

4 Deep Creek Lake Influence Area Master Plan

The Deep Creek Lake area is a unique and special place. Deep Creek Lake is Maryland's largest freshwater lake, and is set amid scenic mountains and stream valleys. The combination of water, mountains, and forests in the Lake area provide year-round recreation opportunities, which have attracted residents and visitors since the early 20th century. As a result, the Deep Creek Lake area has become the County's most important economic engine, and is an increasingly popular place for new year-round and seasonal housing.

In part because of its success as a residential and vacation destination, the Lake area faces significant growth-related pressures, particularly related to traffic and circulation, water and sewer infrastructure, and the environmental quality of the Lake itself. The 2004 *Deep Creek Watershed Economic Growth and Planning Analysis Study* (the "Watershed Study")¹, recommended that a Deep Creek Master Plan be developed to

guide the type, location, and design of future growth and development in the Deep Creek Lake area and provide a long-term guide for public and private decisions affecting development and conservation.

This chapter of the 2008 Garrett County Comprehensive Plan responds to that recommendation, as well as several others in the 2004 *Watershed Study*. In particular, this chapter evaluates the Lake area's capacity to accommodate new growth, in terms of available land, water resources (drinking water, wastewater treatment capacity, and stormwater management), traffic, and public services.

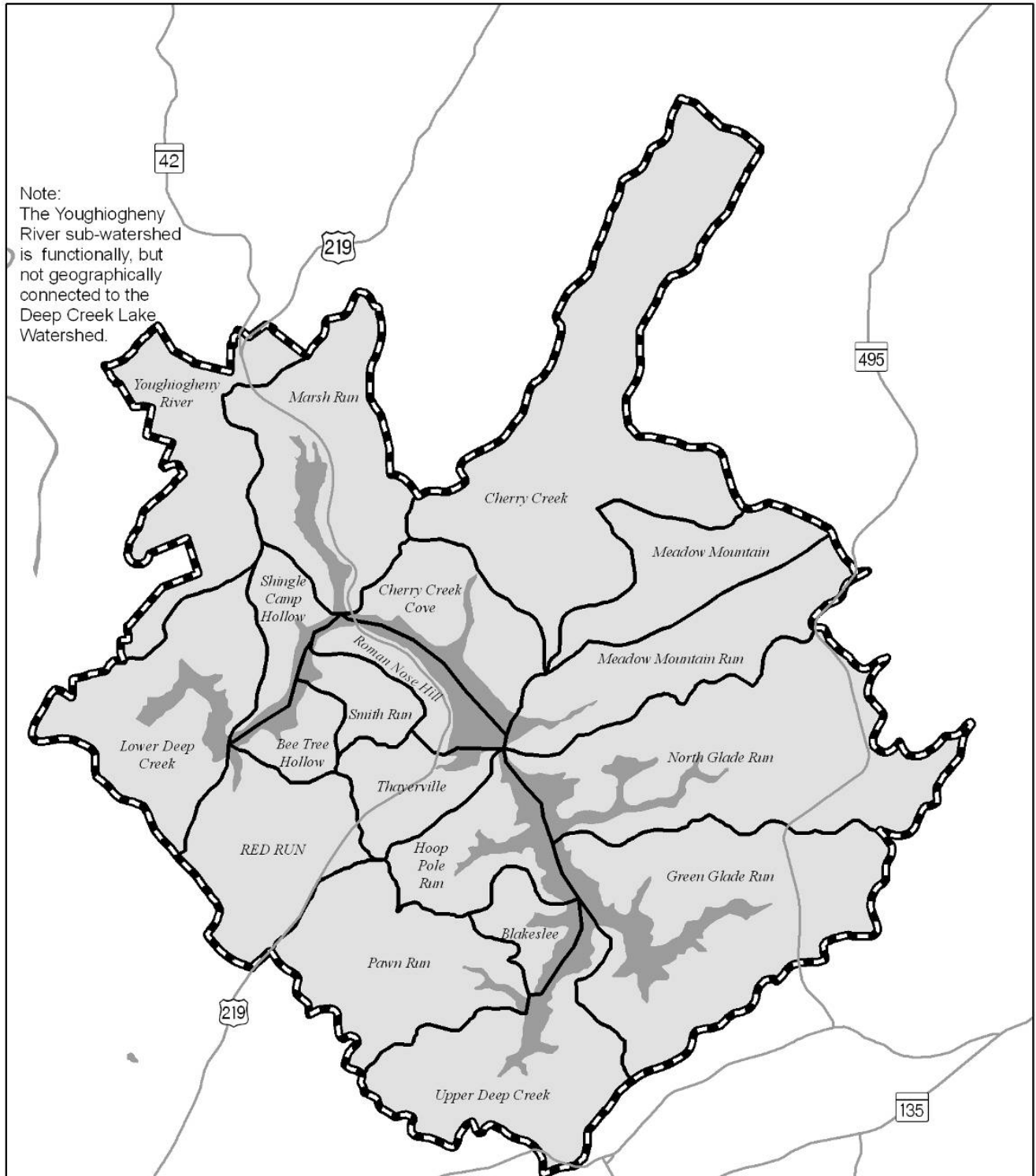
4.1 Influence Area

The Deep Creek Lake Influence Area, shown in Map 4.1, is the portion of Garrett County that has a direct impact on the environmental and visual resources of Deep Creek Lake and on the Lake Area's infrastructure and services. This 43,407 acre area includes the entirety of the Deep Creek watershed (40,937 acres), plus some areas outside the Watershed that directly impact the roads and community services in the Lake area: a portion of the Youghiogheny River watershed on the western slope of Marsh Mountain—encompassing the Wisp Resort Planned Residential Development (PRD) and other major subdivisions—and a very small portion of the Bear Creek watershed north of McHenry.

