# TOWN OF SURRY, INC.

# **COMPREHENSIVE PLAN UPDATE**

**JULY 3, 2007** 

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Title: Town of Surry Comprehensive Plan

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Surry

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ABSTRACT: The Comprehensive Plan for the Town of Surry is a community guide for

orderly growth and development. It is intended to aid public and private decision makers in promoting the most beneficial arrangement of land use and related public services. The Plan was developed through an inventory and analysis of existing conditions leading to policy determinations that will best achieve the community development aspirations of the citizens of Surry, Virginia. The plan was first adopted in October 1981 and later revised in October 1994. This second revision is designed to comply with the comprehensive plan requirements of the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and

Management Regulations.

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#### **TOWN OF SURRY**

The Town of Surry is located halfway between the cities of Norfolk and Richmond. The 1990 U.S. Census reported the Town's population at 190 persons. The Towns 2000 Census revealed a population increase to 262 persons. The Town provides retail and wholesale trade and is the seat of Surry County's government. Area employment is in agriculture, an electric power plant, and recreation. The Town's government has a sixmember mayor-council with an administrative staff of two, town clerk and waste treatment plant manager.

#### INTRODUCTION

#### Purpose

The Surry Comprehensive Plan is a general guide for decisions and actions that determine the Town's physical, social and economic development. The plan articulates goals, objectives and policies for the future development of the town and purposes implementation programs to carry out these policies. For the citizen and government official, the plan helps shape the future of the community by showing probable areas and types of development and anticipating future public facility needs.

# **Authority**

The authority to plan is a police power of Virginia, (Title 15.2, Chapter 22, Article 3, Code of Virginia 1950, (as amended), which is delegated to its localities. The local planning responsibility is vested with a planning commission which acts in an advisory capacity to the local governing body. The law requires that each locality have a plan of general development and such a plan be reviewed once every five years. Sometimes, however, unexpected development or population increases necessitate more frequent revisions.

# **Plan History**

The <u>Code of Virginia</u> requires that all localities have a planning commission, and adopt a subdivision ordinance and comprehensive plan. The Town of Surry appointed a planning commission on March 13, 1976 and adopted a subdivision ordinance on March 10, 1977. This document is the third update of the Town's comprehensive plan. The original document was adopted on March 10, 1981 and revised on October 11, 1994 and August 8, 2000.

#### Plan Format

The comprehensive plan has six parts. The first, the introduction, describes the planning area and states the purpose and authority of the plan.

The second provides an inventory of existing land use, land features, economic and population characteristics, public facilities, transportation services and housing.

The third section provides hazard mitigation information about local hazard and options to reduce those risks.

The fourth contains goals, objectives, and policies to guide future land use planning and development.

The fifth provides the comprehensive land use plan that recommends a pattern of future land uses, support public facilities, a transportation network and the Chesapeake Bay Preservation Act.

The sixth discusses plan implementation methods such as zoning, subdivision control, and capital improvements programming.

Throughout the development of the plan, Surry's citizens were encouraged to participate. This participation hopefully will result in citizens who are knowledgeable about the plan prior to public hearings. The finished plan will be presented at public hearings by the Planning Commission and Town Council.

#### **INVENTORY**

#### **Town Government**

# **History of Incorporation**

The Town of Surry can trace its beginnings to 1796 when it became the Surry County seat of government. It was then known as "MacIntosh's Crossroads" after a tavern operated by Robert MacIntosh who donated the land on which the courthouse is located. The Town became Surry Courthouse, later shortened to Surry. The town was incorporated by action of the Virginia Assembly on September 26, 1928.

#### **Services**

The citizens of Surry are provided water supply, wastewater treatment, fire and police protection, health and educational services by town, county or state governments and by volunteer service organizations. Governmental services include town water supply, county schools and police, and state street maintenance and health services. Volunteer services include the Surry Fire Department and the Surry Rescue Squad.

#### **Organization**

Surry's charter establishes a mayor/council government, sets for the duties and terms of elected officers, and stipulates that the <u>Code of Virginia</u> shall regulate the Town's activities. The charter also provides for the power of eminent domain, the power to set utility rates, the power to zone, to create debt and to establish a municipal court. It also spells out the duties of town officials.

Surry's six council members are elected on the first Tuesday in May in even numbered years. Terms of office begin on the first day of July after each election.

One member of council is also elected as mayor. Mayoral duties include presiding at council meetings, serving as ceremonial head of Town's functions and serving as the Town's chief executive officer. General responsibilities as chief executive officer include preparation of an annual budget and the appointment or removal of Town employees other than council appointed employee.

The Town Council is authorized to appoint an administrative staff/town clerk. The Town clerk is responsible for keeping a record of Town meetings, ordinances and resolutions and for general revenue and expenditure booking.

#### **ECONOMY**

# Introduction

Data of the U.S. Bureau of the Census, the Virginia Employment Commission and the Virginia Department of Planning and Budget provide insight into the economic conditions in the Town and County of Surry. The latest available data for the Town

is the U.S 2000 Census. It provides selected characteristics of the Town of Surry's population, housing, labor force, and income and property status in 2000.

Surry County's economy consists of basic and supporting industries. Basic industry-agriculture and manufacturing – produces goods and services which are exported, bringing money into the economy. Supporting industries, retail trade, wholesale trade and personal services produce goods and services within the area. Supporting industries do not bring "new" money into the local economy.

The Town of Surry has experienced only limited economic growth in recent years because of the area's sagging basic industrial sector. Reversal of this trend by adding commerce with a work force and disposable income can stimulate housing and the local economy and increase the tax base.

# **Local Economic Development**

Before 1960, Surry County's economy was based primarily on agriculture. Since 1960, utilities and contract construction have become the dominant employers. This change is attributed to Dominion Resource's Surry Nuclear Power Plant construction seven miles south of the Town. Throughout the 1970's, 1980's and 1990's, there was a statewide decrease in agriculture and manufacturing sectors of the economy, but an increase in service industries.

The Town of Surry is the primary shopping area in the county with approximately 50 percent of the county's retail establishments and 35 percent of its wholesale and service establishments. The Town provides community shopping and services (food stores, drugstore, banking, physicians, etc) for area residents. Major shopping (automobiles, clothing, etc) is done elsewhere. The Town is expected to remain a community shopping center.

Source: U. S. Bureau of Census Profile of Economic Characteristics

# **Economic Basic Analysis**

#### **Employment**

Surry County employment figures reveal a trend from agriculture to utilities and contract construction. Agriculture's share of total employment dropped from 54 percent in 1960 to 20 percent in 1977, 6.5 percent in 1989, and down to 5 percent in 2000. Utilities and contract construction's share of total employment increased from zero in 1960 to the peak of 24 percent in 1977 because of Virginia Power's plant construction. In 1999 utilities and contract construction's share of the county's total employment maintained at 16.3 percent.

#### Labor Force and Market

Surry County's labor force consists of skilled workers (craftsman and operatives) and non-skilled workers (farm and non-farm laborers). In contrast, the Town's labor force is mainly professional and clerical.

The information gathered during the 2000 Census indicated that in 1999, 128 persons in the Town of Surry who were sixteen years or older were a part of the civilian labor force. Of that number, 2 persons were unemployed, producing and unemployment rate at that time of 1.6 percent.

More recent data regarding the County's labor force show that unemployment for the County has decreased. In 2000, the County's civilian labor force consisted of 3,374 persons, with an unemployment rate of 5.3 percent. According to the Virginia Employment Commission, the rate has decreased to 2.2 percent in November 2006. Data for the Town is not tracked separately by the Virginia Employment Commission.

According to 2000 Census, approximately 30 percent of Surry County's workforce work inside the County while the majority, about 70 percent, work outside of Surry County. Thirteen percent of them or 415 workers commute to Isle of Wight County.

# **Sector Analysis**

# Basic Industry

Agriculture has historically been the most important of Surry County's basic industries. Because of mechanization, agricultural employment declined from 332 persons in 1977 to 160 persons in 2000. However, farm income increased from \$9 million to over \$65 million. This income is primarily from peanuts (Surry ranked fifth among Virginia's counties), hogs, soybeans and corn. Surry can expect a continued economic contribution from agriculture; however, in keeping with state and national trends, there will probably be a continuing decrease in agricultural employment.

Surry County's manufacturing industry includes lumber and food products. In 2000, manufacturing employed 692 persons. As a stimulus to expand manufacturing, the county has developed a business park approximately one mile south of the Town.

Other basic industries includes utilities and travel trade. Virginia Power will continue as the largest employer with over 400 persons. Between 1979 and 2000 travel trade employment increased from 6 to 35 persons. This growth resulted from the expansion of the Chippokes State Park, The Hogg Island Wildlife Management Area and restaurant services.

#### **Supporting Industry**

Growth of supporting industries (retail trade, wholesale trade, banking, insurance, and government) reflects growth of basic industries. In Surry, supporting industry employment increased from 904 persons in 1970 to 1,459 persons in 2000.

