

# 6 COMMUNITY FACILITIES AND SERVICES

## INTRODUCTION

Community facilities play a significant role in the dynamic of growth in Botetourt County. Well-timed and strategically located public facilities are necessary to promote and sustain the growth pattern proposed on the Future Land Use Map. They are also critical to achieving and maintaining the high quality of life that Botetourt County residents admire and have come to expect. Community facilities include both the utility infrastructure and the public services provided for the benefit of residents. For the purposes of this Comprehensive Plan, the Community Facilities Element addresses the following topics:

- Water and wastewater
- Solid waste management
- Public safety (police, fire, and emergency services)
- Schools
- Library services
- Recreation facilities



Community facilities and services are critical to quality of life and can directly affect a community's potential for growth. As Botetourt County's population continues to increase and change in character, demand for facilities and services will also increase and change -- more classroom space, police protection, social services, recreation facilities, etc., will be needed. Community facilities and services in the County are provided on several levels; the provision of these facilities and services is dependent on tax dollars, whether in the form of state aid, County supported programs or locally funded facilities and services.

Community facilities and services can also serve as a tool, or as an unexpected trigger, to guide or stimulate community growth and development. Availability of a public water supply or wastewater disposal system can be used as an economic development tool to attract business and industry. It can also attract associated commercial and residential development, for which the County must plan. The construction or improvement of roads can have a similar effect, resulting in changes to community character. In short, the planning and provision of community facilities and services must be undertaken within the overall context of the County's *Comprehensive Plan* and a public discussion of the community's long-term growth and development goals.

## BACKGROUND

### Community Facilities and Services Analysis

#### *Recreation Services and Facilities*

The active and passive recreational needs of Botetourt County residents and visitors are met through services and facilities that are provided by a broad cross-section of local, state, federal, and private sector entities. The Botetourt County Parks, Recreation, and Tourism, and its associated Advisory Parks and Recreation Commission were created by the Board of Supervisors in 1975 to address County recreational needs and to provide recreational opportunities for County residents. Today, the Botetourt County Recreation Department, with the assistance and guidance of the Advisory Commission, provides a wide variety of team and non-team and leisure programming for County residents. To provide these opportunities, the Department relies heavily on County schools to provide space for programming.

In May 2010, the Botetourt County Parks, Recreation, and Tourism prepared a *Five-Year Parks and Recreation Plan*. The plan provides an inventory of the wide variety of local, state, federal, and private recreational facilities that serve area residents and visitors. Map 24 (Recreation Sites) shows the recreational sites within Botetourt County. The plan also discusses the need to consider the financial constraints of limited local funding with specific emphasis on the County's Capital Improvement Incentive Fund and the County's Five Year Capital Improvement Planning process as a means to finance local recreational improvements. The plan concludes with a list of park and recreation projects, also included in the 2011-2015 Capital Improvements Plan, and outlines nine departmental objectives. Objectives address the issue of coordinating the development of recreation facilities with future school development and expansion of the County's on-going efforts to cooperate with local residents and interest groups, such as booster clubs, in the parks and recreation planning process. Objectives also stress the need to address ADA compliance, completion of regional recreation facilities at the Blue Ridge, Buchanan, Greenfield and North County Parks, and continued efforts to work with the County school system and local community colleges to expand the range of adult and youth recreation courses, and the strong role and active utilization of the Capital Improvements Incentive Fund Program.

Projects highlighted in the 2011-2015 Capital Improvement Plan include:

1. *Park Community Centers* - Construction of community recreation centers in Blue Ridge, Buchanan, Greenfield and North County Parks. (2014-2015)
2. *Botetourt Sports Complex* - Development of additional athletic fields, storage and locker room facilities. (2012-2014)
3. *Boxley Park* - Implementation of Boxley Fields Master Plan. Includes infield and fencing replacement for two instructional baseball fields, parking and field access upgrades, and installation of athletic field lighting. (2012-2014)
4. *Buchanan Park* – Complete parking and access routes for park (2012) and construct picnic pavilion and park amenities. (2013)
5. *Greenfield Historic Resources* - Historic preservation/relocation and initial planning of visitor center. (2011-2013)
6. *Greenfield Recreation Park* - Construct a concession/restroom building (2012), improve parking area with the installation of grass paver system (2013), and construct for tennis courts for recreation and high school play. (2013)
7. *Incentive Fund* - Grant to provide matching funds for community based park improvement projects. (2010-2015)
8. *ADA Compliance* - Provide for necessary improvements to become ADA compliant at county athletic facilities. (2010-2015)

