

# **Chapter 7:**

## **Community Services**

Design and Maps updated June 2016

### **1.0 Introduction**

Community facilities and services in Shenandoah County are provided by the County, by other governmental agencies, and by private companies and organizations. County facilities and services include the County Government Center, Court Houses and jail complex including the Sheriff's Department, school system, County Park, Shenandoah County Library, solid waste management facilities, animal shelter, Department of Social Services, Health Department, and the Virginia Cooperative Extension Service. Some of these services are provided in conjunction with the Commonwealth of Virginia, but housed in County offices.

Consideration of facilities construction by the county is part of a Capital Improvements Program (CIP). Currently, County Administration provides recommendations to the Board of Supervisors regarding the CIP. In the future, the Planning Commission should play an expanded role in the consideration and recommendation of facilities projects included in the CIP.

The six incorporated towns provide general local government services and, in all but Toms Brook, their own police protection. In addition, they supply water and sewer facilities and services to most of the residents and businesses in the county that have public service. The Stoney Creek Sanitary District provides water and sewer service to the Basye/Bryce Mountain area and the Toms Brook-Maurertown Sanitary District provides service covering an area from Toms Brook to just north of Woodstock.

### **2.0 Utilities**

These systems are described in detail as to their capacities, sources (for water), methods of treatment, and discharge points (for sewer) in the Economic Development Profile, and are summarized in this section. The major effect of these facilities on the County's planning efforts lies in the location of the current and future service areas, and their ultimate capacities.

Private companies or organizations provide the other utilities (electricity, gas, telephone and cable), own and operate the Shenandoah Memorial Hospital in Woodstock and other health clinics and services, provide volunteer fire and rescue services, a sheltered workshop for the handicapped, and various recreational facilities.

Dominion Virginia Power serves five of the six incorporated towns and almost half of the County. The Shenandoah Valley Electric Cooperative--which receives power from Virginia Power's transmission system--serves the remaining portion of the County.

Shenandoah Telecommunications Company (Shentel) is headquartered in Edinburg, Virginia. Founded as a rural telephone cooperative in 1902, Shentel now has more than 700 employees serving customers in Virginia, West Virginia, Maryland and Pennsylvania. In Shenandoah County, Shentel provides a broad range of telecommunications services including local and long distance telephone, Internet and data services and cable TV. As a Sprint PCS Affiliate of Sprint/Nextel, Shentel offers mobile telephone service from a network of towers. Since 2005, high-speed Internet (DSL) has been available to 100% of Shentel local exchange subscribers-an important option for the increasing number of residents who work from home.

Living in a beautiful rural area does not mean surrendering technology in Shenandoah County. Current DSL service provides data speeds from 384 kilobits per second to 10 megabits per second for residential customers. Natural gas, LP gas, fuel oil and coal are all available in Shenandoah County through a variety of distributors.

### **3.0 Schools**

Since the fall of 1994, the Shenandoah County Public Schools system has been divided into three distinct campuses located in the north, center, and south of the County. Each campus is comprised of one elementary school, one middle school, and one high school. In March 2012, the combined enrollment of the school system was 6,003, with 523 teachers.

Located in the Strasburg area, the Northern Campus consists of Sandy Hook Elementary, Signal Knob Middle, and Strasburg High School. The Central Campus contains W. W. Robinson Elementary, Peter Muhlenberg Middle and Central High School and is located in Woodstock. The Southern Campus lies halfway between Mt. Jackson and New Market, off the Shenandoah Caverns exit of I-81. It is the home of Ashby-Lee Elementary, North Fork Middle and Stonewall Jackson High School.

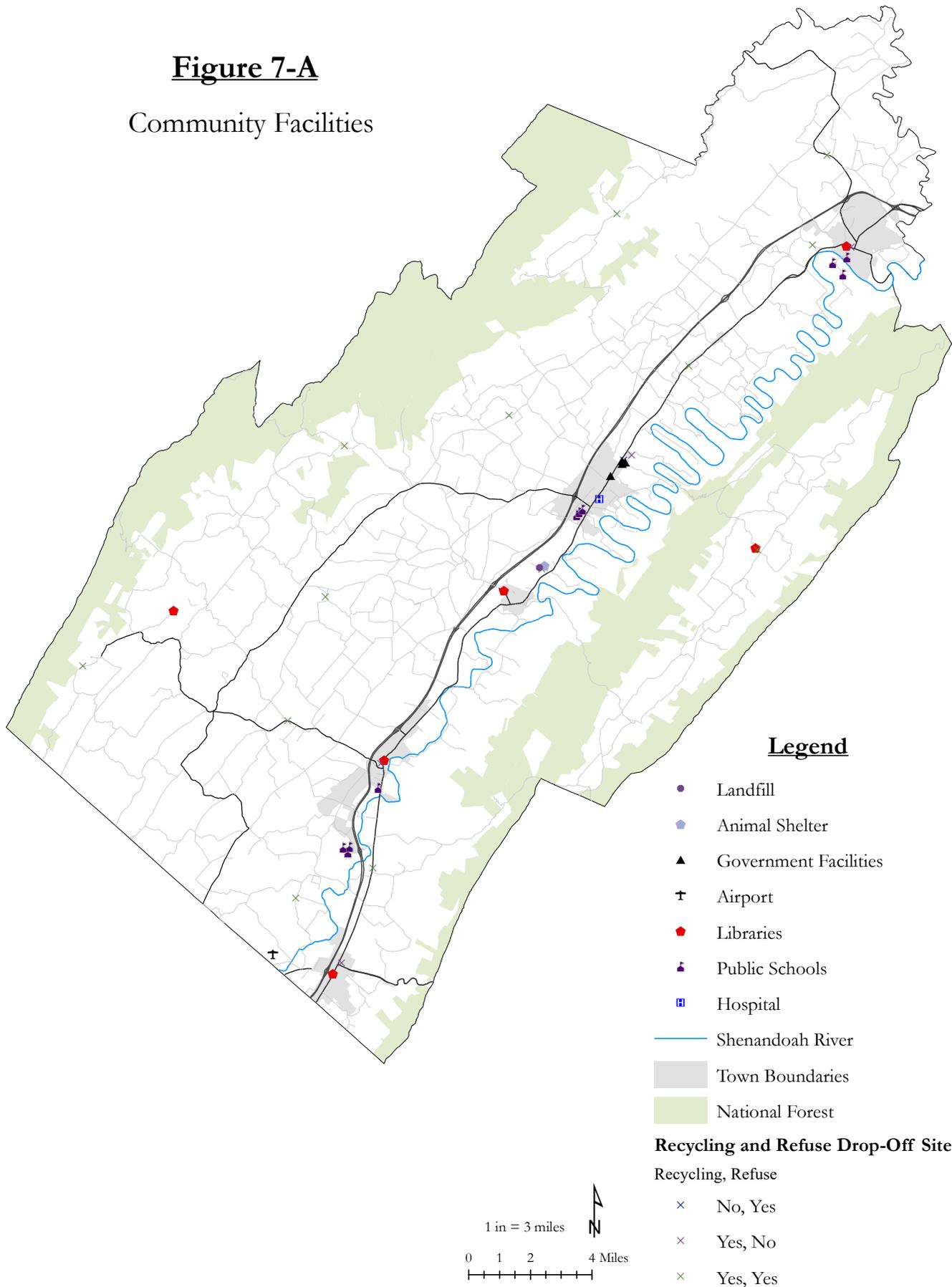
Triplett Tech, located in the Town of Mt. Jackson, is the career and technical center serving secondary school students from the three high schools in Shenandoah County. Occupation specific programs are offered that are taught by industry-experienced professionals using current equipment. Business and industry representatives serve on the advisory board, and assist yearly in keeping programs current with industry standards.

