & residential development in the N. Main St. area is encouraged**	Encourage construction of "mixed use" commercial and residential consistent with the Town's Zoning Ordinance (Chapter 54) regulations for the "General Commercial" district. With careful planning and oversight, some sites along North Main Street may be appropriate for development of townhouses or multi-family housing facilities.
3	23	**Undeveloped Commercial area: Route 200/ Harris Rd. to the S.E./James B. Jones Hwy: Sidewalks/bicycle lanes for non-vehicular access to employment centers (RGH) & areas offering community & public services**	Consider installation of sidewalks, designated bicycle lanes and other related pedestrian/bicycle improvements in this area to encourage bicycle and pedestrian access to major employment centers and areas with a high concentration of development offering community and public services. These improvements could be required as a condition of permit approval when development is proposed, as part of the Town's Capital Improvement Plan, and/or in conjunction with the Virginia Department of Transportation when road improvements are proposed.
3	24	**Undeveloped Commercial area: Route 200/ Harris Rd. to the S.E./James B. Jones Hwy: Commercial development to be aesthetically compatible (e.g., no unsightly strip development)**	When new development is proposed, ensure proper design review, using compatible architectural styles and innovative design techniques, to allow for responsible and aesthetically compatible commercial growth in keeping with the "Gateway" approach to town, adjacent residential areas, and the rural small town charm of Kilmarnock.
3	25	**Established residential community: Infill/ redevelopment compatible w/ surrounding neighborhood**	Continue to ensure that new residential development within the established residential community (i.e., infill and/or redevelopment) is compatible with the residential characteristics of the surrounding neighborhood.
3	26	**Established residential community: Limited conversion of a residence (e.g., to a professional office) may be allowed provided it's compatible w/ the neighborhood & consistent w/ the intent of the zoning regulations for the site. No modification to the external appearance of the original residence.**	When it can be determined that an existing residence can better serve the community and adjacent neighborhood as some other use because of its age, size, location or other factor, a limited conversion of the dwelling may be allowed. In general when such conversions are proposed, the project shall be reviewed for compatibility with existing uses in the immediate vicinity and the neighborhood in general to ensure that no adverse impacts to the residential neighborhood would occur and that the proposal is consistent with the intent of the zoning classification for the site. A converted residence is limited to activities that would not require modifications to the external appearance of the original single family dwelling. Examples of appropriate conversions include, but aren't limited to, a professional office, a service related establishment, and visitor serving accommodations such as a Bed and Breakfast.
3	27	**Established residential community: Gateways to Kilmarnock remain attractive entrances. Retain residential uses w/ limited**	"Gateways" to the Town of Kilmarnock along major roads should be attractive entrances. The "Gateways" that are predominantly residential in character should remain, although limited conversion of existing residences may be allowed provided the resulting use does not adversely affect the existing character of the area and is consistent with

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
		conversion of homes. Redevelopment of a few "Gateway" areas may be appropriate	the intent of the zoning classification for the site. Redevelopment of a few areas within the "Gateways" may be appropriate to improve and enhance the appearance of the entrances to Kilmarnock.
3	28	**Low Density Residential Development: Quiet undeveloped areas where residential construction - similar to other low density areas - may occur. Development limited to low concentration of single-unit homes on separate lots. Certain public facilities serving neighborhood residents may be allowed**	The low density residential designation is composed of quiet undeveloped areas where similar residential construction may occur. The purpose is to stabilize and protect the essential character of the area, as well as to promote and encourage a suitable living environment for all of Kilmarnock's residents. Development in this residential designation is limited to relatively low concentration single-unit dwellings, plus selected additional uses such as schools, parks, churches and certain public facilities that serve the residents of the neighborhood. Mobile homes, rooming houses, and commercial activities are not allowed pursuant to the zoning regulations but could be approved subject to a Variance.