Within the Influence Area, this Comprehensive Plan identifies 19 "sub-watersheds" for detailed planning (see Map 4.1). Sub-watersheds were used for housing unit projections (Section 4.3.2), transportation projections (Section 4.4.1), and for the Deep Creek Lake Water Quality Assessment report (Section 4.6). The portions of the Influence Area that fall within the Youghiogheny River and Bear Creek watersheds are all covered by the "Youghiogheny River" sub-watershed shown on Map 4.1.


¹ The Recommendations of the Watershed Study, along with the Planning Commission's Summary Report (which contains the Planning Commission's response to the Watershed Study's recommendations) are included in the Comprehensive Plan Appendix.

Map 4.1: Sub-Watersheds in the Deep Creek Lake Influence Area



Deep Creek Lake Influence Area

Legend

-  Sub-Watersheds
-  Deep Creek Lake Influence Area



4.2 A Vision Statement for the Deep Creek Lake Influence Area

The Deep Creek Lake Influence Area, including the Lake, its watershed, and surrounding areas, is a vital part of Garrett County's identity and economy. Consistent with the recommendations of the 2004 *Watershed Study*, the goals and objectives for the Influence Area are expressed in the form of the following Vision Statement.

The Deep Creek Lake Influence Area is a place where:

- *Land use patterns, transportation systems, and community facilities support existing economic assets (such as commercial areas in McHenry and Thayerville, and the Wisp Resort) and encourage new economic activity.*
- *Agricultural and forest lands, as well as views of the lake and the surrounding mountains are preserved.*
- *The impact of new development on the lake's water quality is minimized through sewer connections and site designs that reduce non-point source pollution.*
- *Future development is concentrated in areas that are or will be served by public sewer service.*
- *The transportation system limits vehicle traffic congestion and enhances pedestrian and bicycle circulation, especially in McHenry and Thayerville.*
- *There are varied and diverse public recreational resources and offerings.*

4.3 Land Use and Development Trends

The Influence Area has experienced considerable land use change since the 1995 Comprehensive Plan. Understanding past land use and development activities, as well as projected future trends helps to inform the Master Plan's recommendations.