County supporting employment plays an important role in the Town's economy as one-third of all county supporting industries are centered in the Town. Government and retail are Surry's principal supporting employers, each supplying 30 percent of the Town's total supporting employment.

### Income

The Town's per capita income in 2000 was about 30 percent higher than that of Surry County's, 10 percent lower than Virginia's and increasing at about 3 percent annually in the 1990s. This is indicative of the Town's predominantly professional, higher income workforce. For the future, town per capita income increases are expected, due to inflation and continued employment in higher waged supporting industries.

## Per Capita Income

	<u>1990</u>	2000	Average Annual Rate of Change <u>1990-2000</u>
Town of Surry	\$16,245	\$21,606	3.3%
Town as a percent of Surry County	141.3	129.5	-
Surry County	\$11,495	\$16,682	4.5%
Town as a percent of Virginia	103.4	90.1	-
Virginia	\$15,713	\$23,975	5.3%

SOURCE: U.S. Bureau of the Census, Profile of Selected Economic Characteristics.

Median household income information was also collected as a part of the 2000 Census. This data revealed that the median household income level in the Town is also higher than that of Surry County, but lower that of the State as a whole.

Median Household Income – 2000

Town of Surry	\$42,361
Surry County	\$37,558
Virginia	\$46,677

SOURCE: U.S. Bureau of the Census, Census of Population, 1990 and 2000.

# **Summary**

The Town of Surry's economy has historically been dependent on area agriculture, industry and county government. Although Surry County's basic employment has changed from agriculture to utility, contract construction and tourism, the Town's economic importance as a wholesale and retail shopping center has continued. Surry County's retail sales volumes however are low, indicating shopping elsewhere or limited funds with which to shop.

Because of the Town's predominately professional work force, per capita incomes are in excess of County figures. The Town's high per capita incomes are expected to continue.

#### **POPULATION**

# **Introduction**

The purpose of a population analysis is to project a future population trend which provides the basis for establishing public service priorities or for setting of goals and policies. The method used in the analysis was to examine the community's population components from the standpoint of past growth or decline, age grouping, ratio of males to females and racial makeup.

Data used in this analysis was obtained from the U.S. Department of Commerce, Bureau of the Census (Census), the Virginia Department of Planning and Budget, the Virginia Employment Commission, the Weldon Cooper Center for Public Service (University of Virginia), and the Crater Planning District Commission.

# **Population Trends**

A review of the population trends in the state and the Crater Planning District gives a scale for comparing growth in Surry. According to Virginia Employment Commission estimates, the state has experienced increases of population in recent years, having grown 14.4 percent between 1990 and 2000. During this period the population of the Crater Planning District increased 6.8 percent.

Between 1990 and 2000, the population of Surry County increased 11.1 percent while the population of the Town of Surry experienced an increase of 35.7 percent, from 193 to 262 persons.

# **Projections to 2010**

While the population of Surry County is experiencing slight growth, the Town's population has increased at a much higher growth rate. Currently, the population of the Town of Surry is expected to continue to grow over the next decade at a moderate rate of 12 percent.

# **Characteristics of Population**

Characteristics of population consider statistics on age, sex, and race. Such statistics are useful in evaluating the Town's labor force, its dependents and the structure of community facility programs needed to serve Surry's population.

#### **Age**

Seventy percent of the Town's population is over 25 years of age compared to 72 percent in the County. Also, 15 percent of the Town's population is age 65 and above as compared to only 14 percent in the county.

With 54.6 percent of Surry's population between ages 25 and 64, a relatively large labor force exists. Having a large labor force is important to Surry as this group provides workers for existing and prospective basic and supporting industries. Additionally, wage earners provide a stable tax base.

The 65+ and 0 to 24 age groups have special significance since most individuals in these groups are not employed and therefore are dependent on the labor force to provide goods and services.

The 65+ and 0 to 14 age groups influence the demand for certain types of community facilities.

Distribution of Population by Age, Percent of Total Population Surry, Surry County and Virginia (1990 and 2000)

	1990	2000	1990	2000	1990	2000
0 to 4	4.7	7.2	7.3	5.6	7.1	6.5
5 to 14	4.7	11.9	15.0	15.2	13.3	14.0
15 to 24	6.3	11.0	12.7	11.6	15.3	13.6
25 to 44	24.7	33.2	30.6	27.8	34.6	31.6
45 to 64	31.0	21.4	19.7	25.8	18.9	23.1
65+	28.4	15.3	14.7	14.0	10.7	11.2

SOURCE: U. S. Bureau of the Census, Census of Population, 1990 and 2000.

# **Sex and Race**

The 2000 Census reported 53 more males and 19 more females than were reported in 1990.

The 1970 Census reported 22 black inhabitants of the Town; however the 1980 and 1990 Census showed no black population. According to the 2000 Census, there were 61 black residents, 3 American Indians, and 4 members of other races lived in the Town.

2000	1999
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	Number	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Male	130	49.6	77	41
Female	132	50.4	113	59
Total	262	100	190	100

Source: U.S. Bureau of the Census, <u>Census of Population</u>, 1991 and 2000.

# **Summary**

Town population increases due to immigration have been reported by the Census. The Town's population is showing a trend towards younger citizens. Younger residents will be able to support labor forces and public service needs. Older citizens require more health, transportation, and recreation services. The ratio of females to males is increasing between 1990 and 2000.

#### **EXISTING LAND USE**

A survey of Surry's existing land use is important because it provides a basis from which the future land use portion of the comprehensive plan is developed.

Surry's existing land use was updated in August, 1999. Survey information was recorded on a 1 inch to 600 foot scale town map. This map shows all platted lots and their use. Each lot and use was categorized according to the following criteria:

Residential: property primarily used for human habitation.

Single Family – a structure containing one dwelling unit.

Two Family – a structure containing two dwelling units.

Manufacturing Housing – a structure subject to federal regulation, which is transportable in one or more sections; is eight feet or more in width and 40 feet or more in length in traveling mode, is built on a permanent chassis; is designed to be used as a single - family dwelling.

Commercial: property used for transactions of retail or wholesale trade or profit making services, including business or professional services such as real estate, insurance, lawyers, doctors and like uses.

Industrial: property used for manufacturing, warehousing, and processing or

reprocessing of materials.

Public and Semi-public: property owned by governmental agencies, utilities,

religious groups or non-profit groups which are either

open to or serve the public.

Vacant: undeveloped property such as open lots, wooded tracts and

farmland.

# **Current Inventory**

There is a total of 567 acres within the Town of Surry's corporate limits. Approximately 24 percent of the Town's land area is developed and 76 percent is vacant. Presently, vacant land is used for agriculture and forestry, but it is also the Town's potential growth area.

# Residential

Surry's residential development extends along Route 10, 31, 626, Church Street and Colonial Drive. Residential construction dates from the early 1830's to the 2000's. Most of Surry's residences were built in the 1930's and most homes are in standard physical condition. There is no substandard housing.

Surry's residential lot sizes vary from 15,000 square feet to several acres in area. A typical lot has 20,000 square feet with a 75 to 100 foot frontage.

#### Commercial

Surry's commercial activities, located along Routes 10 and 31, include retail and wholesale uses, farm implement and supply sales, meat sales, service stations, a motel, and offices. Traffic and parking are problems in the commercial areas. Examples include left turning vehicles impeding traffic and hidden or poorly marked entrances to off street parking.

#### Industrial

Surry's major industrial activity is grain storage. The grain storage appears to be compatible with adjacent residences. The expansion of industries in residential areas is limited because the purchase of small residential parcels is often difficult and uneconomical.

#### Public and Semi-public

Surry's public and semi-public uses, including utilities, churches, cemeteries, and town and government offices, account for six percent of the Town's land area. The community facilities section reviews these uses in detail.

# Vacant

Surry's vacant land principally contains agricultural and wooded areas. Vacant land parcels occur behind the residential and commercial structures along Route 10, 31, and 626. There are sufficient land parcels to allow for future development.

Existing Land Use, 1999

	<u>Number</u>	<u>Acres</u>	Percent of Total
Single Family	118	67	12
Two Family	1	1	-
Manufactured Housing	9	5	1
Office	3	1	-
Commercial	25	22	4
Industrial	2	6	1
Public & Semi-Public	20	34	6
Vacant or Open Space		<u>431</u>	<u>76</u>
Total		5.67	100
Total		567	100

SOURCE: Land Use Survey, Crater Planning District Commission, August 1999.

Map 2

Existing Land Use - Developed Land, 1999

	Acres	Percent of Developed Land
Residential	73	54
Office	1	1
Commercial	22	16
Industrial	6	5
Public & Semi-Public	<u>33</u>	<u>24</u>
Total	135	100

SOURCE: Land Use Survey, Crater Planning District Commission, August 1999.