Programs offered include career and technical instruction in Automotive Technology and Collision Repair, Carpentry, Masonry, Electricity and Professional Cosmetology. Expanded instructional opportunities now include Animation, Culinary Arts, CISCO Systems Networking, Criminal Justice, Industrial Co-Operative Training (ICT), and Health Care Science. Many students completing career training at Triplett Tech successfully complete requirements for a variety of industry certifications. Dual enrollment opportunities with Lord Fairfax Community College are available for students enrolled in Health Care Science, Criminal Justice, and Electricity.

Triplett Tech is also the site of the regional Massanutten Governor's School for Integrated Environmental Science and Technology for gifted and

**Figure 7-A**

Community Facilities



highly motivated high school juniors and seniors who have demonstrated an advanced mastery of the traditional high school curriculum. Approximately 75 pupils attend the program from the school divisions of Harrisonburg City Public Schools, Page County Public Schools, Rockingham County Public Schools and Shenandoah County Public Schools. The Governor's School curriculum provides students a rigorous academic program that demands the integration of academic disciplines with technology. It integrates the study of environmental science, mathematics, technology, computer science, information systems, society and business. Using principles of problem-based learning, scientific theory will combine with hands-on experience to encourage further interest in environmental science and technology and its impact on society.

Figure 7-B shows the grade levels, capacity, and March 2012 enrollment at each school. Enrollment versus capacity is highest at the elementary schools, with the highest at Sandy Hook Elementary School which is located where the greatest growth in the County has occurred. Sandy Hook's enrollment exceeds its capacity. In due course, an additional school will be needed. It should be noted, however, there is unused capacity at the middle schools and high schools at each of the campuses. As an interim measure, consideration needs to be given to reallocation of these resources.

School capacity figures found in Figure 7-B was taken from the November 2006 report "Population Planning and Facilities Review" prepared for Shenandoah County Public Schools by the Commonwealth Educational Policy Institute (CEPI) of the Virginia Commonwealth University. As explained in Part II, School Capacities and Facility Utilization, these capacity figures are "an estimate of the capability of the facility to offer its program."

The capacity of individual school buildings has been reduced over time with such variables as increased federal and state program requirements that result in lowered capacity for individual instruction spaces or changes in local community expectations related to class size. Having first determined a "standard operating capacity" for each facility, the 2006 CEPI review made a final adjustment or reduction (using standards or principles explained in the review) to the "standard operating capacity", which resulted in the "adjusted operating capacity" for each facility. A full description of how the "adjusted operating capacity" is determined can be found in the 2006 CEPI review. Figure 7-B reflects the "adjusted operating capacity" for each school facility as found in the 2006 CEPI review.

The U.S. Census indicated a population of 41,993 citizens in the county in 2010 with a public school enrollment of approximately 6,100 students. The State population projections prepared by the Virginia Employment Commission show that there will be a total of 49,427 county residents by the year 2020 and 56,927 county residents by 2030. Assuming the April 2010 ratio of student enrollment to total county population it is estimated that the student enrollment will be 7,187 students by 2020 and 8,277 students by year 2030.

All of the public schools in the County are fully accredited by the State of Virginia, and the pass/fail rates on the Standards of Learning examinations are competitive with the state averages. As the County shifts toward newer businesses which require a more highly educated workforce, more emphasis will be focused on the preparation of high school students to advance to four

**Figure 7-B:  
Shenandoah County School Enrollment & Capacity  
As of March 31, 2013**

Source: Shenandoah County School Board, April 2012

School	Grades	Enrollment	Capacity
<b>Northern Campus</b>			
Sandy Hook	K-5	1,010	953*
Signal Knob	6-8	478	713
Strasburg	9-12	683	810
	Campus Total	2,171	2,476
<b>Central Campus</b>			
W.W. Robinson	K-5	1,126	1,192*
Muhlenberg	6-8	552	893
Central	9-12	758	1,002
	Campus Total	2,436	3,087
<b>Southern Campus</b>			
Ashby-Lee	K-5	634	796*
North Fork	6-8	331	685
Stonewall	9-12	506	808
	Campus Total	1,471	2,289
	<b>Totals</b>	<b>6,078</b>	<b>7,852</b>
<p align="center">* Based on a K-3 ratio of 21:1 for elementary schools Source: Shenandoah County School Board, April 2012</p>			

**Figure 7-C:  
Comparison of Shenandoah County Schools  
with State of Virginia Averages**

Metric	Shenandoah County	Virginia
Pupil / Teaching Position Ratio (K-7)*	10:1	12:1
Pupil / Teaching Position Ratio (8-12)*	15:1	11:1
SAT Scores - Class of 2011**		
SAT Reading	510	512
SAT Math	516	509
SAT Writing	498	495
Advanced Studies Diplomas (2009)***		
	44.36%	41.33%
<p align="center">* Source: Superintendent's Annual Report - Table 2,209 - 2010 ** Source: Shenandoah County School Board - April 2012 *** Source: Superintendent's Annual Report - Table 5, 2009-2010</p>		

year college programs. Figure 7-C compares the County's schools with the state average for three relevant parameters: pupil/teaching position ratios, SAT scores, and advanced studies diplomas.