4.3.1 Existing Land Use

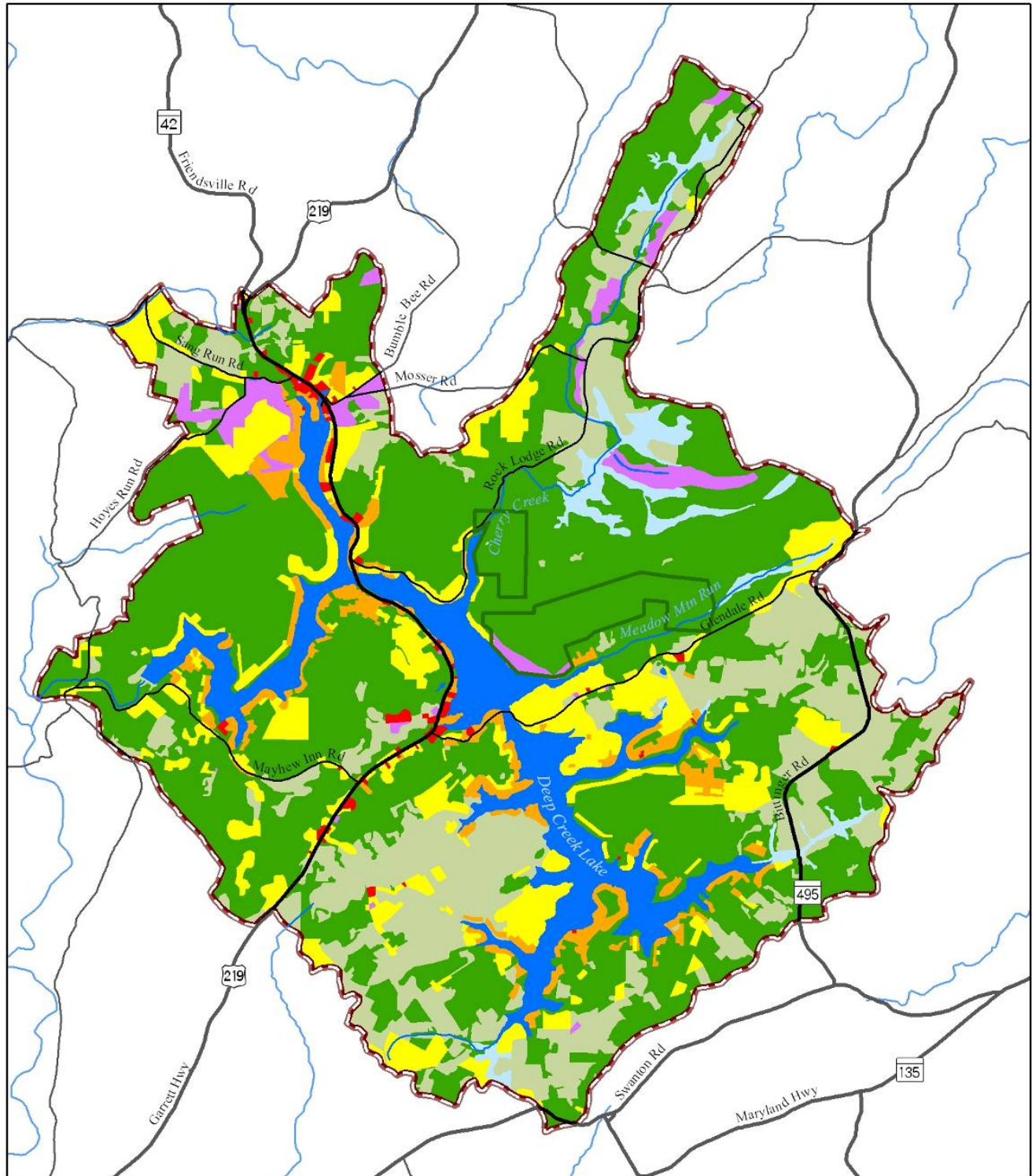
Existing land use as of 2005 is shown on Map 4.2, and land use acreages are listed in Table 4.1. Approximately 19 percent of the Influence Area is comprised of developed areas, including residences, businesses, and resort development. The remaining 81 percent of the Influence Area is resource lands or very lightly developed—primarily forest and agricultural land. Since 1973, approximately 6,500 acres of forest and agricultural land within the Influence Area have been converted to other uses, primarily low and medium density residential development.

Nearly 11,000 acres, or 25 percent of the Influence Area, is protected by state or County ownership; tax exempt status; utilities; or the presence of wetlands or protective easements established through agricultural or other preservation programs. Deep Creek Lake itself, a buffer strip around the lake, and the 1,400-acre Deep Creek Lake State Park are all state-owned, and are maintained by the Maryland Department of Natural Resources (DNR).

Within the Influence Area's forested acreage is the 3,060-acre Rock Lodge Trust property, located north and east of Deep Creek Lake State Park. While not officially protected by government ownership or easement, the Rock Lodge Trust property is managed for timber production.

McHenry and Thayerville (including nearby areas zoned CR1 and CR2), and the land zoned General Commercial at the intersection of US 219 and Sand Flat Road are the only Priority Funding Areas (PFAs) in the Influence Area (see Map 3.2). McHenry and Thayerville are discussed in greater detail in section 4.10.

Map 4.2: Existing Land Use/Land Cover, Deep Creek Lake Influence Area



Deep Creek Lake Influence Area Existing Land Use

| | | |
|---------------------------------|-----------------|--------------------------------|
| Low Density Residential | Agriculture | Deep Creek Lake Influence Area |
| Medium/High Density Residential | Forest | Deep Creek Lake State Park |
| Commercial/Industrial | Wetlands | |
| Other Developed | Deep Creek Lake | |

0.5 0 0.5 1
Miles

Table 4.1: Deep Creek Lake Influence Area Land Use/Land Cover

| Land Use | 1973 | | 2005 | | Change 1973-2005 (Acres) |
|---------------------------------|---------------|-------------|---------------|-------------|--------------------------------|
| | Acres | Percent | Acres | Percent | |
| <i>Development Lands</i> | | | | | |
| Low Density Residential | 1,599 | 4% | 5,323 | 12% | 3,724 |
| Medium/High Density Residential | 34 | 0% | 1,766 | 4% | 1,732 |
| Commercial/Industrial | 296 | 1% | 316 | 1% | 20 |
| Other Categories ¹ | 554 | 1% | 958 | 2% | 404 |
| <i>Resource Lands</i> | | | | | |
| Agriculture | 10,010 | 23% | 8,410 | 19% | -1,600 |
| Forest | 26,770 | 62% | 21,886 | 50% | -4,884 |
| Wetlands ² | 439 | 1% | 1,060 | 2% | 622 |
| Water | 3,706 | 9% | 3,688 | 8% | -17 |
| Total | 40,938 | 100% | 43,408 | 100% | |

1: Includes Institutional, Extractive, Open Urban, Beaches, Bare rock, Bare Ground.