#### **Current Land Use Controls**

# Zoning

A zoning ordinance defines how each parcel of land in a community may be used. Items usually covered by a zoning ordinance include permitted uses, population density and building bulk. Other items that a zoning ordinance may address include view protection; excavation or mining of soil or other natural resources; the reconstruction, alteration, repair, and maintenance of structures. The zoning ordinance should be tailored to the stated goals, objectives and recommendations of the comprehensive plan.

The Town of Surry adopted a zoning ordinance in March 1981 and amended it in May 1995 and February, 2003.

# Subdivision Ordinance

While conventional zoning generally applies to individual lots, a subdivision ordinance governs the process by which those lots are created out of larger tracts. These regulations insure that the subdivision is compatible with its surroundings and consistent with the comprehensive plan for that area. Subdivision regulations are concerned with general design standards and address themselves to such items as street, water and sewer, length of blocks and frontage along major streets.

The Town of Surry adopted a subdivision ordinance on March 10, 1977 and amended it in May 1995.

#### **Summary**

Of Surry's 567 acres, 135 acres are developed. Residential land use comprises over half of the developed land; the rest is used for public, commercial and industrial purposes. Land use conflicts and problems include traffic, parking and some incompatible uses. Seventy-six percent of the Towns land is undeveloped vacant land.

#### NATURAL RESOURCES

The following reviews Surry's natural resources and their influence upon community growth.

# **Natural Features Inventory**

# Geology

Surry is located on a flatland coastal plain adjacent to the Atlantic Ocean.

Minerals beneath this plain include sand, gravel, clay and marl. Some of these minerals have been mined commercially in the Surry area, but none are currently mined in the town. An abandoned sand quarry is located in the Town's southwestern corner.

## **Topography**

Surry is situated on a ridge of land that has a maximum elevation of 122 feet. This ridge dips gently to the west and east. Some valleys, the lowest elevations of which are 60 feet, occur along intermittent streams originating near the Town's limits. There are some land slopes greater than 15 percent which limits construction within the Town.

# **Soils**

Soil characteristics affect the capacity of land to support structures, roads, foundations and septic systems. Soil suitability is determined based upon degree of wetness, degree of slope and size and texture of particles in the soil. The shrink-swell ratio, closely correlated with the clay content of soil, is an important consideration due to changes in moisture content. Areas which have dense clay sub soils with a high shrink-swell potential are unstable and thus poorly suited for foundations, roadways and septic tank drain fields. Erodibility and permeability are also affected by slope, wetness, particle size and soil texture. Map 6 illustrates those soils in the Town which are not suitable for septic fields and development.

Surry's soils include Marlboro, Rumford, and Goldboro which are well drained and generally suitable for structural foundations, roadways and similar development. Atlee and Lenoir soils also occur in the Town. These soils exhibit wetness due to a high water table and are not suitable for development. Marlboro soil also exhibits wetness if located on flat terrain. The general configuration of Surry's soil indicates large areas of the Town to be suitable for buildings or recreational uses.

## **Hydrology**

#### Watersheds

A watershed is defined as all land water within the confines of a drainage divide. The land ridge which runs through Surry is a drainage divide between two watersheds; the James River to the north and the Chowan River to the south.

The location of the Town's sewage treatment plant will allow sewage collection by gravity flow in the James River watershed. Sewage from the Chowan River watershed will have to be pumped to the treatment plant.

### Floodplain

The term floodplain refers to normally dry land that is subject to flooding from an adjacent stream or body water. Surry does not have floodplains; however, after prolonged rains there are some poorly drained wet areas in drainage valleys and flat, swamp-like areas. Surry's largest such area is along School Street. It will require an extensive drainage system prior to its development.

#### Groundwater

Surry's water comes from two artesian wells. A large artesian aquifer three miles south of Surry has produced nearly 100 gallons of water per minute from a test well. This aquifer occurs elsewhere in Tidewater, Virginia providing water for industrial and residential development.

Ground water is the water found below the surface of the earth. This water fills the pores, voids and fractures within the soil and rock. Contained in the town of Surry sediments is a system of underground aquifers. Each aquifer acts like an underground river except that these underground rivers travel through the voids, pores and fractures of the soil and rock. Each aquifer is separated from the ones both above and below by clay layers. These clay layers trap the water, allowing water to escape up and down only at very slow rates. The clay confining layers also act to add pressure to the water because water in the clay is released slowly. When the aguifers are tapped by a deep well, the pressure forces the water flow upward (an artesian effect). Through the Town, there is also an unconfined water table aquifer. This aquifer is found between the ground surface and the first confining layer. This aquifer provides water for shallow wells. Water moves to this aquifer at ground surface level by rainwater and below the ground surface by water bodies such as creeks and rivers. Because the aquifer is unconfined and receives water directly from the surface, it is very susceptible to contamination. Anything that flows though the ground surface can quickly reach the water table aquifer.

The intense use of this aquifer elsewhere has prompted the Department of Environmental Quality (DEQ) to designate a contiguous area of seven cities and five counties, including Surry County, as a groundwater management area. A groundwater management area is defined in Section 62.1-44.85 of the <u>Code of Virginia</u> as an area in which the DEQ has deemed the levels, supply, or quality of groundwater to be adverse to public welfare, health and safety. The DEQ found

declines in water level, water depletion, interference between water wells, and potential pollution from saltwater in the management area.

Designation as a groundwater management area means that industrial and commercial enterprises must have a Certificate of Groundwater Right to withdraw over 50,000 gallons of groundwater per day. A certificate is not required for the use of groundwater for agriculture, human consumption, or domestic purposes, or by local governments such as Surry.

Residents and business in the Town are served entirely by groundwater.

Groundwater will continue to be the sole source of drinking water for the foreseeable future. For this reason, measures must be taken to protect the entire recharge area of the aquifer. The confined aquifers are especially important to protect because they recharge regional flow systems.

# **Climate**

Surry's climate is moderate with relatively mild winters and warm summers. Temperatures average 41 degrees in January and 78 degrees in July. There is a 190-day growing season from mid-April through October.

Precipitation averages 43 inches annually. Snowfall occurs most frequently in January and February and seldom exceeds 12 inches a year. Prevailing winds are southerly and normally light.

#### **Existing Pollution Sources**

An inventory of existing pollution sources that may potentially harm groundwater and surface water ways can help identify areas in the Town that may need to be monitored. Pollution sources can be classified as either point sources or non-point sources. Those coming from a well-defined location or sources are known as point sources. Typically, point sources consist of sewage treatment plant and industrial wastewater discharges into creeks and rivers.

As of December 2006, there is one point source discharge within the Town and its vicinity that are regulated under Virginia Pollution Discharge Elimination System (VPDES) permit program. Permits specify effluent limitations, monitoring, and reporting requirements. The Town of Surry's sewage treatment plant discharges its effluent into a creek at Dark Swamp.

In addition, DEQ administers the Virginia Pollution Abatement (VPA) permit program, which regulates pollutants that are not directly discharged into creeks and tributaries. S. Wallace Edwards and Sons, a meat processor located just outside of the Town, is permitted to apply land application or recycle its wastewater or sludge. VPA permits specify management requirements, monitoring, and reporting requirements.

In contrast with point source pollution, it is difficult to pinpoint the exact source of non-point source pollution. Source of non-point source pollution are spread throughout an entire watershed. Non-point source pollution can result from several human activities including construction, runoff from impervious surfaces associated with development, agriculture, and forestry. Non-point source pollutants can consist of fertilizers, pesticides, oil, sediment, and metals. The Virginia Department of Conservation and Recreation is responsible for assessing non-point source pollution statewide by hydrologic unit and associated sub-watersheds.

According to DEQ, underground storage tanks (USTs) are the primary source of groundwater contamination in Virginia. Many streams are fed by groundwater and therefore any spills may adversely impact surface water quality. In addition to gasoline, underground tanks are used for storing kerosene, diesel fuel, etc. According to records maintained by DEQ, there are eight registered USTs within the Town limits and its vicinity. The following table presents information about the USTs in the vicinity of the Town of Surry. None were reported leaking.

#### **Underground Storage Tanks in the Town of Surry**

Fac ID	Name	Type	Address	Status
4006378	Surry Automotive Parts &	Commercial		Closed
	Repairs			
4011734	Zooms 13	Gas Station	Route 10	Active
4015985	Surry Vol. Rescue Squad	Local	Post Office Box 400	Active
4015986	Farmers United Inc.	Commercial	Route 31	Above
				Ground
4011587	Surry Sheriff	Local	Route 10	Closed
4018818	Rolfe Service Station	Gas Station	Route 10 & 31	Active
4018983	Surry County Board of	Local		Active
	Supervisors			
4018991	Addison's Amoco #1	Gas Station	Route 10	Active

Source: Virginia Department of Environmental Quality, December 1999

#### Summary

Surry's ridge and valley topography necessitates sewer pump stations, the location and expense of which will influence land development. Soils suited for structures, roadways, and similar development include Marlboro, Rumford, and Goldboro; those soils unsuited include Atlee and Lenior. Although commercially valuable deposits of sand, gravel, clay and marl occur in Surry area, none are presently being mined.