### 3.1 Colleges

A college education is available at many locations close to Shenandoah County. A partial listing of nearby colleges and universities and others which serve the entire state follows:

<b>Area Colleges and Universities</b>	
<b>Institution</b>	<b>Location</b>
Blue Ridge Community College	Weyers Cave, VA 24486
Bridgewater College	Bridgewater, VA 22812
Christendom College	Front Royal, VA 22630
Eastern Mennonite University	Harrisonburg, VA 22801
George Mason University	Fairfax, VA 22030
James Madison University	Harrisonburg, VA 22807
Lord Fairfax Community College	Middletown, VA 22645
University of Mary Washington	Fredericksburg, VA 22401
Shenandoah University	Winchester, VA 22601
University of Virginia	Charlottesville, VA 22903
Virginia Military Institute	Lexington, VA 24450
Virginia Tech	Blacksburg, VA 24061
Old Dominion University	Middletown, VA 22645*
	*satellite campus at LFCC

### 4.0 Libraries

There are seven libraries serving Shenandoah County. The Shenandoah County Library System consists of the County Library in Edinburg, the Basye/Orkney Springs station, and community libraries in Strasburg, Fort Valley, Mount Jackson and New Market. The County Library opened in 1985 and formed the library system in 1997. The County Library features an archive and a local history and genealogy collection. An independent library is located in Woodstock.

The County Library system has collections with over 155,000 cataloged items, including e-books, DVDs, audios and periodicals in several formats. The system has a fully integrated automation system and provides access to an array of electronic resources through its website. Internet access is available at all locations in the system, whether by Wi-Fi or by use of one of the more than 40 public access workstations. In 2011 there were over 150,000 visitors to the County Library System. They checked out over 235,000 items, with 35,000 registering to use a computer.

The County Library has six full time and seven part time staff members. Volunteers staff the other libraries. The Shenandoah County Library Foundation supports the County Library system with a Book Endowment Fund, a Technology

Endowment, annual fund drives, and capital drives. In 2012-2013 the County Library will receive \$146,000 in State Aid for the system's materials budget.

The County owns the two plus acre lot immediately west of the County Library. It is used for parking and offers space for expansion of the County Library. The Stone House on the property houses the Richard A. "Dick" Golden Meeting Room and the library's technical services offices.

## 5.0 Parks

Shenandoah County has numerous parks and recreation facilities which offer a wide range of activities for people of all ages. These facilities are owned and operated by a range of agencies and organizations including Shenandoah County, several towns, recreational associations, and private companies. Figure 7-D shows the location of the parks and recreation facilities.

The Shenandoah County Park is located between Toms Brook and Maurertown. It contains two large picnic shelters with double-sided grills, one lighted softball field, one non-lighted softball field, and one non-lighted baseball field, a playground, sand volleyball court, two tennis courts, a basketball court, four horseshoe pits, two rest room facilities, three gazebos, and a newly-renovated one-mile walking trail.

Edinburg, Mt. Jackson, New Market, Strasburg, and Woodstock each have town parks. The old Madison District Park was deeded to the Town of Edinburg by the County in 2003. It has a pool and bath house, playground, two tennis courts with lights and three picnic shelters. A walking trail has been started within the wooded area of the park; it is approximately 1,000 ft. The Town is planning to continue improving the existing facilities. Behind the Edinburg School and adjacent to the Edinburg Madison District Park, Shenandoah County Parks & Recreation also maintains the Woodstock-Edinburg Little League baseball field and one basketball court.

The Shenandoah County Soccer League opened its soccerplex south of Mt. Jackson in September 2009 with three of the planned five full size fields in operation. The non-profit SCSL provides soccer for over 500 children ages 4-15 every fall and spring season.

Mt. Jackson's Town Park contains a swimming pool with a new bathhouse (2009), tennis court, a baseball field, a tee ball field, basketball courts, a playground, and a picnic shelter. The Town also has a fishing area along Mill Creek and a downtown festival park in conjunction with its new Visitors Center/Town Hall project, and a new Veteran's Park.

New Market's Town Park has a swimming pool, a bath house with showers, two basketball courts, five lighted tennis courts, a softball field, a little league baseball field, playground equipment, a fitness/walking trail, a gazebo, six picnic shelters, a soccer field, one large barbeque pit, two horseshoe courts, four parking lots and public restrooms. New Market has Rebel Park which is home to the New Market Rebels of the Valley Baseball League and the New Market Shockers of the Rockingham County Baseball League.

Strasburg's Town Park includes a swimming pool with bath house, the new Riverside Park walking trail that connects to Strasburg High School, newly-

renovated playground, picnic shelters, two tennis courts, basketball courts, soccer fields, and a boat ramp access to the Shenandoah River.

The Parks and Recreation System for the Town of Woodstock has a significant effect on the quality of life enjoyed by town and county residents. Recreation facilities available to residents are located in Woodstock at the W.O. Riley, Riverview, Fairview and Main Street Parks; the elementary, middle, and high schools; and the Shenandoah County Fairgrounds. Additionally, a new state park, the Seven Bends State Park, has been approved east of town with access to the park being provided along E. Reservoir Road.

W.O. Riley Park has a swimming pool, playground, volleyball courts, tennis courts, basketball court, picnic shelters, an all-purpose field and arboretum. Riverview Park consists of two Little League fields with one field equipped for night games, and a nature walking trail.

Fairview Park (Future) consists of a 73 acre parcel on the northwest corner of the town limits. The master plan for Fairview Park displays elements that include: an historical event center, two field sports complex, tennis complex, central park, small amphitheater, arboretum, picnic areas, playground areas, public restrooms, park-wide trails, college level baseball/multi-use complex and a recreation/wellness/community center. The town anticipates this project to develop over a twenty year time period.

A total of 241 acres of local public park land is located throughout the County. In 2002, the County acquired the 151 acre Keister tract of land, east of Strasburg, to be developed as an additional park facility. Recreation areas are also located at each of the County's schools.