3	29	**New residential development to be served by the public water & sewer system. Services extended to major projects by the developer only if there is adequate capacity**	New residential development in Kilmarnock should be served by the town's public water and sewer systems. Infrastructure for public water and sewer services shall be extended to each development by the developer. Development may take place only if there is adequate capacity to serve the development by Kilmarnock's public water and sewer systems.
3	30	**Large residential development projects to include "feeder" streets connecting to major roads. Incorporate pedestrian amenities (i.e., sidewalks & bicycle paths), open space, etc**	Identify the general locations of "feeder" streets which connect to major thoroughfares for larger residential subdivisions and encourage the incorporation of pedestrian-friendly amenities (i.e., sidewalks and bicycle paths) open space, preservation of natural resources and creative design techniques as part of the subdivision.
3	31	**Low density residential areas: An alternative residential use of a parcel may be appropriate in an "LDR" area if a property is better suited for a use other than a single-family residential lot subdivision. For example, if the site abuts an environmentally sensitive area & clustered development, as opposed to individual single family residential lots, may be more appropriate**	An owner may submit a plan for an alternative residential dwelling use of a parcel in cases where a tract of land is: a) vacant; b) contains more than five acres; c) has not previously been subdivided into residential lots; and d) because of its location, frontage, shape, adjoining uses, or other relevant physical features, it can be demonstrated by the applicant that the parcel is better suited for a use other than a single-family residential lot subdivision. The plan for an alternative residential use shall be evaluated on a case-by-case basis to determine the proposal's compatibility with the community at large and existing development located in proximity to the site. This policy may be appropriate in a case where a site abuts an environmentally sensitive or protected area and clustered development, as opposed to individual single family residential lots, may be more appropriate in order to provide an adequate buffer from the protected area.
3	32	**Medium density residential allows higher density development w/ compatible public & limited commercial land uses. It is intended for those desiring amenities of townhomes, condos or apartment living w/ the convenience of being close to shopping, employment centers & community facilities.**	The medium density residential designation is intended to allow residential development at a higher density as well as certain compatible public, semi-public and limited commercial land uses. This designation is intended to provide a suitable environment for those who desire the amenities of townhomes, condominiums, multifamily dwellings and/ or apartment living along with the convenience of being closest to shopping and employment centers and other community facilities. Examples of the limited commercial uses allowed in this land use designation, subject to appropriate permit approvals, include: tourist homes; boardinghouses; professional offices; office buildings; nursing homes; and bed and breakfasts.
3	33	**PUD w/in a medium density residential area is encouraged. A PUD may include a cluster of residences w/ a variety of housing types & densities, along w/ shopping facilities, parks, open space & recreational amenities. A PUD**	Planned Unit Development located within a medium density residential land use designation is encouraged. This type of development typically includes a cluster of residential dwelling units based on an innovative design to provide for a neighborhood with a variety of housing types and densities. A PUD may also include neighborhood shopping facilities, parks, open space and recreational amenities such as bicycle paths and playgrounds for residents. This policy is intended to allow for greater flexibility in terms of design to ensure quality development

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
		clustered development is intended to avoid encroachment into sensitive areas.	while preserving areas designated for resource protection. A clustered development helps to avoid encroachment into sensitive areas. Mixed-use residential land uses are appropriate consistent with the overall density limitation of the entire site's acreage.
3	34	**New residential development to be served by the public water & sewer system. Services extended to major projects by the developer only if there is adequate capacity**	New residential development in Kilmarnock should be served by the town's public water and sewer systems with infrastructure extended by the developer. Please refer to policy #29 above which also applies in its entirety to new development in Medium Density Residential land use designation.
3	35	**Large residential development projects to include "feeder" streets connecting to major roads. Incorporate pedestrian amenities (i.e., sidewalks & bicycle paths), open space, etc**	Identify the general locations of "feeder" streets which connect to major thoroughfares and encourage the incorporation of pedestrian-friendly amenities (i.e., sidewalks and bicycle paths). Please refer to policy #30 above which also applies in its entirety to new development in Medium Density Residential land use designation.