The Town's water is supplied by artesian wells. Parts of southeast Virginia, including Surry, have been declared a groundwater management area by the Department of Environmental Quality. Groundwater withdrawal regulations have been imposed.

#### TRANSPORTATION FACILITIES AND SERVICES

The physical and economic growth of Surry is partially dependent upon its transportation system which influences the location and kind of land development. Transportation also influences economic development by providing a means of movement for goods and services.

### **Highways**

The highway system serving Surry is maintained by the Virginia Department of Transportation. Beginning in 1968, Virginia's highways were classified by function in accordance with the U.S. Department of Transportation's "Highway Functional Classification and Needs Study." The streets and highways of Surry have been designated in accordance with their respective functional criteria. Map 3 presents the 1997 and 2005 traffic counts for the Town of Surry.

#### Minor Arterials

These roads connect with principal arterial system roads like U.S. Route 460 south of Surry County. Minor arterials link urban areas with towns such as Surry, not situated on principal arterial routes. The only minor arterial highway serving the Town and County of Surry is Route 10. Known as Colonial Trail East and Rolfe Highway within the Town, this highway, established in colonial times, still follows much of its early routing. Route 10 serves an east-west corridor through the county, connecting Virginia's Hampton Roads area to Richmond. Although Route 10 is a direct connection between these points, it has been assigned a lower priority for improvements in favor of other highly traveled routes serving the same corridor. For Surry, this has made it difficult to attract business and industry needing a high traffic roadway. On the other hand, the absence of a highly commercialized roadway has resulted in the area retaining much of its historical heritage, local and tourist business, and agricultural economy.

Route 10 within the Town has a fifty foot right-of way. It has two paved twelve-foot lanes and additional paved width for curbside parking. Its intersection with Rolfe Highway (State Route 31) and Oakwood Drive (State Route 626) is controlled by a traffic light.

Route 10's (Rolfe Highway) 1997 estimated traffic volume was 4,400 vehicles per day (VPD) and 2005's traffic volume was 4,700 VPD. Route 10's (Colonial Trail East) 1997 traffic volume was 3,600 VPD and 2005's traffic volume was 5,100 VPD. This fluctuation is due to changes in agriculture and commercial activities, and construction of Virginia Power Plant.

# **Collectors**

These streets collect traffic from local streets and channel it onto the arterial system. Collector streets are divided into two categories – major and minor. Major collectors connect local traffic generators, such as county seats, to other nearby towns or arterial roads. Minor collectors serve local traffic by linking developed areas (sub-divisions, industrial areas, etc.) with major collectors or arterial roads.

Route 31 (Rolfe Highway), designated as a major collector, serves a north – south corridor through the county and is the southern terminus of the Jamestown (James River) Ferry. This ferry, located four miles north of Town, has 24-hour toll-free service to the City of Williamsburg in James City County. Rolfe Highway is located on a fifty-foot right-of-way and has two paved, twelve-foot travel lanes. This route serves the tourist areas at Colonial Williamsburg and Jamestown. No improvements are planned for Route 31 in the Town area.

Route 626 (Oakwood Drive and Old Burrough Road) is designated as a minor collector. This route serves the rural area west and south of Surry, and the nearby Town of Claremont. Route 626's roadway has twenty feet of pavement on a thirty-five foot right-of-way.

#### **Local Streets**

Local streets include all streets and roads which are not classified by VDOT. These streets provide access to adjacent land and sub-divisions. Local street rights-of-way vary from 25 feet to 50feet. The only significant problem appears to be the narrow pavement on streets.

# **Private Streets**

Surry's only private street, Colonial Drive, currently serves 12 houses in a subdivision. This street, except for its narrow entrance off Rolfe Highway, appears to have a right-of-way which meets standards of VDOT.

Developers should be discouraged from building private streets which do not meet VDOT standards because the Department will not accept such street for maintenance.

#### Rail

Norfolk and Western is the nearest railroad fifteen miles west of Surry in Sussex County. Freight service is available on this line.

#### <u>Air</u>

The nearest airfield is the Wakefield Municipal Airport fifteen miles south of Surry in Sussex County. There is a 4331 foot paved runway with dawn runway lights and a rotating beacon. The airport, which is attended only during daylight hours, offers fuel but no maintenance.

#### Bus

There exists no bus service to the Town of Surry; however, a van service is available for those who commute to the shipyard in Newport News.

# **Summary**

Surry's highways are functionally classified and maintained by the Virginia Department of Transportation. The Town has one private subdivision street, which does not meet the VDOT standards, but should discourage creation of the others. Other means of transportation near Surry include rail and air.

Map 3: Transportation

#### **COMMUNITY FACILITES**

Community facilities are government or Quasi-public improvements that serve the general public. Community facilities include buildings, lands, and improvements that provide school, health care, libraries, recreation, fire and police protection, and water and sewer service. Community facilities are instrumental in guiding future land uses and are therefore an integral part of the land use plan.

# **Education**

The Surry County Public School System serves Surry County with three schools (one elementary, one middle school and one high school), providing for students in Pre-School, Handicapped and Kindergarten through 12<sup>th</sup> grades. Course offerings provide Academic programs, Vocational /Technical programs, Gifted and Talented, and Special Education for those with disabilities.

Surry County School System

School	<u>Grade</u>	Capacity	Enrollment Sep. 2005	Number of <u>Teachers</u>
Surry Elementary	K-4	700	421	39*
L. P. Jackson Middle	5-8	500	324	36*
Surry County High	9-12	500	331	44*

<sup>\*</sup> Including guidance counselors, librarians & resource teachers.

SOURCE: Surry County School Board, April 2006

# Higher Education

Institutions of higher learning near Surry include seven colleges offering four year and advanced degree programs, four community colleges and one 2-year college.

# Institutions of Higher Learning Proximate to Surry

Educational Institution	Location	Miles from Surry
College of William & Mary	Williamsburg	10
Virginia State University	Petersburg	40
Christopher Newport University	Newport News	40
Hampton University	Hampton	35
Norfolk State University	Norfolk	40
Old Dominion University	Norfolk	40
Eastern Virginia Medical School	Norfolk	40
Paul D. Camp Community College Associate (2 Year)	Smithfield	18
Thomas Nelson Community College Associate (2 year)	Hampton	35
Richard Bland College College Associate (2 year)	Petersburg	40
John Tyler Community College Associate (2 year)	Chester	30
Tidewater Community College Associate (2 year)	Portsmouth	35

# **Health**

Surry's private health services are provided by a general practitioner. Public health services are provided by the Surry County Public Health Department. This Department through its director, sanitarian and nursing staff, provides clinic, immunization, x-ray

services, and tuberculosis and sanitation control. Dental services are not available in the Town.

# Hospitals Serving Town of Surry

<u>Hospital</u>	Approximate Distance from Town
Sentara Williamsburg	10 miles
Smithfield Medical Center	18 miles
John Randolph	30 miles
Riverside Hospital	30 miles
Sentara Obici Hospital	35 miles

# **Libraries**

A branch of the Water Cecil Rawls Library is located in the Town of Surry. The library has varying hours Monday – Saturday, except Friday and offers all normal library services.

# Recreation

Recreation facilities for Town residents are provided through the Surry County School Board, the Town of Surry and three semi- public sources. County facilities consist of athletic fields, playgrounds, a picnic area, an indoor gymnasium, nature trails, two soccer fields and a swimming pool at Chippokes State Park.

**Map 4: Community Facilities** 

Recreational Facilities, Town of Surry, Virginia

Recreational Facility	Ownership	Site Size Acres	Equipment Activity	Condition	
"The Oaks"	Town	1	7 concrete	Good	

Picnic Area		picnic tables		
Smith Park	Surry Athletic	2 ½	Team dugouts Fair to Good	
Baseball Diamond	Association		backstop	
Football- Baseball Playfield	Surry Athletic Association	4	Spectator stands, Good scoreboard, lights, backstop, goals	
Surry Community Center	Surry County		Athletic fields, Good playgrounds, picnic area, indoor gym, golf driving range, nature trail	

# **Public Safety**

# Fire Protection

Fire protection is provided by the Surry Volunteer Fire Department. The department, organized in 1928, has 26 active volunteers. All members are trained in state authorized fire fighting courses and the department has two members that are state certified instructors. The department holds monthly training meetings. The response time of the department is fifteen minutes.

# Major Firefighting Equipment

Description	Make
1,500 GPM Pumper & Tanker	1997 Ford
1,000 GPM Pumper, 1,000 gallon storage	1981 Chevrolet
750 GPM Pumper, 750-gallon storage	1971 Ford
500 GPM Pumper, 500-gallon storage	1951 Ford
250 GPM Pumper, 250-gallon storage	1970 Ford (4WD)
250 GPM Brush Truck	1989 Chevrolet
200 GPM Pumper 200-gallon storage	1985 Hahn

SOURCE: Town of Surry Volunteer Fire Department, 2007.