## ***Outdoor Recreation Opportunities***

Outdoor recreation facilities are numerous within the County. The James River, the George Washington and Jefferson National Forests, the Blue Ridge Parkway, the Appalachian Trail, and the Carvins Cove Reservoir are just some of the many natural and scenic areas that contribute to the County's recreational amenities. These areas provide excellent opportunities for fishing, hiking, horseback riding, hunting, biking, boating, birding, kayaking, camping and general sightseeing. In addition to the recreational benefits, use of these areas by residents and visitors also provides an economic benefit to the County.

### *The James River*

The James River, 14 miles of which is designated as a Virginia Scenic River, provides opportunities for freshwater fishing as do Craig, McFalls, Jennings, Middle, and Roaring Run Creeks. The James River is popular with smallmouth bass fishermen and has gained recognition for Muskie fishing. Rock bass, bream and catfish are also plentiful. The James River is also popular with rafters, canoeists and kayakers. There are five public boat access areas along the James River in Botetourt County. These are located near Arcadia, Buchanan, Horseshoe Bend, Springwood, and Iron Gate. Parking is available at each of the public boat launch sites. The Virginia Department of Game and Inland Fisheries maintains the public boat launch access points.

The *Upper James River Water Trail Strategic Plan* was produced in 2009 by the Botetourt County Office of Tourism and provides greater detail of plans to enhance the recreational use of the James River. The plan envisions a water-based trail system that will provide opportunities for recreation, conservation, tourism and education while preserving the natural, historic and cultural resources along the river. Goals and objectives of the plan include increasing public access to the James River, developing an identity for the Upper James River, and developing a sustainable tourism based economy along the corridor. Map 25 (James River Trail – Public Access Points) provides a geographic overview of the trail alignment. The plan emphasizes that Trail development should focus on increasing public (local and non-local) access to the river while working to preserve the natural state of the Upper James. By involving all sectors of the community and working collaboratively to identify and implement needed infrastructure, services and marketing improvements, the Upper James Trail can become a premier outdoor recreation destination.

### *George Washington and Jefferson National Forests*

The Jefferson and George Washington National Forests offer excellent fishing, hunting and nature study opportunities. Together, the Forests have over 80,000 acres in the County and comprise over twenty-two percent of the County's land area. The U.S. Forest Service maintains four major recreation areas in Botetourt County: Craig Creek Recreation Area, Middle Creek Picnic Area, North Creek Campground and Roaring Run Furnace and Picnic Area. Craig Creek Recreation Area offers picnicking, primitive camping, space for trailers and horses, a loop trail and access to Craig Creek. Middle Creek Picnic Area located near Arcadia, has a large picnic area with shelters, a pavilion, water and restroom facilities. North Creek Campground (3 miles from Arcadia) includes 15 camping units with parking, picnic table, tent pad and fireplace. Water and restroom facilities are available. Roaring Run Furnace and Picnic Area is located 8 miles northwest of Eagle Rock and includes 15 picnic units and restroom facilities. Attractions include the Roaring Run Iron Furnace, a pre-Civil War iron ore furnace, Roaring Run Falls, and the Iron Ore National Recreational Trail.

The U.S. Forest Service also manages and maintains several trails that provide residents and visitors with hiking, equestrian and off-road opportunities. The Patterson Mountain Off-Road Vehicle Trail offers opportunities for all-terrain vehicles and dirt-bike enthusiasts. The trail is approximately 15 miles in length. The U.S. Forest Service maintains the 65-mile Glenwood Horse Trail that extends from Natural Bridge Station to Montvale. There are a series of trailheads dispersed along the trail, which offer parking and entry to the trail. Bearwallow Gap Horse Trail is located near Buchanan; primitive camping is permitted along the trail as well.

### Appalachian Trail

The Country's premiere hiking trail passes through Botetourt County on its way from Maine to Georgia. The Appalachian Trail enters southwestern Botetourt County on Tinker Mountain, and then crosses the valley at Daleville, before heading into the Blue Ridge Mountains. The trail has numerous access points in the County. US 220 at I-81 near Exit 150 is the most popular. Other access is possible along Mountain Pass Road, and at numerous points along the Blue Ridge Parkway.