2: MDP's Land Use/Land Cover dataset shows generalized land use types and areas. The extent of wetlands shown in Table 4.1 is used for estimation only.

Sources: Maryland Dept. of Planning 1973 and 2002 Land Use Land Cover dataset (2002 dataset updated by Garrett County to reflect 2005 conditions).

4.3.2 Growth and Development Since 1990

The year-round population of the Deep Creek watershed grew from 3,174 residents in 1990 to 3,845 residents by 2000, a 21 percent increase (compared with a 6.1 percent increase in overall County population during that period).²

Housing grew faster than population between 1990 and 2000. There were 3,787 total housing units (including homes used as permanent residences, as well as those maintained as vacation or rental units) in the Influence Area in 1990, and approximately 5,683 by the end of 2005, a 50 percent increase.³ By comparison, the County's housing stock grew by 30 percent, and new development in the Influence Area accounted for 42 percent of all new housing units in the County during the same period. The faster pace of growth in the Influence Area reflects the continued popularity and development of seasonal residences in the Influence Area.

Between 1997 and 2006, a little over 6,200 acres of land in the Influence Area—primarily forest and agricultural land—was subdivided for residential development, resulting in more than 4,500 lots (including the 2,500-unit Wisp Resort PRD). Approximately 270 residential units had been built on those subdivided lots in the Influence Area as of 2005.

Projected Growth

As discussed in Chapter 2, the Deep Creek Lake Influence Area is projected to experience steady growth through 2030. Approximately 4,050 new housing units, many of them vacation units, are expected to be built during this time period. Table 4.2 shows the number of projected units in each of the Influence Area's sub-watersheds. The Wisp Resort PRD spans portions of Marsh Run, Lower Deep Creek, and the Youghiogheny River sub-watersheds, accounting for the large projected housing unit growth in those areas.

² Please note that census data are not collected for the exact area of the Deep Creek Lake Influence Area. The population data listed above are for Census tract 0005, which nearly approximates the Deep Creek watershed. 2005 population data for smaller areas like Census tracts are not available. As per Chapter 2, the Comprehensive Plan relies primarily on housing units, rather than population, to express growth projections.

³ Housing unit data based on Maryland Property View.

Much of the growth shown in Table 4.2 will be part of proposed or approved subdivisions. The projected growth within *approved* subdivisions is in the “Pipeline” column on Table 4.2. New units that would be built in other subdivisions—those that have been *proposed*, but not yet approved—are listed as “Planned” units, while other projected housing units (either on individual properties, or as part of subdivisions that have not yet been proposed), are labeled “Scattered.”

Table 4.2: Influence Area Existing and Projected Housing Units

| | 2005 Existing | Projected, 2006-2030 | | | | Projected Total Housing Units, 2030 |
|---------------------|------------------|----------------------|--------------|------------|--------------|---|
| | | Pipeline | Planned | Scattered | Total New | |
| Cherry Creek | 128 | 13 | 0 | 19 | 32 | 160 |
| Meadow Mountain | 0 | 0 | 0 | 15 | 15 | 15 |
| Marsh Run | 1,294 | 113 | 368 | 50 | 531 | 1,825 |
| Lower Deep Creek | 335 | 0 | 673 | 20 | 693 | 1,028 |
| Shingle Camp Hollow | 129 | 191 | 0 | 5 | 196 | 325 |
| Cherry Creek Cove | 212 | 0 | 0 | 25 | 25 | 237 |
| Meadow Mountain Run | 204 | 12 | 0 | 22 | 34 | 238 |
| Roman Nose Hill | 386 | 0 | 0 | 20 | 20 | 406 |
| Smith Run | 79 | 96 | 0 | 25 | 121 | 200 |
| Bee Tree Hollow | 82 | 32 | 40 | 45 | 117 | 199 |
| Red Run | 231 | 0 | 0 | 25 | 25 | 256 |
| Thayerville | 250 | 117 | 0 | 80 | 197 | 447 |
| North Glade Run | 734 | 155 | 99 | 45 | 299 | 1,033 |
| Green Glade Run | 641 | 40 | 150 | 55 | 245 | 886 |
| Hoop Pole Run | 314 | 0 | 39 | 45 | 84 | 398 |
| Blakeslee | 99 | 31 | 0 | 70 | 101 | 200 |
| Pawn Run | 243 | 1 | 0 | 45 | 46 | 289 |
| Upper Deep Creek | 198 | 31 | 6 | 45 | 82 | 280 |
| Youghiogheny River | 124 | 186 | 976 | 25 | 1187 | 1,311 |
| Total | 5,683 | 1,018 | 2,351 | 681 | 4,050 | 9,733 |