# **Police Protection**

Police protection for the Town is provided by the Surry County Sheriff's Office consisting of the Sheriff and twelve Deputies. All of the deputies are trained at the Crater Criminal Justice Academy at Richard Bland College. They receive additional training through schools sponsored by the Department of Criminal Justice Services and the Virginia State Police. The Sheriff's Office has fifteen vehicles; each equipped with a

mobile radio. The Sheriff's Office, in addition to dispatching for law enforcement, also dispatches for the rescue squad and fire departments.

# Rescue Squad

The Surry Volunteer Rescue Squad provides the emergency medical services for the Town. It has both BLS and ALS capabilities, and operates three medical units and one crash truck. The rescue squad provides emergency services on a 24 hour, seven day per week schedule and is staffed by paid staff and volunteers.

# **Historic Landmarks**

The Virginia Historic Landmarks Commission (VHLC) registers historic landmarks to identify them and to encourage appreciation of buildings, structures, districts, and sites of architectural, historical or archeological significance. Surry has nine buildings and one site of historic significance, however; only four are registered with the VHLC. All of Surry's historic places should be protected from encroachment by incompatible development or from destruction. Surry could preserve and protect its historic resources by preferential tax treatment, historic district zoning or scenic easements.

# Historic Sites and Structures, Town of Surry, Virginia

Name of Structure	Location	Ownership	Date of Construction	Recognition
Academy	Academy St	Public	1840	VHLC
Burrough	Old Burrough Rd & Rolfe Rd	Private	1830	VHLC
Captain Faulcon's House	Church Street	Private	anti-bellum	VHLC
Clarke House	Church Street	Private	1880	elaborate ornamentation
Clerk Office	Church Street	Public	1826	VHLC
Old Dutch Roof House	Church Street	Private	unknown	believed to be the oldest house in Town
St. Paul's Episcopal Church	Rolf Road	Private	1886	ornamentation
Surry Baptist Church	Oak Street	Private	1886	architectural Ornamentation

Surry County Court House	Main Street	Public	1906	original Court House site -1797
The Oaks	Rolfe Road	Public	-	town center with large oak trees; said to be local mustering place for Revolution 1812, and Civil Wars

Map 5: Historic Landmarks

# **Water Supply and Treatment**

The Town of Surry's owns its water system. Water is obtained from two wells and one backup well. Water stored in the Town's water tank is distributed principally by 6-inch lines.

# Water System Town of Surry, Virginia

	Well Number 1	Well Number 2
Diameter ( with all pipe reductions)	8inch, 6inch, 4inch	6inch, 4inch
Depth	475 feet	495 feet
Pumping Capacity	75gpm	110 gpm
SOURCE: Sydnor Hydrodynamics		

# **Waste Water Collection and Treatment**

According to the Town, all occupied housing is served by the Town's wastewater collection and treatment system. The Town is served by a 60,000 gallon a day sewage treatment plant. In 2007, the Town is using an estimated 55,000 gallons per day. The effluent is discharged into a creek at Dark Swamp.

# Solid Waste

Solid waste is hauled by the Surry County Maintenance Department to the Atlantic Landfill in Sussex County, approximately 25 miles west of Surry.

# **Public Utilities**

# Electricity

Dominion Virginia Power supplies Surry's electricity from 230 kilovolt transmission lines south of Town. Presently, there is no problem with the supply or distribution of electric energy to the Town.

#### Gas

Surry is within the natural gas franchise area of the Commonwealth Natural Gas Corporation, but gas lines are five miles from the Town.

#### **Summary**

Community facilities include buildings and improvements that provide for education, health care, libraries, recreation, fire and police protection, rescue squad, water and sewer services. They are basic to community growth and well-being.

#### HOUSING

Surry's housing problems and needs are discussed below. In developing the background data, two sources of statistical information were used; the 1980 and the 1990 <u>Census of Housing</u> by the U.S. Bureau of the Census.

# **Existing Housing**

One unit detached structures are the dominant type of housing in Surry. Two or more unit structures decreased from 13 in1990 to 5 in 2000.

#### Housing by Type of Structure, Town of Surry

Structure Type	Number of	Number of Structures			
	<u>1970</u>	<u>1980</u>	<u>1990</u>	<u>2000</u>	
One Unit	89	109	106	106	
Two or More Units	12	9	13	5	
Manufactured Housing	<u>6</u>	<u>10</u>	<u>10</u>	<u>9</u>	
Total	107	128	129	120	

Source: U.S. Bureau of the Census, Census of Housing, 1970, 1980, 1990, and 2000.

Manufactured housing compromises 7.5 percent of the Town's housing. In 2000 manufactured housing accounted for 23.3 percent of Surry County's housing and 6.4 percent of Virginia's housing. Demand for manufactured housing may be expected to increase as costs continue to rise on conventional housing.

# Number of Manufactured Housing

	1960	1970	1980	1990	2000
Town of Surry	-	6	10	10	9
Surry County	12	100	715	709	768
Virginia	17,257	46,562	86,829	155,429	185,282

Source: U.S. Bureau of the Census, Census of Housing, 1960, 1970, 1980, & 1990.

# **Housing Value**

According to the 2000 Census, the median value of owner-occupied housing in Virginia was \$125,400.

At this same time, the median value of owner-occupied housing was \$88,100 in Surry County and \$86,700 in the Town of Surry.

# **Occupancy Rates**

# Occupied and Vacant Housing, Town of Surry

# Number of Units

	1970	1980	1990	2000
Owner Occupied	68	70	75	76
Renter Occupied	31	50	26	28
Vacant	8	<u>8</u>	<u>28</u>	<u>16</u>
Total	107	128	129	120

Source: U.S. Bureau of Census, Census of Housing, 1970, 1980, 1990, and 2000.

# **Substandard Housing**

The Census identifies housing units that lack plumbing as substandard. In 2000, the Census found no substandard housing in Surry.

According to the Town, today all occupied housing is served by the Town's water and sewer system.

#### **HAZARD MITIGATION**

Mitigation is commonly defined as sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. Hazard mitigation focuses attention and resources on community policies and actions that will produce successive benefits over time. A mitigation plan states the aspirations and specific courses of action that a community intends to follow to reduce vulnerability and exposure to future hazard events.

A local mitigation plan is the physical representation of a jurisdiction's commitment to reduce risks from natural hazards. Local officials can refer to the plan their day-to-day activities and in decisions regarding regulations and ordinances, granting permits, and in funding capital improvements and other community initiatives.

This section will be a useful tool for Surry by increasing public awareness about local hazards and risks, while at the same time providing information about options and resources available to reduce those risks. Teaching the public about potential hazards will help the Town to protect itself against the effects of the hazards, and will enable informed decision making on where to live, or locate business.

Although all types of disasters are possible for any given area. The most likely hazards, based on the past could potentially affect Surry are hurricanes, wind, and winter snowstorms. Other hazards such as flooding, drought, tornados, wildfires, and earthquakes are not addressed because of its infrequency of occurrence in the region.

Wind and hurricanes are hazards with localized impacts throughout the Town. The impacts may last several months. Estimated losses are primarily from wood framed buildings and residential structures. In addition, hurricanes can bring heavy rain and sometimes tornados. Winter storms in the Town are often a mix of snow, ice, sleet, and rain. Winter weather may cause road closures and loss of power and telephone service.

Following the hazard identification and risk assessment, a list of actions is developed. The actions will be prioritized and then incorporated into the public safety section of the goals, objectives, and policies chapter of the comprehensive plan. The overarching goal for hazard mitigation and the comprehensive plan is to develop and maintain Surry into a community, which is more resilient to natural disasters.

#### **Hurricane Hazard**

# **History**

# August 23, 1933

On the evening of August 22, 1933, a severe storm entered Virginia producing strong winds with gusts up to 80 mph and rain, which continued into August 23. This storm event caused no injuries but significant damage due to high winds and heavy rain. Telephone and electric service were disrupted throughout all areas. Damage was mostly trees, roofs, and awnings. Falling debris was a major concern. Many trees were uprooted causing damage to residences, blocking roads, and knocking down fences and utility lines. Heavy damage to towns and beaches along the James River were reported. The pier at Jamestown Surry Ferry was severely destroyed. The Claremont Ferry dock was swept away. The Crouch's Creek Bridge was destroyed. Many houses had flood damage and several boats were damaged or washed up on land. (Source: The Sussex-Surry Dispatch).

# October 15, 1954

On the morning of October 15, 1954, a severe storm system entered Virginia from NC producing light rain but strong gale winds of more than 70 mph from the east that intensified mid-afternoon. Wharves at Claremont were almost completely demolished. (Source: The Sussex- Surry Dispatch).

# **September 15, 1999**

On the afternoon of September 15, 1999, a severe storm system entered Virginia producing high winds and rain. Throughout the region trees and power lines were down, roads were blocked and washed out.