### Blue Ridge Parkway

The Blue Ridge Parkway links the Shenandoah National Park in Virginia to the Great Smokey Mountains National Park in North Carolina. The parkway follows the Blue Ridge Mountains for 469 miles and passes through thirty-five miles of the southeast section of Botetourt County. The Parkway provides scenic vistas, areas for picnicking, overlooks and trailheads. The Parkway is accessible in Botetourt County from Route 43 east of Buchanan, from Route 618 near the Peaks of Otter, and from U.S. Route 460 in Blue Ridge.

### Carvins Cove Reservoir

Carvins Cove Reservoir and its twenty square mile watershed lie within Botetourt and Roanoke Counties. Recreation opportunities of off-road bike, hiking, and horseback riding trails are located in the Carvins Cove. It is owned by the City of Roanoke and serves as a public water source for area residents. The City of Roanoke charges visitors a fee to access the property and for public boat rental. Carvins Cove is regulated by a series of policies set forth by the City of Roanoke to protect water quality. In recent years, access to the watershed has been further restricted due to public health and safety concerns.

### **Libraries**

A public library is an important community facility, the use of which expands with increasing population, land development, and higher educational goals. Botetourt County provides public library services to the residents of Botetourt County and the Roanoke Valley. The library system has nearly 165,000 items including books, DVDs, audiobooks and magazine collections. There are four library buildings including the headquarters library, known as the Blue Ridge Library, on U.S. 460 East, the Fincastle Branch Library, the Buchanan Branch Library, and the new Eagle Rock Library (Map 26 – Schools and Libraries). Internet access is available at all four library locations. The library also operates a bookmobile, which serves populations in predominantly rural areas. Botetourt County Library patrons borrowed 261,213 items in FY10 as well as recording 195,265 visits to library facilities. Children's services are provided at all libraries, including preschool story hour and an annual summer reading program. The Botetourt library system is part of the Roanoke Area Libraries consortium, whose members share a common borrower's card and computer catalog. Botetourt patrons may also obtain books and other materials from the collections of the City of Roanoke, Roanoke County, and Salem libraries at no charge.

### **Electric Services**

Botetourt County residents and businesses obtain their electric services from one of three utility companies. The Craig-Botetourt Electric Cooperative provides electric service in the western part of the County. Virginia Power Company serves customers in the Eagle Rock and Buchanan areas. Finally, American Electric Power serves the remainder of the County and has the largest service area and customer base.

### **Education**

Currently, the Botetourt County School System operates seven elementary schools, two middle schools, two high schools, and a County-wide vocational school (Map 26 – Schools and Libraries). The elementary schools serve grades K-5; the middle schools serve grades 6-8; and the high schools serve grades 9-12. Several local institutions, including Dabney S. Lancaster Community College, Virginia Western Community College, Hollins University, Roanoke College, Radford University, and Virginia Polytechnic Institute and State University serve the regional higher education needs of Botetourt County residents. Finally, the Greenfield Education and Training Center provides extended learning and workforce training opportunities. All of these institutions are within a 50-mile radius of Fincastle.