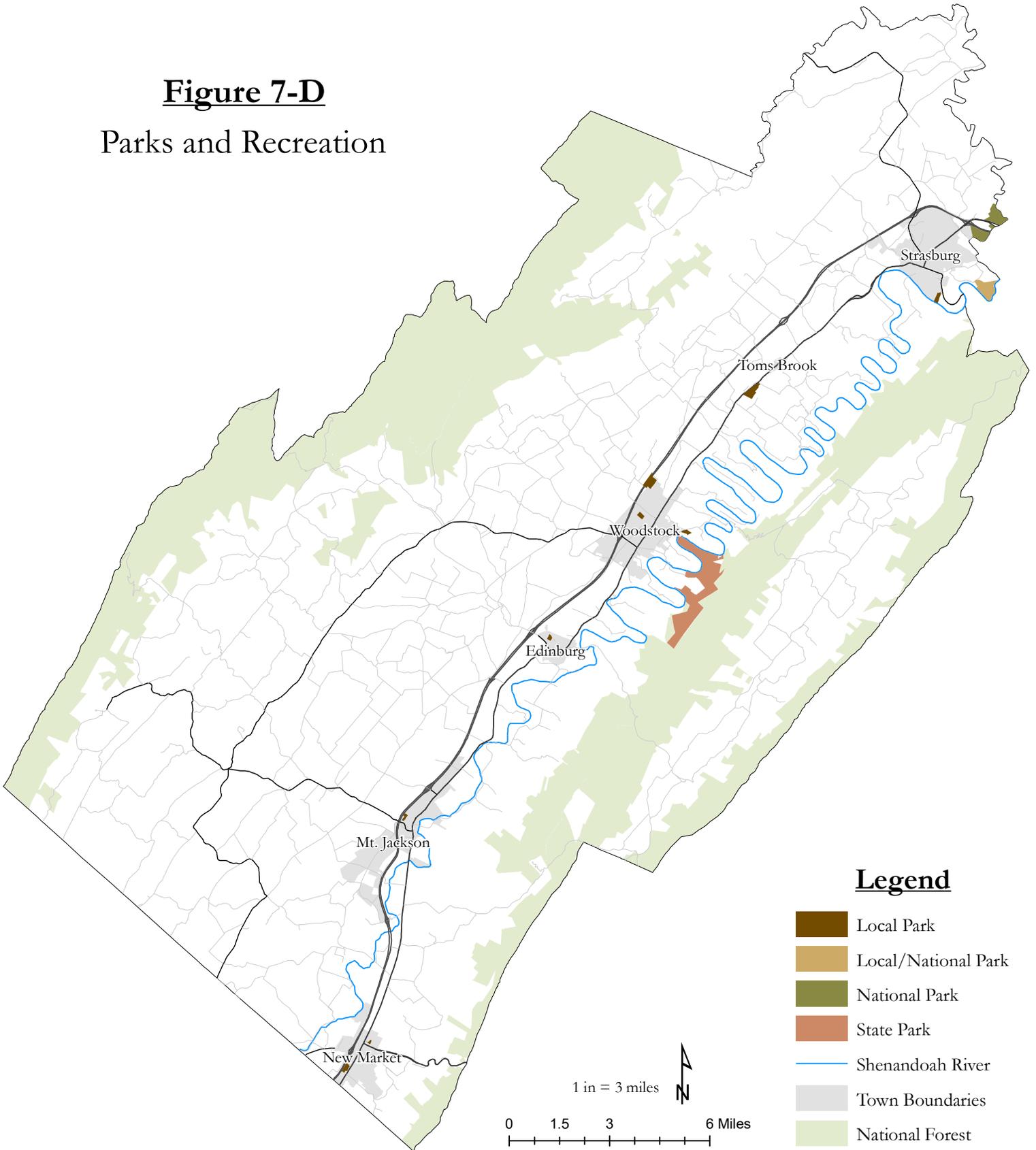
Seven Bends State Park is named for a series of oxbow curves in the river. The 1,066 acre site has almost four miles of river frontage. The state park master planning process is complete with the development of a park mission statement and goals and objectives. The Commonwealth of Virginia Department of Conservation and Recreation is now in the process of implementing the plan as funding becomes available.

The North Fork of the Shenandoah River and the County's other waterways provide residents and tourists with opportunities for boating, canoeing, swimming, and fishing. Currently, there are three public access landing sites on the North Fork in Shenandoah County: Meems Bottom near the Route 730 bridge, Chapman's Landing south of Woodstock, and at the Strasburg Town Park. Additionally, a fourth public access landing site may be added in the future at the Deer Rapids Bridge. In addition to public recreational facilities, Shenandoah County has a number of privately owned and operated recreational activities that are open to the public. These include two golf courses, driving ranges, miniature golf, skiing and snow tubing, horseback riding, bowling alleys, swimming, lake sports, museums and caverns.

## **6.0 National and State Forests**

The George Washington National Forest contains 77,681 acres of forest in the county, offers hiking trails, ATV trails, campgrounds, and picnic areas, along with hunting and fishing, for both residents and tourists. There is also

**Figure 7-D**  
**Parks and Recreation**



a newly created Cedar Creek and Belle Grove National Historic Park located at the northern edge of the County and extending into Warren and Frederick counties. The county-owned Keister tract and future park is within the national park boundary.

Creation of a series of trails on land owned by the National Park Service (NPS) and key partners such as the Cedar Creek Battlefield Foundation, The National Trust for Historic Preservation and Belle Grove Inc., and the Shenandoah Valley Battlefields Foundation (SVBF), along with local and community partners, is included in the Cedar Creek and Belle Grove National Historic Park final general management plan. The SVBF is managing the creation of a trail system to link Fishers Hill Battlefield properties with the new Cedar Creek and Belle Grove National Historic Park in the northern portion of the county. SVBF has engaged a professional planning and design firm to accomplish this work. Initial trail development will be within the Fishers Hill parcels currently owned by SVBF. It is expected that completion of the entire project, including new trails located on privately owned property, will take several years.

The Virginia Department of Forestry is still in the process of receiving final land donations for the Devil's Backbone State Forest (DBSF). Located in the northwestern portion of the county in the Cedar Creek Valley, it is presently 715 acres in size. The future estimated size of the DBSF will be approximately 900 acres. The main goals for this State Forest are conservation education, forest research concentrating mainly on the reestablishment of the American Chestnut in Shenandoah County, and passive outdoor recreation such as hiking, bird watching and nature study.

The Shenandoah County Parks & Recreation Department's Master Indoor/Outdoor Recreation Plan for the County was adopted in 2000. Its overall goal is to "Provide a range of high quality indoor and outdoor recreational facilities and activities that meet the expressed needs of all County citizens." Major recommendations include: work with the School Board to develop and manage joint-use facilities; rehabilitation and expansion of the County Park at Maurertown; addition of walking/biking trails to all parks; additional boat access sites along the North Fork; acquisition and development of a new park with river access; meet the needs for indoor wellness and fitness activities and sports; and meet the needs for arts performance and instruction.

## **7.0 Arts**

Whether as student, artist or member of an audience, Shenandoah County provides the opportunity for community participation in the visual and performing arts. The Shenandoah County Department of Parks & Recreation and private art organizations such as VECCA and The Art Group Gallery at the Bowman-Shannon Cultural Arts Center in Mt. Jackson offers classes and mentorships in the visual and performing arts. The Shenandoah Valley Music Festival, Masterworks Chorus and Theater Shenandoah offer performances throughout the year. Masterworks Chorus and Theater Shenandoah are composed of local musicians and actors while the Shenandoah Valley Music Festival brings nationally known musicians to the county.

A facility to support the activities of these groups is needed. The Master Indoor/Outdoor Recreation Plan for the County, referenced above, specifically addresses the need for arts performance and instruction in the community. Shenandoah County, at present, does not have an adequate performing arts space. A theater with raised seating for the audience and appropriate sound and lighting systems is needed. Practice spaces, classroom space and a gallery for the display of artwork are additional needs.