3	36	**Public/semi public land uses reviewed for compatibility w/ surrounding area & provide for off-street parking w/ access to a circulating street**	New "public/semi public" land uses shall be reviewed for compatibility with the existing land use and development in the surrounding area. Uses that are acceptable in residential areas include some public/semi public uses and facilities that are typically located in residential neighborhoods, such as schools, churches, and playgrounds, provided such uses have access to a principal circulating street and there is sufficient area to accommodate required off street parking.
3	37	**Infrastructure improvements by Kilmarnock of the 60-acre undeveloped site @ the "Technology Park" to attract new qualified businesses / economic development**	Continue infrastructure improvements to allow for the development of the "Business and Technology Park." A few examples of projects include, but aren't limited to: complete a survey of the undeveloped portion of the property; identify appropriate building sites; construct a new access road with drainage improvements and install appropriate signage.
3	38	**Provide a range of choices in housing type, design, density, and price in order to meet various needs of Kilmarnock's population**	Continue to seek opportunities and encourage developers to provide an adequate range of choices in housing type, design, density, and price in order to meet various needs of Kilmarnock's population. The housing mix includes market rate residences, rental units, housing for Kilmarnock's work force, as well as affordable housing for low income residents.
3	39	**Diverse & innovative affordable housing designs for a appealing developments w/ open space, sidewalks, etc., incorporated**	Encourage diverse and innovative housing and subdivision design which includes a range of affordable housing styles utilizing high quality design, construction and architectural techniques to create an aesthetically appealing development. Open space and amenities for pedestrians and bicyclists should be incorporated in the project design.
3	40	**Encourage inclusion of a certain # of units below market-rate during planning phase of a market-rate residential subdivision**	During the planning process for a market-rate residential subdivision, encourage a developer to designate a certain number of units below market-rate to provide opportunities for home ownership to those who could not otherwise afford to purchase a home.
3	41	**Support private/nonprofit groups to improve & provide housing for the town's work force & low income residents.**	Support the efforts of private and nonprofit groups to improve and provide housing for the work force and low income residents.
3	42	**Regional approach to meeting housing needs for workforce & low income residents. Inventory existing housing & identify needs**	Coordinate with neighboring jurisdictions to develop a regional approach to meet the need for adequate housing for the work force and low income residents. This approach would include an inventory of existing housing of this type and a needs assessment.
3	43	**Promotion of the "Business & Technology Park" to attract new qualified businesses / economic development**	Promote the "Technology Park" on a regional, national and international level, consistent with the intent of Town Council and subject to the advice and assistance of various economic development entities in the community and the region including, but not limited to, local businesses in the technology zone.

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
3	44	**Regional approach to economic development**	Continue to collaborate with various economic development entities; local, regional and state governmental agencies; non-profit organizations; local businesses/stakeholders; and major employers in both Kilmarnock and throughout the region. These organizations include, but aren't limited to: Lancaster County; Northumberland County; the incorporated towns of Irvington and White Stone; public school system; various non-profit organizations such as the Rappahannock Community College Educational Foundation, Inc. and the public library; Rappahannock General Hospital; Lancaster County Partnership for Economic Development; Lancaster, Northumberland and Kilmarnock Chambers of Commerce; VISIONS Economic Development Committee; Virginia's River Country; the Northern Neck Planning District Commission; Virginia Economic Development Partnership; Northern Neck Tourism Commission; local banks and businesses, just to name a few.
4	45	**Connect new development to the public SEWER system**	New development of buildings, structures or subdivision of land designed or intended for human occupancy/ use shall be connected to the Town's public sewage system whenever feasible.
4	46	**Development served by SEPTIC systems - connect to public sewer system when feasible**	For buildings and structures that currently and lawfully utilize septic systems for wastewater disposal, such septic systems shall be connected to the town's public sewage system if practical and when public sewer lines are accessible.