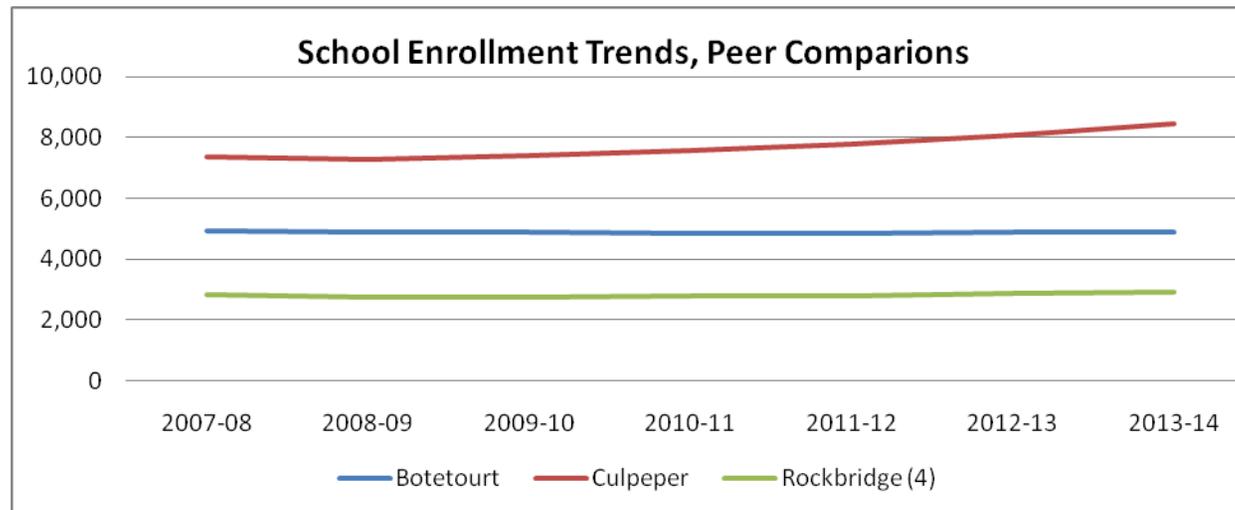
Fall enrollment in Botetourt County schools has been decreasing since 2007, and projections indicate membership will remain stable through 2013 (Table 45). When compared to peer counties, enrollment in the County schools has not kept up with population growth. This suggests that the new population growth is in the older, possibly retiree, age groups that do not have children at grade school age.

Table 45 – Historic & Projected Botetourt School Enrollment

HISTORIC & PROJECTED FALL MEMBERSHIP FOR VIRGINIA'S SCHOOL DIVISIONS: 2007-08 TO 2013-14													
School Division	Historic Membership* Fall Grades K-12:		Projected Fall Membership Grades K-12:					Numerical Change			Percentage Change		
	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Historic	Forecast		Historic	Forecast	
								2007-08 to 2008-09	2008-09 to 2009-10	2008-09 to 2013-14	2007-08 to 2008-09	2008-09 to 2009-10	2008-09 to 2013-14
Virginia**	1,202,342	1,205,169	1,208,994	1,214,286	1,221,361	1,233,113	1,246,869	2,827	3,825	41,700	0.2%	0.3%	3.5%
Botetourt	4,956	4894	4,880	4,865	4,872	4,889	4,901	-62	-14	7	-1.3	-0.3	0.2
Culpeper	7,368	7276	7,392	7,568	7,809	8,074	8,452	-92	116	1,176	-1.2	1.6	16.2
Rockbridge (4)	2,827	2772	2,768	2,805	2,796	2,886	2,939	-55	-4	167	-1.9	-0.1	6.0
Roanoke MSA	39,250	39036	38,871	38,624	38,655	38,784	39,040	-214	-165	4	-0.5	-0.4	0.0

Source: Demographics & Workforce Group, Weldon Cooper Center: [www.coopercenter.org/demographics/SCHOOL%20FORECASTS/](http://www.coopercenter.org/demographics/SCHOOL%20FORECASTS/)

Figure 9 – School Enrollment Forecast, Peer Comparison



## **Law Enforcement**

The Botetourt County Sheriff's Department provides law enforcement services to Botetourt County and to the Towns of Buchanan, Fincastle and Town of Troutville. With offices located in Fincastle, the Department provides court security, civil process, law enforcement, criminal confinement, crime prevention, D.A.R.E., and animal control services as part of its departmental mission. Approximately twenty-four patrol officers and six investigators provide 24-hour services to County and town residents. An additional five sworn officers provide crime prevention programs and activities to residents.

## **Fire and Rescue Services**

Seven volunteer fire departments and seven volunteer rescue squads located at a total of eight facilities provide fire and rescue services in Botetourt County (Map 27 – Fire and Rescue Stations). Map 33 (Fire Service Areas) and Map 34 (Rescue Service Areas) show the locations of these fire and rescue facilities and the service areas.

Additionally, Botetourt County operates career Emergency Medical Services from two locations:

- 1 – 24x7 Advanced Life Support (ALS) ambulance unit, based in Fincastle
  - 1 – 12x7 (daytime) Advanced Life Support (ALS) ambulance based in Troutville
  - 1 – 24x7 Advanced Life Support (ALS) response vehicle, based in Troutville.\*
- \* - This unit is staffed with one Paramedic who responds to meet any available volunteer ambulances at the scene of a call, thus providing advanced life support services.*

While EMS is the primary mission, career staff members are cross-trained as firefighters and assist with fire response as required. A primary future focus should involve tracking response rates and making adjustments where required to ensure that Fire and EMS services are being provided appropriately and equitably.