The area of Surry County received 14 inches of rain particular damage occurring in the Claremont District, Sunken Meadow and Claremont Beach, Poplar Lawn Road, Spring Grove Road, College Run and New Design Road were completely washed out. Crop damages estimated at \$1.15 million. (Source: The Sussex – Surry Dispatch).

# **September 18, 2003**

On the afternoon of Thursday, September 18, a severe storm system entered Virginia, peaked around 7:00 p.m.ending Friday morning September 19 (Hurricane Isabel). This storm produced moderate rainfall (4.4 inches in Richmond) and winds (sustained winds at 40 mph with gusts up to 70 mph). Throughout the region this event downed trees and power lines, blocking roads, flooding and damaging homes, smashing cars leaving almost everyone without power. Strong winds knocked down power lines and removed roofs. Sewer systems backed up and telephone services were disrupted. Massive numbers of trees were uprooted.

Schools were closed and power was out for several weeks in many locations. The Town of Claremont is on a bend in the James River. The James serves as the boundary for the Town on three sides. Hurricane Isabel destroyed many streets in the Town.

(Source: The Sussex- Surry Dispatch).

#### **Impacts**

Depending on strength, the low-pressure systems over tropical or sub-tropical waters are classified as hurricane or tropical storms. They involve both atmospheric and hydrologic characteristics, such as severe winds, storms, surge flooding, high waves, coastal erosion, extreme rainfall, thunderstorms, lighting, and in some cases, tornadoes. Storm surge flooding can push inland, and riverine flooding associated with heavy inland rain can be extensive. Parts of the Town are flat and intense prolong rainfall tends to accumulate without ready drainage paths. High winds are associated with hurricanes, with two significant effects: (1) widespread debris due to down trees and damaged buildings, and (2) power outages.

# **Winter Storm Hazard**

#### March 8, 1962

On March 8, a severe storm system entered Virginia combining the effects of a winter blizzard with an offshore Northeaster. Gale force winds and near-record tides sent rivers and the Atlantic Ocean surging over sea walls and beaches. This event flooded low-lying areas and caused destruction inland along rivers and bays. This storm produced up to three feet of snow blocking roads and knocking out power. (Source: The Progress-Index).

# **January 26, 1977**

Several weeks of ice, snow (11.1 inches) and record low temperatures produced one of the coldest winter seasons. The James River was frozen. Residences and businesses were dealing with frozen and burst pipes. Ice and freezing temperatures caused the Surry Nuclear Power Plant to shut down. Ice in the James River stopped ferry services. (Source: The Sussex – Surry Dispatch).

# February 10, 1994

A severe ice storm hit the region from February 8 through February 12 helping to produce the harshest winter in a decade. In Surry County, this ice storm damaged a water tower for the school system, knocking out heating and cooling for thirty hours. (Source: The Sussex-Surry Dispatch).

#### **January 13, 1996**

From January 6 through January 15, two snow fronts striking first from the south and then from the north produced large and prolonged snowfall. Snow and rain froze on

roads producing hazardous conditions and numerous accidents. More than 14 inches of snow fell in Surry County. (Source: The Sussex-Surry Dispatch).

#### **Impacts**

The impacts of winter storms are minimal in terms of property damage and long-term effects. The most notable impact from winter storms is the damage to power distribution networks and utilities. Severe winter storms have the potential to inhibit normal functions of the community. Governmental costs for this type of event are result of the needed personnel and equipment for clearing streets. Private sector losses are attributed to lost work when employees are unable to travel. Homes and businesses suffer damage when electric service is interrupted for long periods of time.

Health threats can become severe when frozen precipitation makes roadways and walkways very slippery, when there are prolonged power outages, or if fuel supplies are jeopardized. Occasionally, buildings may be damaged when snow loads exceed the design capacity of their roofs or when trees fall due to excessive ice accumulation on branches. The primary impact of excessive cold is increased potential for frostbite, and potential death as a result of over-exposure to extreme cold.

The other effects presented by extreme/excessive cold are a danger to livestock and pets, and frozen water pipes in homes and businesses.

# **Mitigation Plan**

The hazard mitigation planning process applied here is a typical problem-solving methodology. It started with identification of the problem (History), followed by estimating the impacts the problem could cause, then assessing what safeguards exist that might already or could potentially lessen those impacts, and finally using this information to develop a list of goals, objectives, and polices. The recommended policies are presented page 36.

#### GOALS, OBJECTIVES AND POLICIES

# Introduction

Goals, objectives and policies are presented for Surry on land use, transportation and community facilities.

A goal is a general statement of an aspiration which is considered desirable for the community; it is an end towards which actions are aimed.

An objective is a statement of a way in which a goal is to be reached; it refers to some specific accomplishment which is reasonably attainable.

A policy is a statement of a fundamental commitment which is used to guide decisions.

It prescribes a definite course of action or method of doing something and is selected from among alternatives based on an assessment of existing conditions and future expectations.

#### Land Use

Goal: To create a land use pattern that will meet the needs of Surry's citizens and advance the Town's economic and physical development.

#### Residential

Objective: Provide for safe and attractive residential housing and residential areas.

#### Policies:

- 1. Encourage additional residential development that is compatible with existing residential development.
- 2. Encourage innovative residential construction which is affordable and energy efficient.
- 3. Recognize manufactured housing as an alternative affordable housing option.
- 4. Provide that substandard housing be rehabilitated or demolished.
- 5. Enforce the Town's subdivision ordinance and zoning ordinance.

#### Commercial

Objective: Provide for the expansion of downtown and highway business areas.

#### Policies:

- 1. Encourage new business and the remodeling of existing businesses.
- 2. Require adequate and accessible off –street parking.
- 3. Encourage buffers (fences, hedges) or open areas between commercial and residential uses.
- 4. Provide that businesses be of desirable character best promoting the morals of Surry's inhabitants.
- 5. Propose that vacant, deteriorated commercial structures be rehabilitated or demolished.

# **Environmental Protection**

Objective: Sensitive lands that have intrinsic water quality value due to the ecological and biological processes they perform should be protected from the adverse effects of indiscriminate land development patterns and practices.

#### Policies:

- 1. Enforce the Town's Chesapeake Bay Preservation Act program.
- 2. Protect ecologically and environmentally sensitive areas for open space and passive recreation use.

- 3. Restrict development in areas of critical environmental importance.
- 4. Collect and refine land use information on physical constraints, then direct future development away from these areas.
- 5. Achieve a reduction in existing pollution sources.
- 6. Work with the Department of Environmental Quality to prevent and remediate underground storage tank spill.

General Objective: Improve the aesthetic quality of Surry's land use.

#### Policies:

- 1. Encourage the installation of underground utilities.
- 2. Require that street lights be installed in new developments.

# **Transportation**

Goal: To create a transportation system for the movement of people, goods, and services.

Objective: Provide for a transportation system that is safe and efficient.

#### Policies:

- 1. Assure by enforcing the subdivision ordinance that all new roads are built to state specifications.
- 2. Provide sidewalks to all streets in the Town corporate limits to safely accommodate pedestrian traffic.

# **Community Facilities**

Goal: To provide and maintain the quality and quantity of community facilities appropriate for Town needs.

#### Schools

Objective: Support the Surry County school system.

#### Policies:

1. Support the Surry County School Board's effort to improve county school physical facilities and educational programs.

#### Health

Objective: Support health facilities and services.

#### Policies:

- 1. Encourage the continuation of medical offices and personnel in the Town of Surry.
- 2. Encourage a dentist to locate in the area.

Library Service

Objective: Support library services in the Town.

#### Policies:

1. Support the continuation of the Rawls Library services to the Town.

#### Recreation

Objective: Provide and maintain adequate recreational facilities.

#### Policies:

- 1. Support the recreational programs at Surry County's community center.
- 2. Encourage private recreational areas and activities. (i.e. Smith Ballpark)
- 3. Encourage more residential developments to provide recreational areas.

Water & Sewer

Objective: Continue to provide a safe public drinking water supply and distribution system to the Town and its environs and to maintain a public sanitary sewer and treatment system.

Policies:

- 1. To provide adequate sewer services to all areas of the Town.
- 2. To protect the quality and quantity of the Town's potable water supply.

Solid Waste

Objective: Provide for the expansion of the solid waste disposal service.

#### Policies:

1. Support recycling efforts to meet State recycling mandates.

# **Public Safety**

Goal: To reduce the loss of life and personal injuries from all hazards

Objective: Continue current support of the Surry Volunteer Fire Department and Surry Rescue Squad and Sheriff's Department.

#### Policies:

1. Encourage private and public support for the Surry Volunteer Fire Department, Surry Rescue Squad and Sheriff's Department.

Objective: Increase public access to warnings regarding hazardous weather events.

#### Policies:

- 1. Provide NOAA weather radios to public facilities.
- 2. Investigate, develop or enhance Reverse 911 system or other public notification system.

Objective: Ensure that electricity and other resources are available to continue providing critical facilities during and after a disaster.