From the mid 1990's to late 2011, the old Edinburg School building had housed the offices of the Shenandoah County Parks & Recreation Department and several county non-profit agencies, including space provided to the Shenandoah Area Agency on Aging for a senior center and the meals on wheels program. The Edinburg School building was built in the 1930's and a cafeteria addition was added in the 1950's. A plan was presented in February 2011 by the School Superintendent and County Administration to renovate the Edinburg School. In May 2011 the county received an unsolicited Public Private Education Act (PPEA) proposal to convert the existing building interior spaces into an education facility for alternative education as well as continued use for a senior center and parks and recreation programs. After advertising for additional proposals the County entered into an interim agreement in September 2011 for a 35 percent partial site and design plan which was received in April 2012. The building was fully vacated in December 2011 with all former occupants moved to permanent or temporary locations pending final decisions and actions on the project design proposal.

## **8.0 Law Enforcement**

Four categories of law enforcement agencies serve Shenandoah County citizens. Central dispatch for the County is located in the County Government Center. The towns of Edinburg, Mt. Jackson, New Market, Strasburg, and Woodstock all have their own Police Departments. The Shenandoah County Sheriff's Department, headquartered in Woodstock, has jurisdiction in the Towns as well as the County, but concentrates on providing protection in the rural areas. It also provides court-related services at the Court House and staffs the county jail in Woodstock. The Virginia State Police has State-wide law enforcement powers. Shenandoah County is covered by troopers working out of the Page County office in Luray.

The Virginia Department of Forestry has three, full-time forest wardens living within the County. This State agency provides forest and open land fire protection on all private land holdings within Shenandoah County. The VDF also assists the U.S. Forest Service with fires occurring on national forest lands. The VDF responds to all forest and field fires and assists the county volunteer fire departments with the suppression of these fires. A dozer-fireplow unit and a forest fire engine are stationed at the VDF office in Woodstock. VDF forest wardens are responsible for the investigation of all forest and open land fires, and the pursuit of legal action towards the responsible parties as is warranted.

The Virginia Department of Game and Inland Fisheries has one, full-time Conservation Police Officer living within the County. This State agency is responsible for enforcing all portions of the Code of Virginia relating to boating

and wildlife regulations. Conservation Police Officers enforce these code sections on private, state and federal lands and also assist local law enforcement agencies with other criminal and investigative matters as requested.

The decision to construct a new Shenandoah County District Courts Building to address courthouse overcrowding and habitability issues was made in 2008 with construction completed and occupancy in June 2011. The Historic Court House Task Force, for the continued use and rehabilitation of the Historic Old Court House in downtown Woodstock, presented its recommendations to the County in December 2010. A partial site and design plan was submitted to the County in early 2012 for the renovation and rehabilitation of the historic courthouse. To address overcrowding issues at the County Jail, a decision to participate with Warren County and Rappahannock County in a Regional Jail Facility was made in 2009. Land was purchased in Warren County for this regional facility. It is anticipated that construction and occupancy of the Rappahannock Shenandoah Warren Regional Adult Detention Center will be completed in 2014.

## **9.0 Emergency Services**

Shenandoah County has ten volunteer fire departments with a total of about 350 volunteers. These companies cover most of Shenandoah County and a portion of Rockingham County. One company from Frederick County (Company 17 in Star Tannery) covers the northwest portion of Shenandoah County.

The Shenandoah County Department of Fire and Rescue was formed in 1999. In April 2012, the department had a full-time staff of 33, including the Fire & Rescue Chief, the Fire Marshal, Operations Chief, Training Officer, Service Assistant, EMS Billing Technician, and additional members are Firefighters/EMTs ranging from basic to paramedic. In addition there are six part-time Firefighters/EMT employees. Funding for an additional eight Firefighters/EMT positions has been included in the County's 2012 - 2013 budget. Currently, the Department's vehicles include: two ALS (Advanced Life Support) vehicles, four staff vehicles, a Hazmat Trailer, an ATV and a "Serv" vehicle (a utility vehicle that can haul personnel or equipment).

The County's volunteer fire companies and their major equipment are listed in Figure 7-E.

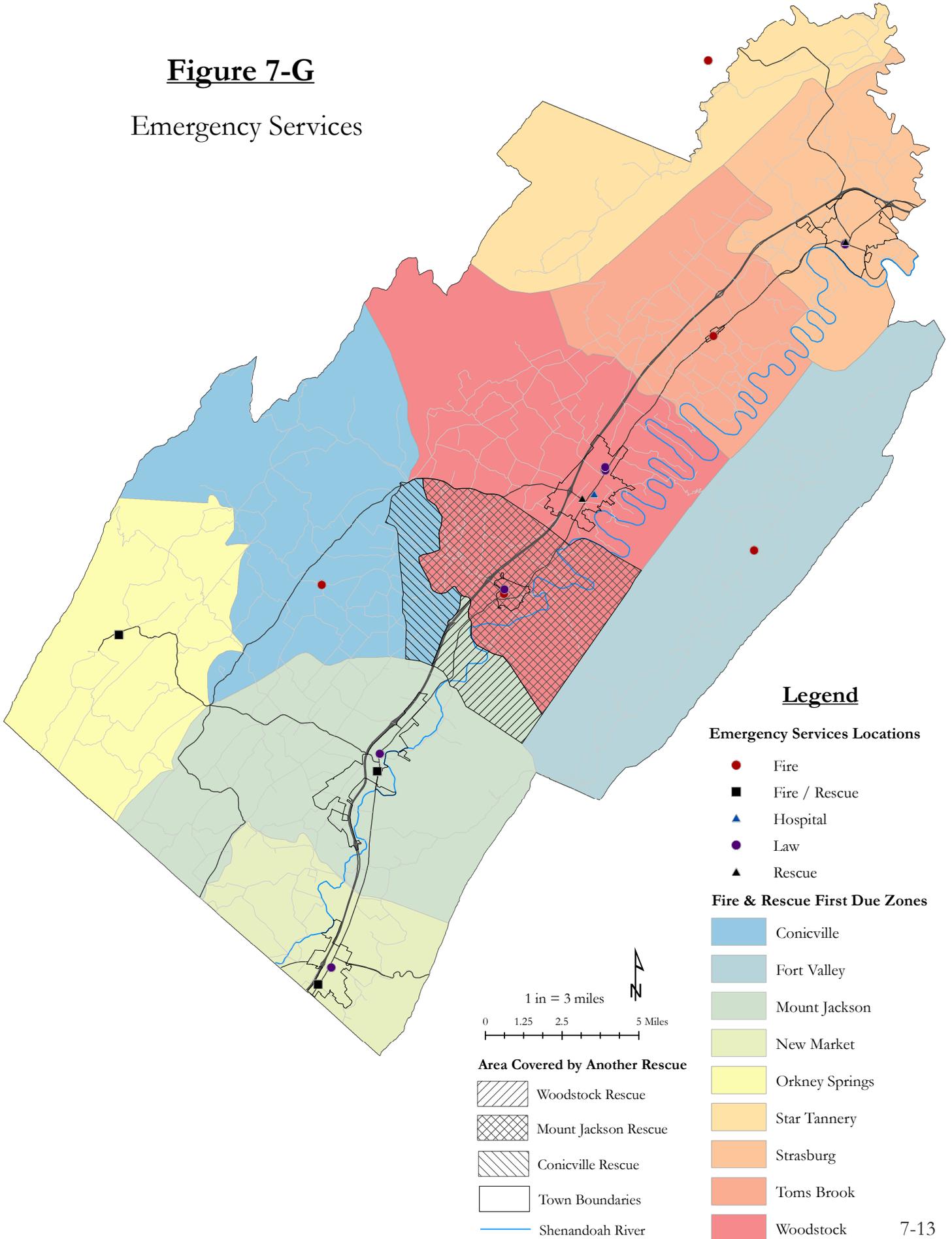
Three volunteer rescue squads and three combination departments currently operate in Shenandoah County. One squad is located in the town of Strasburg and Woodstock. In addition, one Rescue squad from Rockingham County (Broadway Rescue Squad) provides emergency services to the Southwestern portion of the County. The three Rescue Squads and their major equipment are listed in Figure 7-F.