4	47	**Public SEWER system: serving areas outside Kilmarnock is discouraged unless system is expanded to allow for additional capacity**	The existing wastewater treatment plant may not have capacity to serve additional out-of-town customers, beyond the undeveloped portion of Hills Quarter, without sacrificing capacity for future residents of Kilmarnock. Connection to Kilmarnock's wastewater treatment plant by new development located outside of the town's corporate limits should be discouraged unless expansion of the wastewater treatment plant allows for additional capacity.
4	48	**Public SEWER system upgrades & expansion. Innovative funding and/or developer funded**	The Town should consider innovative ways of funding upgrades and/or expansion of the wastewater treatment plant. One example would be for the Town to enter into an agreement with a developer of a major project to pay the cost to upgrade and/or expand the wastewater treatment plant to serve the development.
4	49	**High volume of wastewater generated by new development. Consider programs to reduce / recycle / reuse wastewater**	New development that has the potential to generate a significantly higher volume of wastewater should be reviewed carefully during the planning process, prior to construction and/or establishment of the use, particularly if most of the wastewater is discharged into the public sewage system. Various programs (e.g., an on-site recycling/reuse wastewater system) may be implemented to reduce the volume of discharge. Rappahannock General Hospital has implemented such a system and is successful in terms of reducing its wastewater and water use.
4	50	**Connect new development to the public WATER system**	Continue existing polices to require new buildings and facilities intended for human occupancy or use to connect to the Town's public water system. Under such policies, developers (owners) are required to extend water lines from the public water system to new construction at their own expense. Once complete and approved by the Town, the water lines, associated equipment, as well as utility easements, shall be dedicated to the Town of Kilmarnock.
4	51	**Public WATER system: serving areas outside Kilmarnock is discouraged unless system is expanded to allow for additional capacity**	The existing water system may not have the capacity to serve additional out-of-town customers, beyond the undeveloped portion of Hills Quarter, without sacrificing capacity for future residents of Kilmarnock. Connection to Kilmarnock's water system by new development located outside of the town's corporate limits should be discouraged unless expansion of the water system (e.g., construction of an additional well(s) and/or water storage facility) allows for additional capacity.

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
4	52	**Public WATER system upgrades & expansion. Innovative funding and/or developer funded**	The Town should consider innovative ways of funding upgrades and/or expansion of the water system. One example would be for the Town to enter into an agreement with a developer of a major project to pay the cost to upgrade and/or expand the water system to serve the development.
4	53	**High water usage due to new development. Consider programs to reduce high water demand**	New development that may potentially require a high volume of water should be reviewed carefully during the planning process prior to construction and/or establishment of the use. Various programs (e.g., an on-site water recycling/reuse system) may be implemented to reduce the high water demand. Rappahannock General Hospital has implemented such a system and is successful in terms of reducing its wastewater and water use.
4	54	**Sidewalks & bicycle paths**	Continue to identify the need for and develop new sidewalks and areas for bicyclists as part of the annual review process. Particular emphasis should be placed on areas that: • Connect residential areas with public and semi-public facilities as well as commercial districts including restaurants, shops and venues for public entertainment; • Connect residential areas to major employers in Kilmarnock thereby providing an opportunity for residents to walk and / or bicycle to work; • Fill in the gaps between areas that are partially developed with sidewalks, particularly those areas that provide access to public facilities such as the public school, library, fairgrounds, etc.
4	55	**Downtown commercial district. With VDOT, improve traffic circulation & provide off-street public parking areas**	Continue to improve traffic circulation and parking in the downtown area. This can be accomplished in part by identifying new locations for public parking spaces within the downtown business area particularly where on-site parking is limited. There will be an ongoing need for off-street parking to keep pace with growth, as well as changing uses downtown. Visibility and directional signage is an essential part of public parking.
4	56	**North Main Street commercial area. With VDOT improve traffic circulation, access to businesses, parking & safety. Consider extending sidewalks, etc.**	Continue to work with VDOT to improve traffic circulation, ingress/egress, parking, and safety for both vehicular and pedestrian traffic within the North Main Street commercial area. Consider extending streetscape, parking and pedestrian facilities beyond the downtown commercial district to North Main Street.