In addition to this projected residential growth, more than one million square feet of new business, commercial and retail development is projected to be built within the Influence Area by 2030. Expansion of the Wisp Resort, a new exhibition center at the Garrett County Fairgrounds in McHenry, and a new hotel/water park in McHenry are among the major planned non-residential developments. While outside of the Influence Area, development at White Face Farm (see Chapter 3) could also have traffic and infrastructure impacts on the Influence Area.

Capacity Analysis

As part of the Comprehensive Plan, the Maryland Department of Planning (MDP) performed a Development Capacity Analysis to evaluate development capacity in the Influence Area.⁴ The Capacity Analysis estimates the total number of dwelling units that could be built in the Influence Area (regardless of the time period for this development) based on land

⁴ Maryland’s local governments committed to performing Development Capacity Analyses as part of their comprehensive plan updates via a Memorandum of Understanding, signed in 2004 by the Maryland Municipal League and Maryland Association of Counties.

development regulations, the presence of sewer service, and environmental limitations such as steep slopes or wetlands (but excluding considerations such as septic requirements).⁵

Based on the MDP analysis, there is land capacity in the Influence Area for the construction of 24,160 new residential units beyond the 5,683 already present, of which 22,159 could be built outside of the McHenry and Thayerville PFAs (primarily in land zoned LR or RD).

4.4 Impacts of Growth

This Development Capacity data, as well as the projected growth for the Influence Area, should be evaluated in the proper context. At the Influence Area's projected growth rate (4,050 new units by 2030, or approximately 175 units per year), it could take several decades to reach maximum development capacity. However, the capacity of other resources is much more limited.

This section describes the impacts of projected growth and development capacity on the Influence Area's most critical resources: transportation and circulation facilities, public sewer systems, and the water quality of Deep Creek Lake.

4.4.1 Impacts on Transportation

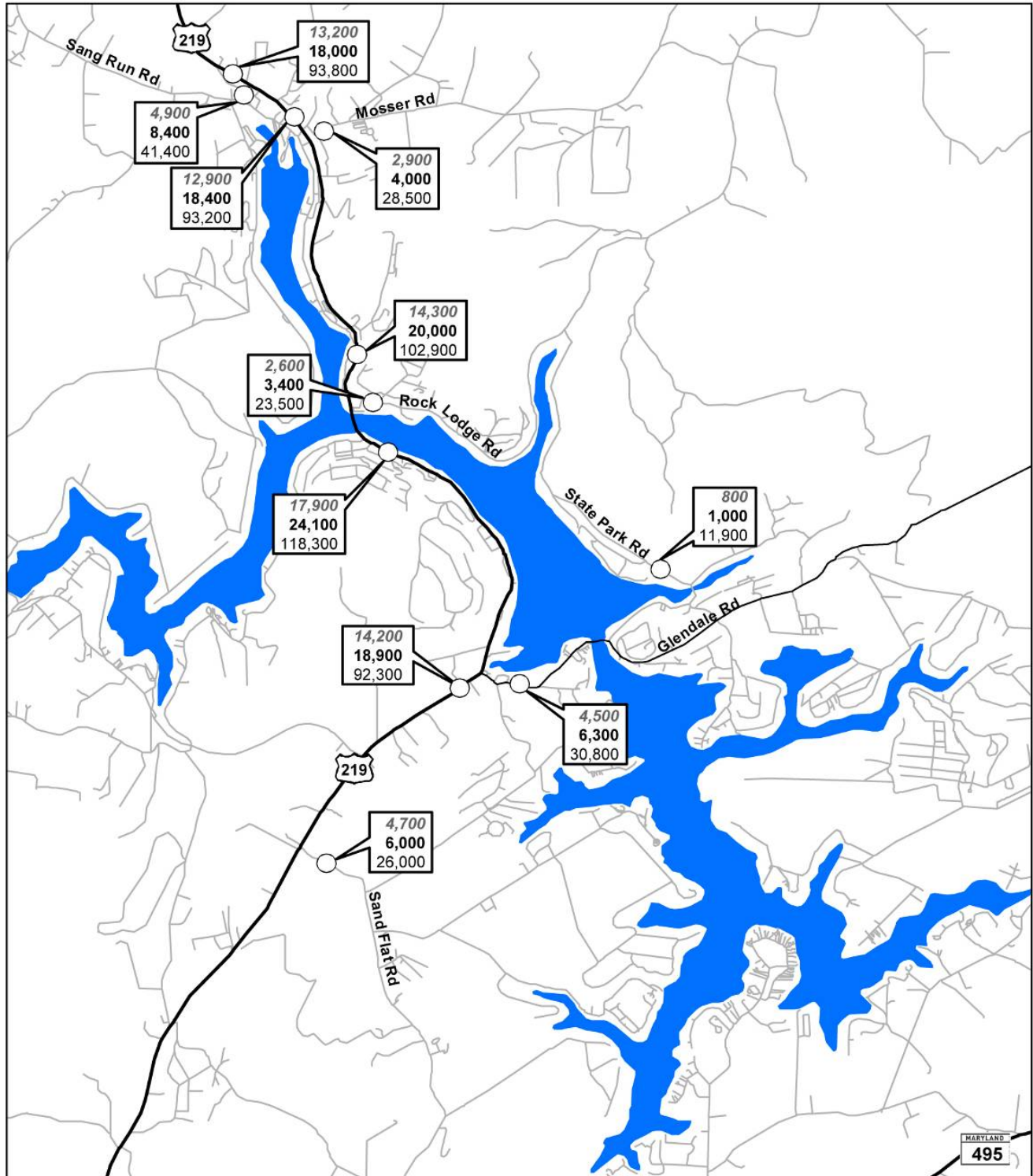
The 4,050 projected new residential units in the Influence Area represent 60 percent of all countywide residential development through 2030. Roadways serving the Influence Area will therefore be the most heavily impacted portion of the Countywide transportation system. Map 4.3 shows existing (2005) and projected 2030 Peak Season Average Daily Traffic (PSADT) in the Influence Area, based on the Comprehensive Plan projections. As Lake-area development increases, the resulting traffic will place higher demands on the US 219 corridor. Table 4.3 shows current and future Level of Service (LOS) at several key intersections in the Influence Area.⁶