Figure 7-G on the following page shows the location and service areas covered by the Fire and Rescue Departments. While the entire County has fire and rescue service, it is apparent that the remote areas of the County are harder to serve. This factor should be considered for future residential development decisions.

The County is served by an Enhanced 911 emergency service dispatching system that is funded by a small surcharge on phone lines. This system provides

**Figure 7-G**

Emergency Services



<b>Figure 7-E Shenandoah County Fire Departments</b>		
#	Name	Equipment
9	Toms Brook	2 Serv, 1 Wagon, 1 Rescue Engine, 1 Tanker
12	Woodstock	1 Engine, 1 Truck, 1 Wagon, 1 Brush, 1 Rescue Engine-Command Unit
13	Conicville (Fire & Rescue Combined)	1 Brush, 1 Tanker, 3 Engines, Ambulance
14	Fort Valley (Fire & Rescue Combined)	1 Mobile, 1 Mini, 1 Pumper, 1 Tanker, 1 Engine, Ambulance, 2 ATVs
15	Edinburg	1 Brush, 1 Engine, 1 Pumper, 1 Wagon
17	Star Tannery (Fire & Rescue Combined)	1 Brush, 1 Tanker, 1 Wagon, 1 Ambulance
18	Orkney Springs (Fire & Rescue Combined)	1 Brush, 1 Squad, 1 Pumper, 2 Ambulances, Serv
21	Mt. Jackson (Fire & Rescue Combined)	Engine, Squad, Pumper, 2 Ambulances, Serv
23	New Market (Fire & Rescue Combined)	Brush, 3 Engines, Truck, Serv
51	Strasburg	Brush, 1 Boat, Engine, Pumper, Squad, Serv, Truck, Wagon
10	Shenandoah County Fire & Rescue	2 Ambulances, 2 Engines, 1 Squad, 1 ATV, 2 Chase Units, 1 Hazmat Trailer, 1 EVOC Supper Trailer, 4 Staff Vehicles
<i>* Source: Shenandoah County Department of Fire &amp; Rescue 2012</i>		

<b>Figure 7-F Shenandoah County Rescue Squads</b>		
#	Name	Equipment
5	Woodstock	4 Ambulances, Mobile, Squad
25	Strasburg Rescue Squad	4 Ambulances, Mass Casualty Unit, Mobile, Squad
10	Shenandoah County Fire & Rescue	2 Ambulances, 1 Engine
<i>* Source: Shenandoah County Department of Fire &amp; Rescue 2012</i>		

location information for the source of emergency calls, and additional capabilities for the dispatchers handling those calls. A computer-aided dispatch system has been implemented to further enhance the system. In April 2012, Shenandoah County Fire & Rescue implemented the Delta Alert program, which communicates emergency situations to citizens of Shenandoah County. This automated system will notify citizens of a missing person search, evacuations and severe weather.

## 10. Water and Sewer Facilities

The Towns of Edinburg, Mt. Jackson, New Market, Strasburg, and Woodstock all have their own public systems; the Toms Brook-Maurertown area and the Basye/Bryce Mountain area are served by the Toms Brook-Maurertown Sanitary District and the Stoney Creek Sanitary District respectively. Each system is described below; gallons per day are expressed as “gpd.”

### 10.1 Edinburg

The Town primarily serves the area within its corporate boundaries. Water is also provided to the Cave Springs Subdivision, located in the County off State Route 698, and water and sewer service is provided to the Edinburg Manor Subdivision off Route 675. Construction was completed in 2005 to allow sewer service to the Massanutten View Subdivision, located in the County on the west side of Interstate 81 and serves approximately 30 homes in the subdivision.

Water is provided by two wells with a Memcor Microfiltration Treatment Plant that was put on line in 1998. Plant capacity is 225,000 gpd, with average usage of 140,000 gpd. The Town has water storage capacity of 800,000 gallons. The Town’s wastewater treatment plant was upgraded in 1988 and has a rated capacity of 175,000 gpd with average flows of 95,000 gpd. The Town has corrected a number of infiltration and inflow problems in recent years and continues to locate and correct these problems. There is very little undeveloped industrial zoned land within the Town. What there is belongs to Shentel, who is not historically a large water user. The Town feels that future growth will be residential and light commercial within the Town’s boundaries. All out of Town water and sewer hookups require the Town Council’s approval and will be studied thoroughly as to their impact on the available capacities.

### 10.2 Mt. Jackson

In 2001, the town completed nearly \$3 million in improvements made to the water system. The town now has 5 wells, any one of which can carry the town’s daily (2010) needs, and a total pumping capacity in excess of 900,000 gallons per day. There are more than 24 miles of pipes ranging in size from 2 inches to 12 inches. The larger pipes form an interconnection between the town’s three 500,000 gallon water tanks (Caverns, Mountain near Fleming Park, and elevated on Dutch Lane). Pressures are uniform at approximately 80 PSI, and fire flow in all areas is excellent. The system is also interconnected with the additional storage and high production wells at Bowman Andros Apple Products to provide mutual backup in the event of emergency. Two additional wells were drilled in 2009 and will be connected to the system in the future, as funding is identified to complete the project.