4	57	**New development / adequate traffic circulation & establish general locations for "feeder" streets connecting to major rights-of-way**	Ensure adequate traffic circulation within major undeveloped areas by establishing general routes for a feeder street system, connecting to major rights-of-way. Feeder streets would be designed as part of the planning process and implemented as new subdivisions are developed. Feeder roads are expected to carry more traffic than residential streets (e.g., cul-de-sacs) and should be planned accordingly.
4	58	**Opportunities for new public recreational facilities & augment improvements at existing facilities**	The Town should continue to seek new and innovative opportunities for public recreational use. These may include: designated bicycle paths; picnic tables; development of existing/publicly owned open space; designation of a local park as part of the planning/subdivision review process for major new development; and dedication of public access easements for passive recreation, such as a walking trail, over resource protection areas which are otherwise undevelopable.
5	59	**Historic Resource Survey**	Conduct a survey of historic structures within the Town of Kilmarnock. Solicit technical and financial assistance to complete the survey and coordinate efforts with local volunteer and/or non-profit organizations including, but not limited to, the Kilmarnock Museum. A survey may help to establish the framework for a potential program in the future to protect the community's historical assets, conserve the charm and appeal of the existing rural small-town,

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
			as well as provide an opportunity to educate the public about the Town's historic resources and their protection.
5	60	**Regional Approach to Preservation of Groundwater Quality**	Continue coordination with applicable agencies to include: 1) federal (Environmental Protection Agency or EPA/Clean Water Act) and the Chesapeake Bay Preservation Act; 2) state (Virginia Department of Environmental Quality or DEQ / initiatives for protection of the groundwater quality, including establishment of a Groundwater Management Area for this region and the ongoing Source Water Assessment Program or SWAP); 3) regional (Northern Neck Planning District Commission or NNPDC to implement recommendations in the 2003 "Northern Neck Ground Water Quality Management Plan" and the 2010 "Northern Neck Water Supply Plan;" and 4) Lancaster and Northumberland counties to ensure protection of the regional and local groundwater supply including, but not limited to development and implementation of the Storm Water Management Plan for the area and the Sediment and Erosion Control Act regulations which are part of the Chesapeake Bay Preservation Act.
5	61	**Local approach for protection of groundwater quality / Kilmarnock's Water Supply Plan**	Consider development of a "Water Quality Plan" for the Town of Kilmarnock to minimize threats to local groundwater, including water quality and quantity. The plan should identify current informational gaps (e.g., inventory of abandoned wells and underground storage tanks) as well as educate the public about protection of the water supply. Development and implementation of many of the policies identified in this Chapter would constitute a "Water Quality Plan" for the Town of Kilmarnock.
5	62	**Public outreach re: the residential use of hazardous materials especially for landscaping in order to protect groundwater quality**	Increase public awareness about the cumulative effect of these contaminants on our water quality. Information may be posted on a web site and/or included in a handout that identifies the following: • list the various contaminants, as well as their impacts, typically used for landscaping maintenance; • recommend environmentally safe products and/or alternative methods that do not require the use of harmful chemicals for landscaping; • include a list of native drought-tolerant low maintenance landscaping species that require minimal use of chemicals; • educate the public about their use and the timing of application.
5	63	**Underground residential fuel storage tanks: identify locations and remove or upgrade to prevent leaks to groundwater quality**	Consider a requirement to register all residential underground storage tanks, primarily used for heating fuel. At this time, it is not a requirement to register these tanks nor are they monitored by the State. However, leaks from these tanks may pose a potential threat to groundwater quality and an inventory of their location may be useful in the event of any contamination events. Removal and/or upgrading underground tanks may occur when redevelopment of a property is proposed.