Projected 2030 traffic volumes in the Influence Area can be accommodated with the provision of new traffic signals, intersection geometry improvements, access management, and similar approaches. However, the traffic volumes generated by Development Capacity would overwhelm the existing road system (for example, the potential 93,800 PSADT on US 219 north of McHenry would be twice the 2006 average daily traffic on I-68 in Cumberland), and could not be accommodated without significant new or widened road facilities. Please see the Transportation Technical Report in the Plan Appendix for more details. Such new or widened roads would be difficult to locate and build, due to challenging terrain, and the likely negative impacts on community character.

⁵ The full Development Capacity Analysis report can be found in the Comprehensive Plan Appendix, CapacityAnalysis_final.doc.

⁶ As described in the Transportation Research Board's *Highway Capacity Manual*, LOS evaluates the functional performance of roadway segments and intersections (based on capacity, speed, delay, and other factors), and assigns a letter grade characterize that performance. While each person experiences congestion and delay differently LOS A typically represents the very best conditions, while LOS F typically represents the worst, most "unacceptable" conditions, where a roadway segment or intersection cannot accommodate traffic demand. Typically, LOS D or better is typically considered an "acceptable" situation, while LOS E and F are considered unacceptable.

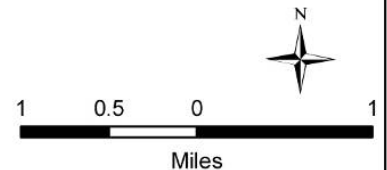
Map 4.3: 2030 Peak Season Average Daily Traffic



Peak Season Average Daily Traffic (PSADT) Volumes

- Traffic Count Station
- #,### = 2005 PSADT (based on existing counts)
- #,### = 2030 PSADT (based on Comprehensive Plan Projections)
- #,### = Development Capacity PSADT

- ≡ Major Roads
- ≡ Other Roads
- 🟦 Deep Creek Lake



Pinpointing a precise failure point for the system, in terms of an amount of development or a year, requires a more detailed understanding of the future road network than is available at a Comprehensive Plan level of analysis. The subjective nature of each person’s reaction to congestion and delay also complicates attempts to determine a single threshold for system failure. However, based on the change in LOS shown in Table 4.3 (between 2005 and 2030), the Lake-area transportation system (without significant upgrades) would likely begin to exhibit signs of failure during peak seasons with the addition of 6-8,000 new residential units in the Influence Area (i.e., 2-4,000 units beyond this Plan’s 2030 projections).