The town closed its old 200,000 gallons/day sewer plant and replaced it with a new 700,000 gallons/day plant capable of handling the sewage loads from both the town’s residential and business uses and the industrial park. The plant is considered “limits of technology” (state of the art) and meets all the most

stringent modern treatment standards.

### **10.3 New Market**

The Town's water filtration plant has an 850,000 gpd continuous capacity and water tank with a storage capacity of 500,000 gallons. In 2010 the average daily consumption of water was 447,667 gallons. Six wells serve as New Market's source of water.

New Market has contracted the treatment of its wastewater with the Town of Broadway. In 2011 the Town started sending its wastewater to Broadway's regional treatment facility by way of a 4.3 mile force main. New Market received \$3,656,513 in Federal Stimulus for the project. The Town's capacity was also increased from 500,000 gpd to 1,000,000 gpd. The average flows for wastewater are 484,000 gpd. New Market is also actively working to reduce inflow and infiltration through the replacement or relining of sewer mains.

The Town has had strict policies on new connections to its system. All water and sewer connections outside of the corporate limits must be approved by the Town Council. In addition, the connection fees are double for out-of-town service. New Market also does not feel it is in a position to finance the extension of its lines; any business or person wanting service would have to pay the cost of any necessary extensions.

### **10.4 Strasburg**

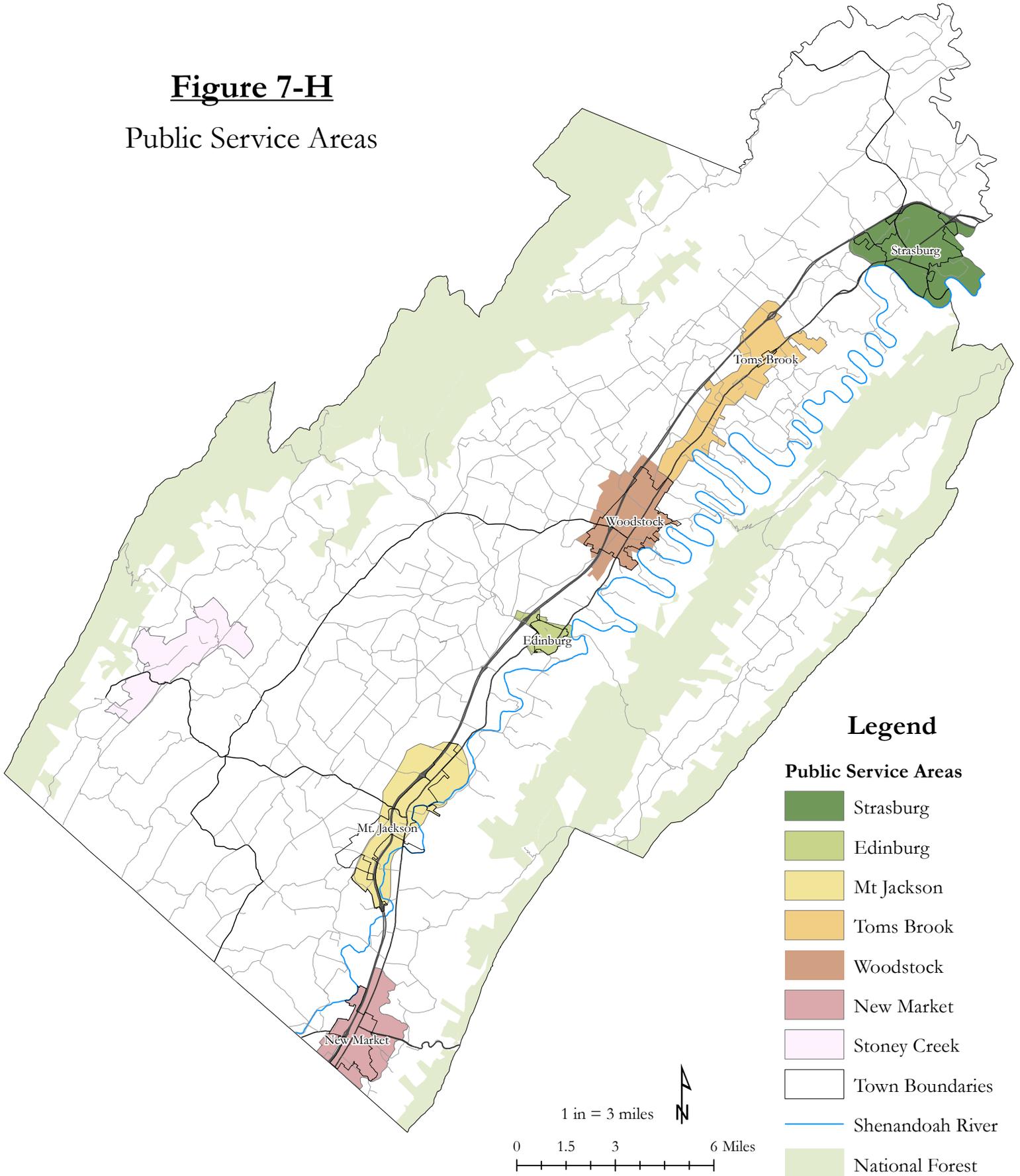
Construction is currently underway on the Town's new water treatment plant that will increase capacity from 1,000,000 to 3,000,000 gpd. The Town is finalizing engineering plans and financing details for an upgrade to its current 975,000 gpd wastewater treatment plant. The upgrade will increase treatment capacity to 2,000,000 gpd. Current average flows at the plants are 890,000 gpd (water) and 950,000 gpd (sewer). Future service areas include the Northern Shenandoah Industrial and Business Park and area identified as Annexation Area B in the Town's annexation study. There is a 40 percent premium on water and sewer utility rates outside of Town limits.

### **10.5 Woodstock**

**Wastewater Treatment:** The town owns and operates a 1,000,000 gallon per day wastewater treatment facility located east of town in Shenandoah County. At present the plant treats an average of 480,000 gallons per day of wastewater with more than 2,548 households being provided with sewer service. **Water Treatment:** The town's water supply quality is good and the treated water meets or exceeds state and federal drinking water quality standards. Drinking water for the Town of Woodstock comes from the North Fork of the Shenandoah River.

The Virginia Department of Health has permitted the town's water treatment plant at 1.8 million gallons per day. Treatment at the Woodstock Water Treatment Plant is achieved by rapid mix, flocculation, sedimentation, and filtration for turbidity removal; chlorination for disinfection; and fluorination to aid in reducing tooth decay. Water is pumped from the water treatment plant to the storage and distribution system which consists of two elevated water storage tanks; the first, located on Ox Road has a capacity of 400,000 gallons, and the second, located on West North Street has a capacity of 2,000,000 gallons.