In 2008, the County undertook a staffing study and strategies plan for fire and rescue services. The following goals and recommendations are from that plan.

### Service Delivery Goals

- Improve Turnout Times and Response Times
- Improve Incident Coordination
- Enhance On-Scene Service Delivery
- Operational Incident Reporting

### Recruitment and Retention Recommendations

- Returning Pride and Esprit de Corps (Retention)
- Incentive Programs

### Training Recommendations

- Countywide Training Coordination
- Multi-Department Operations
- Increasing Participation at Training Programs
- Leadership Development

Based on the information found in the 2008 study, Botetourt County's current populations of medium density or higher are generally located within 1,000 feet of a fire hydrant (Map 28 - Road/Hydrant Analysis, Roads within 1,000ft of Hydrant and Map 29 - Road/Hydrant Analysis, Roads within three miles of Hydrant). Based on an evaluation of the travel distance capture area (Map 30 – Fire Station Travel Distance), most of the commercial nodes and residential areas are located within a five mile zone of a first response station. More importantly, the travel times of

five and ten minutes provide fire and rescue coverage to almost all main residential and commercial areas, include most low rural residential areas (Map 31 - Fire Station Travel Time and Map 32 – Rescue Station Travel Time). Based on this information, cross referenced with the Future Land Use map, Botetourt County’s areas of designated growth can be served by sufficient fire and rescue services. However, consideration should be given to staffing levels for both fire and EMS service at each location.

### ***Solid Waste Management***

Residential solid waste is collected within Botetourt County by five private companies that collect waste in franchised service areas in accordance with adopted County law. Similarly, commercial businesses contract individually with one of seven private companies franchised to collect commercial waste countywide. These private waste collectors own and operate their own equipment. Collected waste is transported to the Salem Transfer Station for loading onto truck and conveyance and disposal at Amelia Virginia. A Citizen Convenience Center has been constructed adjacent to the Botetourt County landfill located off of Route 779 in the southwest portion of the County (Map 35 – Landfills and Recycle Centers). The Citizens Convenience Center accepts residential waste from citizens that do not want to use the franchised residential collection service.

The existing landfill has capacity and is in full compliance with Virginia Department of Environmental Quality (DEQ) solid waste management regulations. Closure of the landfill is not anticipated in the near future.

Refuse Collection - Refuse collection in Botetourt County is privatized through a franchise system. The County receives proposals, interviews and selects the haulers for the franchise contracts and sets the fees that can be charged to residential and commercial customers. The private companies bill the users of the collection services directly. The County is divided into five solid waste residential collection areas (Map 36 – Solid Waste Residential Collection Areas) and three classes of customers.

Refuse Disposal - In 2008, the County determined that it is in its best interest to transfer its waste to a disposal facility outside of the County. This decision was made after careful evaluation of its options and geologic investigations of property owned by the County. The existing County-owned property was found to be unsuitable. To site a new facility is very difficult given the rough geology of the County, its growth patterns, and timing.

Recycling - The County operates ten drop off sites, nine at the schools and one at the Customer Convenience Center, (Map 35). Compartmentalized roll-off boxes are placed at each site where newspaper, plastics #1 and #2, and metal cans are collected. As of July 1, 2004 the County’s recycler would no longer accept brown and green glass. A contract hauler services the sites. The County also recycles tires and white goods at the landfill.

In 2004, the County, with a population of less than 100 persons per square mile, was able to reduce its recycling goal from 25% to 15%, per §10.1-1411 D of the Code of Virginia. For 2007 and 2008 the County was below this goal, and operated under a VDEQ approved Recycling Action Plan during that period. The total recycling tonnage for 2009 was 3,550 tons, or 19.1%, bring the County back into conformance with the state mandated goal.

Litter Control- Includes volunteer programs associated with the Clean Valley Council, Adopt a Highway programs, and the use of inmate labor for periodic cleanup at the landfill.