#### Policies:

- 1. Consider providing necessary electrical hook-up, wiring, and switches to allow readily accessible connections to emergency generators at key critical public facilities.
- 2. Identify need for backup generators, communications and/or vehicles at critical public facilities.
- 3. Investigate all public utility lines to evaluate their resistance to flood, wind, and winter storm hazards.
- 4. Work with VDOT, and private utilities and/or private homeowners to trim or remove trees that could down power lines.

Objective: Identify way to reduce risk by improving natural and man-made storm water management systems.

#### Policies:

- 1. Investigate and implement a channel maintenance program consisting of routine inspection and subsequent debris removal to ensure free flow of water in local streams.
- 2. Inspect and clear debris (or encourage VDOT to) from storm water drainage system.

Objective: Conduct facility assessments to determine the resistance of critical facilities to natural hazards.

## Policies:

1. Investigate town hall and fire station to evaluate their resistance to flood and wind hazards. Particular attention will be given to the HVAC system and structural integrity of the buildings.

Objective: Develop and deliver hazard mitigation and preparedness information to town residents.

# Policies:

- 1. Distribute information packets to raise awareness regarding the risks present in the Town and provide disaster preparedness information.
- 2. Publicize the location of local shelters and emergency phone numbers.
- 3. Inform the public of and/or encourage the purchase of flood insurance.
- 4. Educate homeowners about flood insurance.

Objective: Utilize regulations to implement hazard mitigation.

#### Policies:

- 1. Review and revise, if needed, existing Zoning Ordinance to include separate zones or districts with appropriate development criteria for known hazard areas.
- 2. Review and revise, if needed, existing Subdivision Ordinance to include hazard mitigation-related development criteria in order to regulate the location and construction of buildings and other infrastructure in known hazard areas.

#### THE PLAN

The comprehensive plan which follows, discusses general development proposals for land use, community facilities, and transportation services for the Town of Surry. The plan is intended to serve as a policy guide to decisions on the Town's physical development in formatting the plan, consideration has been given to the Town's background inventory and analysis and to its goals, objectives and policies.

# LAND USE PROPOSALS AND RECOMMENDATIONS

The plan includes proposals for residential and commercial land use categories. Each category is described as to area, density and use. The land use proposals should not be confused with zoning regulations. While the plan makes recommendations as to how the land can best be used, a zoning ordinance allows the Town to control how land is used. Zoning is a means to implement the plan.

# Residential

Three residential land use categories have been proposed for Surry; low density residential use, medium density residential use, and high density residential use. Each residential land use category is discussed below.

# Low Density Residential

Approximately 180 acres have been designated for low density residential development. This area is comprised primarily of Surry's undeveloped land. Development in low density areas should be primarily single family dwellings. The overall density of those

areas is proposed not to exceed 1.33 dwelling units per acre. It equals three quarters of an acre or 32,670 square feet for a minimum lot size.

#### Medium Density Residential

There approximately 300 acres of land for medium density residential development. This area is comprised primarily of the existing residential areas in Surry as well as many adjacent vacant parcels of land interspersed within the developed areas. Medium density residential areas are expected to remain single family in character. The proposed density is not to exceed two dwelling units per acre.

# High Density Residential

There are approximately 12 acres of land for high density residential development. This area is comprised primarily of the existing manufactured home parks and manufactured homes on individual lots. Two-family dwellings and small apartment complexes may also be permitted. The overall density of this area is proposed not to exceed seven units per acre. The higher density development should be planned with open space and buffering when adjacent to single family dwellings.

#### Commercial

General Businesses such as banks, offices, retail stores and service stations are recommended for an area of 6 acres on Route 10 south, for a 10 acre area on Route 10 east, and for an area of 12 acres at the intersections of Routes 10 and 31. The plan takes into consideration the fact that commercial development already exists in these areas.

# **Public Facilities and Services Recommendations**

#### Education

Since the Surry County School Board operates, maintains, and supervises the public school system, the Town can only advise as to coordination between its long range planning and that of the School Board's. The Town's projected growth is not sufficient to warrant changes in the Board's proposed school plan.

#### Health

Although medical services appear adequate for the Surry area, a dentist is needed. The Town should seek assistance from the Surry County Health Department in acquiring a dentist or dental services.

#### Library

Library services appear to be adequate.

# Recreation

Surry County's recreation facilities appear to be adequate for rural environment.

# <u>Information Technology</u>

Support/Encourage the provision of wireless internet service within the Town corporate limits.

# Public Safety

Fire, police, and rescue services appear to be adequate and recommendation is made to increase awareness of hazardous weather events.

# Water Supply and Treatment

Water supply and treatment appears to be adequate and therefore no recommendation is made to improve these services

# Wastewater Collection and Treatment

The Town's current wastewater treatment capacity is at approximately 90%. The remaining 5,000 gallons of treatment volume can be used up by a single commercial customer and will stymie the future growth of the Town. It is recommended that the Town partner with the Surry County government to increase present waste treatment capabilities for the reciprocal benefit of both entities.

#### Solid Waste

The County's disposal service appears to be adequate. The County sets up a recycling station at the landfill. The items being collected are paper, glass, aluminum and metal. The Town should work with volunteers and civic groups in setting up the recycling station.

# **Transportation Recommendations**

#### **Highways**

Although Surry's public roads are maintained by the Virginia Department of Transportation, the Town may advise VDOT on which roads are to be maintained and where new roads should be built. Proposed roads are shown on the comprehensive land use plan map. It provides a guide for considering the expansion of new or existing routes as adjacent land develops; and it serves as a basis for street and highway standards contained in Surry's subdivision ordinance.

Surry's streets are classified minor arterial streets, major collector streets, minor collector streets and local streets. The Town's subdivision regulations require right-of-way widths of 60 feet for minor arterials and 50 feet for all other streets. Route 10 (Main Street and part of Rolfe Road) is designated as a minor arterial street, Route 31 (Rolfe Highway) is a major collector street, and Route 626 (Old Burrough Road and Oakwood Drive) is a minor collector street. All other streets are considered local streets.

The lack of adequate sidewalks along most of the streets in the town presents an unwarranted safety hazard. Seek necessary grant funding to provide same.

Surry's street plan proposes a local street corridor for access to the Town's undeveloped areas. The corridor's location is approximate. A specific right-of-way location would be required as new subdivisions are recorded.

#### **Chesapeake Bay Preservation Act**

Protection of the water quality of the Chesapeake Bay, the James River and its tributaries is essential to the welfare of the Commonwealth and the Town of Surry. As a natural resource, the Chesapeake Bay has always been instrumental to the growth and vitality of Virginia. It is an attractive body of water for recreation and transportation, and it has always been a critical component of the State's ecosystem.

In 1988 the Virginia General Assembly passed the Chesapeake Bay Preservation Act (Bay Act) as Virginia's commitment to improving the health of the Chesapeake Bay. The purpose of the Bay Act is to protect and preserve the water quality of the Chesapeake Bay and its tributaries. The adoption of the Bay Act resulted in the creation of a land use management program based upon the premise that human activities, such as construction, farming and other land clearance and disturbance, have significant cumulative impacts on the water quality of the Chesapeake Bay. The intent of the Bay Act is to balance the needs of economic development and environmental protection.

The Chesapeake Bay Local Assistance Board (CBLA) program was created to develop regulations thereby establishing the criteria for local governments to use in designating and managing Chesapeake Bay Preservation Areas in their jurisdictions. All local governments in Tidewater Virginia, including the Town of Surry, are responsible for implementing the Bay Act and there for are required to designate Chesapeake Bay Preservation Areas and adopt a local program regulating the use and development of these areas in a manner consistent with the Bay Act.

# Chesapeake Bay Preservation Areas

Certain land areas play a more important role in protecting water quality than do others. The Bay Act attempts to identify and focus on those critical land areas, which if improperly developed, could result in substantial water quality degradation. These areas are called Chesapeake Bay Preservations Areas (CBPA's) and include two components. The two components are the Resource Protection Area (RPA) and the Resource Management Are (RMA).

Resource Protection Areas (RPA's) are to include "areas which consist of sensitive lands at or near shorelines that have intrinsic water quality due to the ecological and biological processes they perform or are sensitive to impacts which may cause significant degradation to the quality of state waters". Areas designated as RPA's include, but not limited to, the following:

- Tidal wetlands:
- Non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams;
- Tidal shores; and
- 100 foot buffer zones adjacent to other RPA components.

The RPA features filter sediments and pollutants from runoff before they reach the Bay, thus improving water quality. These land areas, preserved in their natural state, work to prevent erosion, absorb water, prevent flooding, provide a protective buffering of the shore, reduce nutrients entering water, and otherwise prevent sediments and pollutants from entering the water. The uses and development of RPA land, as well as land clearance and the removal of vegetation are extremely restricted and possible only under certain circumstances by special permitting. Few exceptions exist other that for development defined prior to the Bay Act which due to their size, shape or other unique features, cannot be reasonably developed within the requirements of the Bay Act.