5	64	**"Kilmarnock Watershed Assessment Report:" Mitigate problematic land uses & proposed development that may contaminate groundwater quality**	Continue to implement recommendations in the "Kilmarnock Watershed Assessment Report, April 2013." Specific recommendations for on-site maintenance combined with pollution prevention practices can significantly reduce the occurrence of "hotspot" threats. Areas with high water tables (see map in Chapter 2) should be protected from construction activity & potentially problematic land uses, especially the types described w/ the potential to contaminate the underground water table. (Please refer to policies below & "Surface Water" discussion relating to runoff.)

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
5	65	**Hazardous Waste Collection: Protection of Groundwater Resources**	Increase public awareness about the program for hazardous waste collection. This could be accomplished by including notification in the local newspaper, on the web site and/or in a flyer distributed with the Town's water and sewer bill or annual property tax statement.
5	66	**Abandoned wells: Inventory & Abatement. Protection of Groundwater Resources**	Consider inventorying abandoned wells within the Town of Kilmarnock and establish a means to ensure proper abandonment. According to authorities, these wells could be filled with non-toxic materials (e.g., stone or dirt) and capped. This approach may be less costly. In addition, developed properties, currently served by wells, which connect to the public water system in the future, should be required to follow proper procedures for the abandonment of an on-site well. Funding from a variety of sources may be available to implement a well abandonment program.
5	67	**Wellhead Protection Program: Protection of the public water supply**	Consider adoption of a wellhead protection program to protect the Town's public (water supply) wells.
5	68	**Erosion Control & stream bank protection / RPA & protection of surface water / runoff**	Continue to identify and monitor areas where erosion appears to be a critical issue. If there is an area where stream bank erosion is problematic, the Town should delineate the drainage area of that stream bank and implement measures to reduce the rate and volume of storm water runoff for that specific drainage area.
5	69	**Funding for & implementation of stream bank restoration projects to protect quality of surface water / runoff**	Identify funding opportunities to implement stream bank restoration projects.
5	70	**Watershed protection: Erosion control & storm water management - Protection of the quality of surface water runoff**	Continue to enforce the Erosion and Sediment Control Act requirements of the Chesapeake Bay Preservation Act to minimize sedimentation and erosion within the three watersheds located in Kilmarnock.
5	71	**"Kilmarnock Watershed Assessment Report:" Implementation of recommendations such as redevelopment, use of contaminants for landscaping & infrastructure replacement**	Continue to implement recommendations in the "Kilmarnock Watershed Assessment Report" dated April 2013. Recommendations in the report address: 1) redevelopment; 2) the use of household contaminants for landscaping; and 3) repair, retrofit and redevelop the town's aging infrastructure in specific locations to include storm drains and improperly designed storm water outfalls. (Please refer to policies above in the "Groundwater" and "Stream Bank" protection/restoration sections.)
5	72	**Regional approach to preservation of a sustainable long-term water supply**	Continue to coordinate and participate with applicable governmental agencies, specifically the regional Northern Neck Planning District and its member jurisdictions to implement recommendations in the 2010 Water Supply Plan (see pages 172-173) to ensure a sustainable long-term water supply for Kilmarnock's residents and the region's population.
5	73	**Drought management & restricting water use / water conservation**	Continue implementation of the Town's "Drought Management Plan" and requirements to restrict water use in emergency situations. During an emergency situation, such as a fire or drought, restrictions on watering lawns, car washing, and other nonessential uses of water could be implemented.
5	74	**Repair privately owned broken water lines & plumbing fixtures to conserve water**	Prevent excessive waste of water from plumbing failures such as broken water lines that are privately owned.

CHAPTER	POLICY#	SUMMARY OF ISSUE	POLICY
5	75	**Repair broken & leaking pipes that are part of public water & sewer system to conserve water & reduce contaminants**	Continue to maintain an active infiltration and inflow (I/I) program to identify and repair broken or leaking pipes that are part of the public water and sewage system.
5	76	**Public outreach re: water conservation measures**	Create a water conservation brochure for Town residents and applicants proposing new construction. The brochure could address, among other things, landscaping with native drought tolerant species, new plumbing fixtures and retrofitting older plumbing fixtures with 5low-flow devices.