### **Natural Gas**

Natural gas service is available in many parts of Botetourt County. Currently, Roanoke Gas Company, a division of RGC Resources provides natural gas service to the industrial parks in the County, as well as to residents in the Town of Troutville, Daleville, Fincastle and Cloverdale areas. Communities along Route 604/Alternate 220 and U.S. Route 460 East into Webster are also served.

Botetourt County and many other parts of the Roanoke Valley are served by two major gas transmission supply lines that are owned and operated by Columbia Gas Transmission Company. Roanoke Gas also owns and operates a liquefied natural gas (LNG) facility in Botetourt County. This facility is located at the base of Tinker Mountain along Interstate 81. This facility serves as a backup source of natural gas during periods of high demand.

Natural gas lines do not currently serve Buchanan and Blue Ridge. For these and other rural areas, propane can be supplied by Highland Propane and Valley Propane.

### **Water and Wastewater Services**

Public water and wastewater services often drive growth in suburban and urban communities. The location and availability of public water and waste water facilities are key determinants of land use patterns. Similarly, the timing and location of future extensions or new systems influences the location and rate of growth in a community. For this reason, effective community planning requires strong coordination between future utility plans and future land use and transportation plans and decisions.

Botetourt County has numerous public water and wastewater systems within its borders. These systems, which are regulated by the Virginia Department of Health and/or the Virginia Department of Environmental Quality, are owned and operated by a variety of County, municipal and private entities. Botetourt County has a strong interest in ensuring that public water and wastewater services are designed to meet the future needs of the County. Of particular importance are water and wastewater services to the County's existing and planned commercial and industrial areas and businesses. To this end, the County commissioned a comprehensive countywide water and wastewater analysis. The *Countywide Water and Wastewater Systems Analysis Update*, completed in the fall of 2009, was prepared by ARCADIS. The analysis looked at existing system conditions and projections of future need over a 20 year time frame; identifying deficiencies and recommending improvements to allow the County to continue providing appropriate water and wastewater service to its customers.

The water and wastewater analysis is considered a long-range plan for the development of these facilities, and is appended to this Comprehensive Plan by reference. As a component of this plan, it can be used as a general guide for decisions of the Board of Supervisors pertaining to future capital investment in these facilities. As with all plans, the Water and Wastewater Plan is subject to periodic review and possible revision to address current community needs and the availability of fiscal resources.

Specific recommendations included in the Countywide Water and Wastewater Systems Analysis Update (December 2009) are concentrated in the first ten years and will solve nearly all capacity problems foreseen through the year 2029. Phase 1 of the wastewater system improvements include replacement of pipes that are at or over capacity, specifically in areas between I-81 and the Roanoke County line on the Tinker Creek Interceptor (TCI) and one section on the Cook's Creek Interceptor. Phase 2 improvements include pipe replacements on the entire section of TCI between Lord Botetourt High School and I-81, with additional segments along Cook's Creek Interceptor. Phase 3 improvements should address the entire section of TCI between I-81 and just south of Read Mountain Road in Cloverdale and the remaining pipes in the lower portion of Cook's Creek Interceptor. Phase 4 improvements address remaining pipes in the TCI between Read Mountain Road and Roanoke County.

Phase 1 water system improvements include interconnecting all County systems; 8-inch water main from Greenfield to HUB, 8-inch water main from HUB to Cloverdale/Vista Park, and 12-inch water main from Cloverdale/Vista Park to East Park. Adding PRV at Radars Funeral Home and PRV from Greenfield to serve parts of Tinkerview Gardens. Installing a booster pump station at HUB. And, abandoning HUB well/springs and Cloverdale/Vista Park well. Phase 2 improvements include beginning to use the Weatherwood wells and changing the operation settings for Radars Funeral Home PRV. Phase 3 water system improvements include abandoning Tinkerview well and connecting all of Tinkerview to the Greenfield system.

#### Water System Development

The water demands of County residents are currently met through private wells and through a combination of County, municipal and private water systems that operate within the County. Botetourt County owns and operates several water systems. These include Greenfield, Weatherwood, Williamsburg Court, Cedar Ridge, Tinkerview Gardens, HUB, Autumnwood, Cloverdale/Vista Park, and EastPark. These eight individual systems are combined into five major systems based on their water source and the elevation of their customers: Greenfield, Tinkerview Gardens, HUB, Cloverdale/Vista Park, and EastPark. EastPark is supplied by Western Virginia Water Authority. Water for these systems is supplied by wells. In addition to these County systems, there are thirteen strategic private and municipal (non-County owned) water providers in the southern portion of the County.