Resource Management Areas (RMA's) are lands which "have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Areas". These management areas include all areas contiguous to the entire RPA inland boundary.

These areas, if improperly developed, would result in erosion, flooding, and other adverse impacts to the RPA, thereby preventing its proper functioning and degrading water quality.

Included in the Resource Management Areas are such components as:

- 100-year flood plains;
- Highly erodible soils;
- Highly permeable soils;
- non-tidal wetlands, not included in RPA's;
- Steep slopes; and
- Other lands as necessary to sustains the quality of state water

Land development and disturbance activities in Chesapeake Bay Preservation Areas must generally limit land disturbances to a minimum, maintain a 100-foot buffer from protected water and wetland features, strictly control erosion and sediment on the site, preserve natural vegetation to the greatest extent possible, minimize impervious coverage and manage storm water runoff generated by the development.

Following the Chesapeake Bay Preservation Act's designation guidelines, the Town of Surry designated the entire jurisdiction a Chesapeake Bay Preservation Area, including the portion of the Town in the Chowan River Basin.

Because there are no RPA features existing within the Town, no RPAs are designated. The Town's Chesapeake Bay Preservation Areas consist solely of RMAs. Land uses as permitted by local zoning are permitted within RMAs; however, best management practices must be employed where necessary in order to prevent or reduce surface water pollution. The regulations of the CBPA's are administered and enforced by the Town of Surry zoning office.

## **Special Land Use Considerations**

Not all of the land in the Town is suitable for development. Certain areas of the Town are more easily developed for certain uses than others. Certain land-disturbing activities can possible create hazards if unnatural use occurs. Additional costs may be incurred when overcoming the natural conditions existing in the area or when development in the area disturbs the natural process through environmental degradation, both on and off the site.

There is no soil survey for the Town of Surry. The only environmental features that can be identified without a soil survey are steep slopes, flood plains, tidal and nontidal wetlands and general soil information. Special planning considerations are directed to address these development constrains and factors in order to guide the best possible land use for the Town in the future. They are described below and show on Map 6.

# **Shoreline and Stream Bank Erosion**

Shoreline and stream bank erosion is caused by both human and natural forces. Natural forces include wave action, Storm events with high winds and increased tidal action and upland runoff. Human forces can include construction and land disturbing activities such as grading and clearing, boat wakes, improperly sited development and increased storm water runoff from overbuilding. Shoreline and stream bank erosions can affect water quality through the introduction of increased sediments and nutrients.

The Town of Surry is situated on the headwaters of Hulls Slash Gut, Dark Swamp, and Crouch's Creek. No shoreline and only a very short stream bank exist within the Town's limits. Shoreline and stream bank erosion do not appear to be an issue in the Town of Surry.

#### Redevelopment

Intensely Developed Areas (IDA's) are usually confined to either the redevelopment of existing developed sites or new construction on a limited number of remaining parcels. IDA's are further characterized as development areas where the natural landscape has been changed considerably and impervious

surface coverage is greater that 50 percent, housing densities equal or exceed four units per acre and areas are served by public water and sewer systems. The concentration of intense use coupled with the absence of natural vegetation and extensive impervious coverage contribute to non-point pollution of surface waters. No areas in the Town of Surry are considered for IDA designation.

Even without the identification IDA's, the Town of Surry will continue to seek ways to improve water quality on individual redevelopment and renovation projects. Currently, renovation projects in the Town are primarily individual single-family construction activities.

# Steep Slopes

Slopes unsuitable for development generally occur along streams, creeks, river banks and ridgelines. The percentage of slope considered to be unsuitable for development will vary depending upon soil type; however, slopes greater that 15 percent consistently present significant water quality problems for development and their stabilization generally requires more expensive structural solutions. Steep slopes are among the land categories to be considered for inclusion in Resource Management Areas.

Slopes greater than 15 percent are usually a deterrent to development not only because of the topography, but also because the soils often associated with them are much more easily eroded. Highly erodible soils on slopes greater than 15 percent are particularly difficult to stabilize once disturbed by either natural causes or site development. In addition to soil stabilization protected for development on a steeply-sloped site can be cost –prohibitive because of the excessive grading usually necessary to stabilize foundations. Further, erosion resulting from development on steep slopes causes significant water quality problems in the long term, requiring the use of expensive retaining walls which must be periodically repaired or replaced.

Careful site design and installation of Best Management Practices (BMP's) can alleviate many problems on slopes in the 15 percent range. Development should be avoided on very steep slopes (those with slopes of 25 percent or greater) because the engineering necessary to properly stabilize these slopes is often cost-prohibitive and severe water quality problems can arise if such solutions are not used.

Map 6 presents area slopes greater than 15 percent in the Town of Surry.

# **Map 6: Development Constraints**

# Wetlands

Wetlands are a valuable natural resource. They reduce floodwater peaks by storing the floodwater and reducing velocity, serve as groundwater discharge and recharge areas, improve water quality and provide food and habitat for fish and wildlife. Wetlands are defined by the Clean Water Act as "areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support the prevalence of vegetation typically adapted for life in saturated soil conditions." Section 404 of the federal Clean Water Act empowers the U. S. Army Corps of Engineers and the U. S. Environmental Protection Agency to regulate the placement of fill or dredged material into the waters of the United States, including wetlands.

Wetlands are protected by both state and federal regulations. There are small acreages of non-tidal wetlands existing in the Town of Surry. All of them are located in and around the Hulls Slash Gut and Crouch's Creek headwater areas. For planning purposes, wetlands are recommended to be conservation areas and are best left undisturbed.

# **Map 7: Land Use Map Plan Implementation**

Surry's comprehensive plan suggests ways to address the Town's future needs. To be effective, however the plan must be implemented. The following planning implementation devices are authorized by Title 15.2, Chapter 22, Code of Virginia, 1950 (as amended).

#### **Adopting the Comprehensive Plan**

The Town of Surry Planning Commission has revised the comprehensive plan for the physical development of the Town. But before Surry may use the plan, it may be adopted. To adopt the plan, the Surry Planning Commission and the Surry Town Council must advertise and hold public hearings in accordance with regulations set forth in section 15.2-2204 of the Code of Virginia. After the plan is adopted it may be amended as needed to keep it up-to-date. However, the Code requires the plan to be re-evaluated at least once every five years. Proposed plan amendments require public hearing and adoption by the Commission and Council.

Mechanisms for implementing the plan include a subdivision ordinance, a zoning ordinance, and capital improvements program.

# **Subdivision Ordinance**

A subdivision ordinance allows Surry to regulate the layout and construction of new streets and to control the platting of vacant land in order to assure that the new development will be an asset to the Town. A subdivision ordinance helps implement Surry's comprehensive plan by requiring that new subdivisions are developed in accord with the Town's plans for streets and utilities.

As set forth in Section 15.2-2240 of the <u>Code of Virginia</u>, every locality in Virginia is required to have a subdivision ordinance. Surry's ordinance, as adopted in 1977, appears to be adequate for the Town's needs.

#### **Zoning Ordinance**

A zoning ordinance controls the use of land lot sizes, the size and height of buildings and the placement of buildings on the land. A zoning ordinance delineates districts and specifies the land uses which may be placed in each district. Zoning helps to preserve the existing character of an area by excluding incompatible uses while permitting those uses which can exist in harmony. Zoning does not eliminate compatible land uses which already exist in an area, but it may provide methods of phasing out such uses as they become obsolete.

A zoning ordinance would help implement Surry's comprehensive plan by requiring that those areas planned for residential commercial and industrial uses be permitted to these types of development. The ordinance would also provide that residential densities suggested in the plan be followed.

A zoning ordinance consists of two parts, the text setting forth regulations to govern the uses permitted in each district and a map showing where such districts are located. District regulations define words and terms used in the ordinance; provide use and size requirements, and give general regulations on exceptions, appeals, off-street parking, amendments and administration. A zoning map would show district boundaries based on the land use recommendations of Surry's Comprehensive Plan. This does not mean that the zoning and plan maps would correspond exactly, but rather that the plan map would be used as a guide for delineating zoning district.

As set forth in Section 15.2-2280 of the <u>Code of Virginia</u>, the Town of Surry zoning ordinance was adopted in March, 1981. In May 1992, the ordinance was amended to implement the Chesapeake Bay Preservation Act. In September 2001, the ordinance was amended again to reflect the updates of the Town Comprehensive Plan.

# **Capital Improvements Program**

Many private investments hinge on the availability of public facilities and services. The availability of schools, recreational and cultural facilities, water and sewer services and other community facilities can cause the growth and development of certain areas. This gives the Town the opportunity to channel growth and development, commensurate with its financial capabilities, in a manner compatible with the goals and objectives of the comprehensive plan. Community facilities and services should be provided on a priority basis only to those areas in which growth and development are anticipated. *End of Comprehensive Plan*