Table 4.3: Current and Future Traffic Impacts, Influence Area

| Intersection | Approach Levels of Service, Peak Season | | | | | | | |
|---|---|----|----|-----|-------------------------|----|----|-----|
| | 2005 (existing conditions) | | | | 2030 (projected growth) | | | |
| | NB | SB | EB | WB | NB | SB | EB | WB |
| US 219 at Sang Run Road ¹ | A | A | E | n/a | B | B | D | n/a |
| US 219 at Mosser Road/Deep Creek Dr. ² | A | A | B | B | A | B | C | C |
| US 219 at Rock Lodge Road/Deep Creek Dr. ¹ | A | A | E | F | B | A | C | D |
| US 219 at Glendale Road ² | C | B | B | B | C | B | C | C |

1: 2030 Analysis assumes new traffic signal

2: Assumes Current Lane Configuration

Source: Transportation Technical Report (see Plan Appendix)

Stop Sign Controlled

Signal Controlled



4.4.2 Impacts on Public Sewer

Sewer service is currently available for residences and businesses in the northern and central portion of the Influence Area (including all PFAs in the Influence Area). By 2030, the County plans to extend the sewer service area to communities bordering the southern portion of the lake, as shown in Map 4.4. Some of these communities have failing or inadequate septic systems.

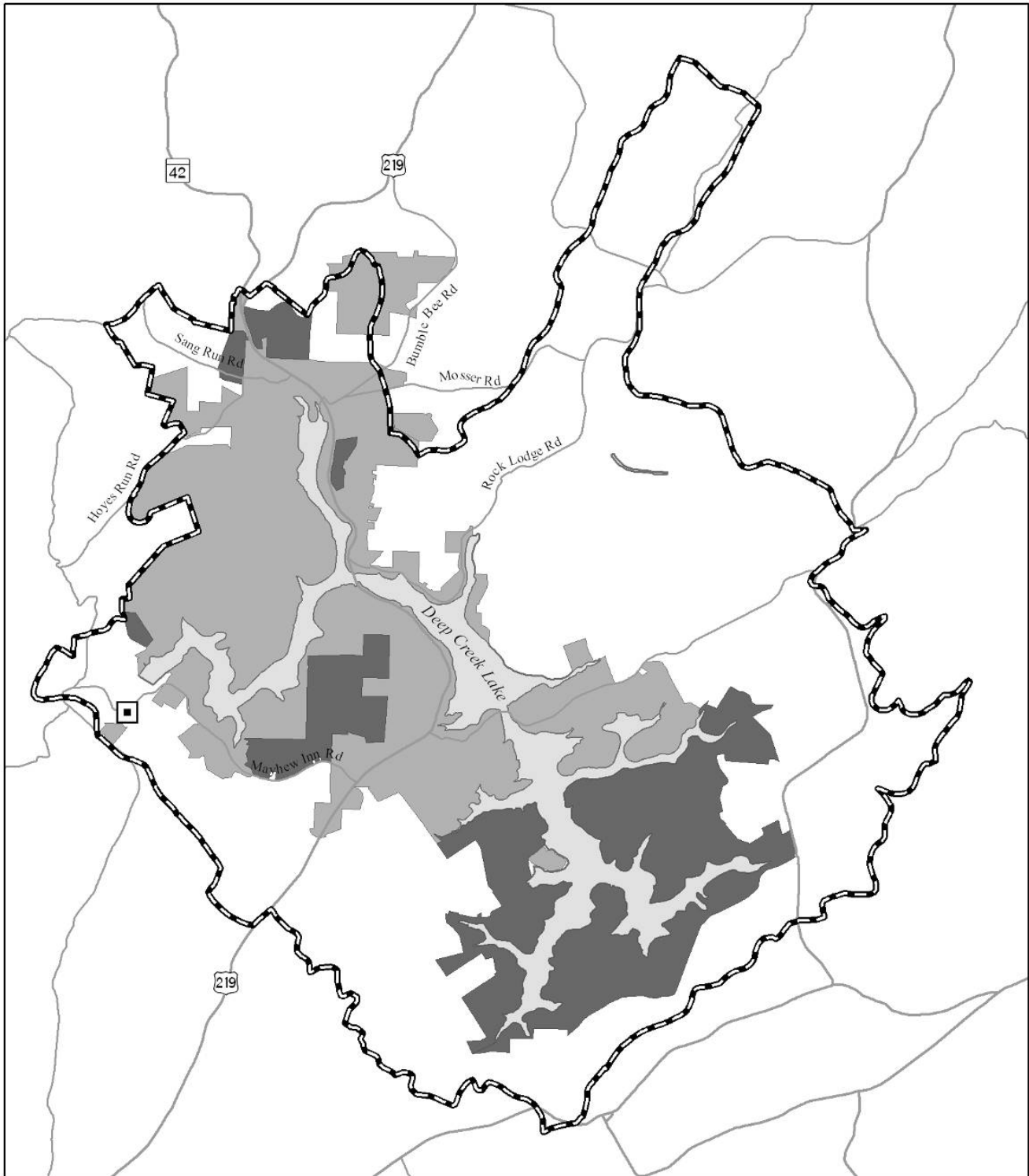
Sewer Demand from Projected Development

All wastewater within the service area is treated at the Deep Creek Lake Wastewater Treatment Plant (WWTP), which discharges into Deep Creek stream just west of the Deep Creek Lake dam (see Map 4.4). Table 4.4 summarizes existing capacity and demand at the WWTP, as well as future demand from projected development.