Map 37 (Water and Wastewater Infrastructure) presents a summary of Botetourt County water system development plans for a twenty-year time horizon. The 2009 analysis of current and future demand reveals that, in general, water mains are adequately sized, if not over sized for the present and 20-year future horizon. Three phases are anticipated. Recommended immediate improvements include the interconnection of all County systems, specifically the Greenfield, HUB, Cloverdale/Vista Park, and EastPark systems. Interconnection of these three systems will improve water supply and distribution to the areas served by these systems. It will also allow for an enhanced capability to extend these systems to interconnect with some of the privately owned subdivision systems should a future public health need arise.

Within a ten-year time frame, the plan recommends placing the Wetherwood wells into service and proposes changes to operation settings for Raders Funeral Home. The twenty-year timeframe recommends taking the Tinkerview well source off-line.

#### Land Use Planning Considerations

Water system improvements during this 20-year time frame are generally located within the southern portion of the County to address the needs of specific areas identified by County staff. These areas include Daleville and Williamsburg Court vicinity of Greenfield's service area and north and east of the EastPark service area. Map 38 and Map 39 provide a comparison of existing and future land uses for the water and wastewater infrastructure.

#### Waste Water System Development

Wastewater treatment needs within Botetourt County are met through a combination of on-site facilities, County and municipal collection and treatment, and private treatment facilities. Botetourt County operates sewer lines in the south which includes the infrastructure tributary to the Tinker Creek Interceptor sewer, Cook's Creek Interceptor sewer, and the Glade Creek Interceptor sewer, that provide wastewater flows into the Western Virginia Water Authority's wastewater treatment plant near the City of Roanoke. Map 37 shows the location of wastewater collection systems in the County.

The comprehensive analysis of wastewater needs prepared by ARCADIS indicates that there are a few pipes in the three systems that are over-capacity during existing dry weather conditions and a number of others that are over-capacity during wet weather conditions. It also reveals that currently allocated flows, those which the County has promised to existing or near future customers, will significantly stress the Tinker Creek Interceptor. Future flows from growth projections for the 20-year period will exacerbate these sewer deficiencies.

## **GOALS, OBJECTIVES AND POLICIES**

### **Community Facilities and Services Goals**

- Ensure that Botetourt County residents are provided adequate public facilities and community services.
- Ensure the provision of and access to comprehensive and innovative state-of-the-art educational facilities, opportunities, and programs for Botetourt County residents.
- Enhance community safety and security through the provision of efficient and effective emergency services such as fire services, emergency medical and transport services, emergency management, and law enforcement.
- Enhance and increase recreational opportunities that will serve all segments of the County citizenry and visitors while preserving open spaces.

### **Community Facilities and Services Objectives**

- Expand the County's water and wastewater systems in accord with the 2009 *Countywide Water and Wastewater Systems Analysis Update* analysis.
- Continue to address the County's solid waste management and recycling requirements in accordance with Virginia law.
- Support an expanded countywide library services program.
- Continue to develop and maintain an integrated County information system that supports all County functions.
- Pursue additional funding for the development of additional public facilities and the provision of programs and services.
- Promote a strong and progressive county school program to properly prepare students for post-secondary education opportunities and to provide students with an array of vocational and technical skills.
- Provide appropriate resources and facilities for law enforcement, fire and rescue training and distribution of services.
- Expand and diversify the County's recreational programs and facilities.

### **Community Facilities and Services Policies**

- Implement the recommended near term improvements to the County's water and wastewater systems.
- Expand the County's water and wastewater system within planned growth areas only.
- Coordinate future public facility expansion and provision with land use planning efforts.
- Continue to operate the County landfill in accord with DEQ guidelines.
- Continue current County recycling initiatives.
- Implement solid waste management and recycling programs.
- Continue to implement the library's five-year plan for the expansion of facilities and programs.
- Expand library programs and facilities to adequately serve existing and future residents.
- Continue with the development, expansion and maintenance of the County's GIS system, and Internet based service delivery applications.
- Continue to prepare and adopt an annual five-year Capital Improvements Plan.
- Continue to monitor and pursue State and Federal grant and loan funds to assist with programmatic and capital needs for all County departments and functions.
- Identify and pursue potential private grant and loan funding sources for programmatic and capital needs.
- Provide training opportunities for teachers and staff.
- Enhance educational facilities.
- Support the development of programs designed to enhance the quality of educational services available for all students.
- Support the efforts of the Community Colleges and other entities to provide vocational and technical workforce-development opportunities and facilities to County students.