**Figure 7-H**  
Public Service Areas



### **10.6 Toms Brook-Maurertown Sanitary District**

This system provides water and sewer services to the Town of Toms Brook, the unincorporated community of Maurertown, and the surrounding area from the Toms Brook interchange at I-81 south to the Town of Woodstock. Total permitted capacity is 240,000 gpd for the water system which pumps an average of 95,000 gpd, and 189,000 gpd for the sewage system which has an average flow of 110,000 gpd. The District is governed by the Shenandoah County Board of Supervisors.

### **10.7 Stoney Creek Sanitary District**

Water and sewer service is provided primarily to the Bryce Mountain-Basye area and several adjacent properties which have been added to the District's service area. Construction commenced in April 2012 to connect Shrine Mont and Orkney Springs into the districts sewer system and is expected to be completed by December 2012. There are no current plans to provide additional service outside of the designated service area. The District relies solely on ground water for its source. Currently, the permitted capacity of the water system is 392,800 gpd, and approximately 150,000 gpd are pumped. The sewer system's permitted capacity is 600,000 gpd (at secondary treatment), with an average flow of 300,000. The District is governed by the Shenandoah County Board of Supervisors.

### **10.8 North Fork Regional Wastewater Treatment Plant**

The North Fork Regional Wastewater Treatment Plant (NFRWWTP) is located at 850 Aileen Road, between Woodstock and Edinburg. The activated sludge treatment facility was acquired by the County in 1998. The current operating permit has treatment capacity of 100,000 gpd, and future potential capacity of up to 750,000 gpd. The plant currently provides treatment for leachate from the County landfill and biosolids from local municipal facilities. Biosolids are eventually dewatered by means of a filter press prior to disposal. All County septage wastes are treated at the NFRWWTP. Sanitary sewer is also treated from the surrounding areas in the vicinity of the plant.

Based on the above information, current and potential future public water and sewer service areas are illustrated in Figure 7-D, Public Service Areas on page 7-22. The service areas for the Town of Strasburg and for the Town of Mt. Jackson are covered by annexation agreements, and therefore accurately represent potential future growth areas for these towns. The Town of New Market and the Town of Edinburg have jointly adopted a future growth area with the County (see figure 3-G, 3-H and 3-I). Individual annexation agreements and corresponding Growth Area Plans should be developed between the County and the Towns of Toms Brook and Woodstock to define specific future growth areas for each.

## **11. Solid Waste Facilities**

The six incorporated towns within Shenandoah County provide refuse collection services to their residents. All the towns contract for these services with private firms via periodic bids. The County provides thirteen convenience

center drop-off sites for its residents to deposit their trash. The sites are located so as to provide minimal travel distances to all citizens. The County services these sites utilizing its own employees and equipment. These sites are open Monday – Saturday (closed on Thursday) from 7:00a.m. until 7:00p.m. and Sunday from 1:00p.m. until 5:00p.m. Several of the drop-off sites do not have compactor capability and need to be upgraded to this configuration. All thirteen sites also have specialized containers in place for the collection of recyclables. In addition, recycling-only containers are located in four of the towns.

The County operates a permitted, modern lined landfill on a 214 acre site off US 11 between Woodstock and Edinburg. Recently, the first portion of an expansion section was opened which, with growth allowances, is projected to provide thirty three years of capacity from its opening in mid-2003. This newest landfill section is the third portion of the property to be used for refuse burial; the initial section was opened in 1972, and a second section was started in 1988. These first two disposal areas are now closed.

Environmental monitoring has been conducted on the property since 1994. Currently the County is burning off methane gas onsite until the completion of the landfill gas system, which will enable the County to collect methane gas from the “old landfill” as well as current and future landfill cells. At this time, it is understood that the carbon credits may be available for the current and future cells but not from the old landfill cells. Further, it is understood that a “beneficial use” project will be actively pursued, whereby the County would be able to sell methane gas and/or electricity generated from that gas.

An underground pipeline from the county landfill to the North Fork Regional Wastewater Treatment Plant was completed and placed in service in April 2012 providing underground transfer of leachate, as well as all septage from local commercial septage haulers from the newly completed Septage Receiving Station located at the county landfill.

Recycling forms a substantial part in the County’s solid waste program, which was begun in 1992 and received added focus in 1994 when a sizeable barn on the landfill property was converted by County employees into a Materials Recovery Facility (MRF) for sorting and packaging of recycled materials. The volume of items processed has grown from 3,811,854 lbs. in 2007, 4,351,300 lbs in 2008, 4,629,524 lbs in 2009, 3,226,000 lbs. in 2010 and 4,368,220 lbs. in 2011. Initially the program included plastics, glass, metals, wood wastes, and paper. Over time, scrap tires, computers and electronics, waste oils and antifreeze, household hazardous wastes (chemicals), and vehicle batteries have been included in the program. The Town of Strasburg started curbside recycling in March 2009. Woodstock began curbside recycling in July 2011.

Shenandoah County is also very active in regional solid waste cooperative programs, plus planning and reporting activities are done as a regional group. Most recently, money has been allocated via local contributions and grant funds for the purchase of a glass pulverizer which will be shared regionally. The County’s landfill and existing recycling centers are shown on the Community Facilities Map

(Figure 7-A), page 7-9.

## **12. Summary**

Adequate public services and facilities are required to serve community needs. Public service areas have been delineated around the towns to serve the major development needs in an efficient manner. It is a County objective to improve the County's school facilities and curriculum. In recent years major improvements and additions have been made to all elementary, middle and high schools. With the County's increased school-age population, particularly in the northern portion of the County, new school construction may be -considered. The capability for fire and rescue service dispatching and response was met by the enhanced 911 emergency dispatch system that has been implemented, and also by the growth of the Department of Fire and Rescue, which coordinates emergency response throughout the County.

The County complies with all state and federal requirements for the disposal of solid waste. It also actively promotes recycling and waste-minimization efforts, and has a county-wide recycling program in cooperation with the towns. It also promotes regional cooperation on solid waste disposal issues by participating in regional solid waste planning, tire recycling, and is investigating other cooperative measures to reduce the waste flow to landfills.

Capital projects are implemented through a Capital Improvements Program (CIP) for expanded services and physical facilities that is reviewed and updated annually as part of the budget process. All other county service agencies and towns are also encouraged to have capital improvement programs.

The provision of adequate public facilities requires foresight, planning, and coordination. It is essential that the several communities within Shenandoah County and all of the agencies, authorities, public service districts and other organizations providing services work with the County to provide facilities where needed, to guide development to desired locations, and to protect natural areas from encroachment.