- Evaluate the recommendations contained in the recently completed Fire – Rescue Needs Assessment, and, as resources allow, implement those recommendations that are necessary to ensure a well coordinated and well trained fire and emergency medical response function.
- Continue to implement the Recreation Department’s plan for the expansion of facilities and programs.
- Identify potential areas for County owned park and recreation area development.
- Develop joint school and County recreational facilities wherever practicable and promote programs that serve the recreational needs of all County residents.
- Support development of the Upper James River by improving and increasing access points to allow a variety of recreational types such as boating, fishing, picnicking and river viewing.
- Work with private landowners and government agencies to implement system of walking and bike paths, and trails that serve both the recreational and transportation needs of residents and visitors.
- Provide additional playgrounds, tennis courts and community swimming pools.
- Continue cooperation with the National Park Service, Department of Forestry and National Forest Service in the protection of the Blue Ridge Parkway and the Appalachian Trail.
- Identify and protect critical viewsheds for their environmental, aesthetic, cultural, agricultural/forestal and recreational value.
- Encourage all future development at Blue Ridge Parkway interchanges and along the Upper James to be designed consistent with the character, culture and history of these valuable resources.

## **IMPLEMENTATION STRATEGIES**

### ***Water and Wastewater Management***

The major recommendations are concentrated in the first ten years and will solve nearly all capacity problems foreseen through the year 2029. Improvements are to be implemented in phases. Phase 1 improvements include replacement of pipes that are at or over capacity, specifically in areas between I-81 and the Roanoke County line on the Tinker Creek Interceptor (TCI) and one section on the Cook's Creek Interceptor. Phase 2 improvements include pipe replacements on the entire section of TCI between Lord Botetourt High School and I-81, with additional segments along Cook's Creek Interceptor. Phase 3 improvements should address the entire section of TCI between I-81 and just south of Read Mountain Road in Cloverdale and the remaining pipes in the lower portion of Cook's Creek Interceptor. Phase 4 improvements should address all remaining pipes in the TCI between Read Mountain Road and the Roanoke County line.

### ***Exploration of a Water Authority***

Botetourt County and its incorporated towns should explore the formation of a water authority that would serve as an independent public agency that collects, treats, stores and distributes water and transports and treats wastewater for residents of Botetourt County, Fincastle, Troutville and Buchanan. The common arrangement in Virginia is for the authority to serve as a wholesale agency with the localities as consumers, who in turn provide direct plumbing to individual customers. Further, it is common for funding of operations to be entirely paid for by users, though local and state funding would be sought for capital improvements.

### ***Land Use Planning Considerations***

Wastewater system improvements during this ten-year time frame are generally located within the southern portion of the County. Similar to the ten-year water plans, they are consistent with the policies and future land use map contained in this plan. The 20 year projections contained in the wastewater analysis are subjective due to the extreme difficulty of projecting needs or demand over a lengthy time horizon.

The Planning Commission should be kept apprised on the status of current County wastewater improvement plans and consider the timing of the implementation of those plans when evaluating land use requests within the existing and proposed wastewater service areas. As water and sewer capital improvements are phased for expansion, it is recommended that new areas to be served by these facilities be further studied by the Planning Commission to determine, and possibly redefine, appropriate future land uses in these areas.

### ***Evaluation of Progress***

Many counties in Virginia have established ways to conduct an evaluation of the progress and effectiveness of the policies and strategies of comprehensive plans. Some counties have annual review or measures for specific areas, targeting outcomes and/or general performance. Some have more comprehensive "report cards" that bring together various measures into a comprehensive assessment of the plans implementation and progress. This approach provides a means to measure the success or changes needed for the comprehensive plan, and its goals and objectives. It is recommended that Botetourt County Board of Supervisors and the Planning Commission explore the implementation of a means to evaluate the expectations of the comprehensive plan, providing an annual assessment of its progress.