The Deep Creek Lake WWTP was upgraded and expanded to its current capacity of 2.2 million gallons per day (MGD) in 2007, and currently has unused capacity to serve more than 3,900 future Equivalent Residential Units (ERU—see note 2 in table). As shown in Table 4.4, projected residential and non-residential development in the sewer service area totaling 4,575 ERUs would exceed available capacity before the year 2030. The WWTP would therefore need to be expanded approximately by the year 2025.

The WWTP was designed and sited to allow expansion, and has an ultimate treatment capacity (after expansion) of 3.9 MGD. Such capacity would be more than adequate to serve projected growth in the Influence Area, as well as more than 5,800 additional ERUs of development after 2030. However, this capacity would not be adequate to serve the amount of development that is possible under the Development Capacity Analysis.

Map 4.4: Public Sewer Service in the Influence Area



Deep Creek Lake Sewer Service Area

- Existing Sewer Service
- Future Sewer Service
- Deep Creek Lake Wastewater Treatment Plant
- ⊖ Deep Creek Lake Influence Area

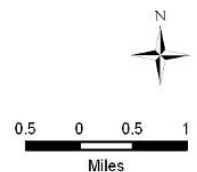


Table 4.4: Sewer Capacity and Demand

| | Volume | |
|--|------------------|------------------|
| | MGD ¹ | ERU ² |
| Permitted Capacity | 2.2 | 8,381 |
| Demand (2007) ³ | 1.2 | 4,459 |
| Current Capacity Available for Future Development | 1.0 | 3,922 |
| Projected new residential demand in the Influence Area ⁴ | 1.1 | 4,171 |
| Projected new non-residential demand in the Influence Area ⁵ | 0.1 | 404 |
| Total projected new demand | 1.2 | 4,575 |
| Net available capacity (deficit), 2030 | (0.2) | (653) |
| Average annual projected (new) sewer demand, 2007-30 | <0.1 | 191 |
| Years before WWTP expansion will be required (3,921 ERU available)/(191 new ERU demanded per year) | | 21 |

1: MGD = Million Gallons per Day of wastewater flow.

2: An Equivalent Residential Unit (ERU) is 262.5 gallons per day (gpd). ERUs are used to compare residential and non-residential water and wastewater use. See detailed note in Table 5.2 (Chapter 5, Water Resources Element).

3: Includes active sewer customers and sewer capacity that has been reserved, but not yet used, for future development.

4: Assumes that 75 percent of projected residential demand in the Influence Area would connect to sewer (the remainder would be outside of the sewer service area), and that some existing units currently on septic would also connect to the sewer system.

5: Future non-residential demand based on Table 11.5 (Chapter 11, Economic Development Element). See Water Resources section of the Plan Appendix for detailed methodology.

Expanded Sewer Service Beyond 2030

Regulatory requirements make it impractical to develop a new Wastewater Treatment Plant to serve the Influence Area (even if that plant were not physically located in the Influence Area). In addition, the underlying geology of the Influence Area would also hamper large-scale implementation of alternative wastewater treatment options such as spray irrigation (see Chapter 5, the Water Resources Element). Thus, the Deep Creek Lake WWTP's 3.9 MGD ultimate capacity represents the total amount of wastewater that can be treated within the Influence Area for the foreseeable future.

This fully expanded WWTP (3.9 MGD) could not serve the amount of development that is possible under the Development Capacity Analysis. As shown in Table 4.5, if development capacity were reached, and if the entire capacity of the sewer system was consumed by development, there would still be more than 10,000 ERUs of wastewater demand that would have to be met through septic systems, rather than sewer (in addition to any development that would not seek sewer connections in the first place). Such large numbers of septic systems would likely have a negative impact on water quality in Deep Creek Lake (see Section 4.4.3).

Table 4.5: Sewer Capacity and Demand, Using Development Capacity Analysis

| | Volume | |
|--|------------|---------------|
| | MGD | ERU |
| Total residential demand from Capacity Analysis | 6.3 | 24,160 |
| Assumed 25% share of Capacity Analysis development (new residential units) that would not seek sewer connection ¹ | 1.6 | 6,040 |
| Total residential demand for sewer from Capacity Analysis | 4.7 | 18,120 |
| Other demand for sewer (conversion of existing residential septic systems to sewer, new non-residential sewer demand) | 0.7 | 2,850 |
| Total demand for sewer service from Capacity Analysis | 5.5 | 20,970 |
| Available WWTP capacity to serve Capacity Analysis demand (Total 3.9 MGD WWTP capacity, minus existing demand as of 2007) | 2.9 | 10,935 |
| Residential sewer demand not met under Capacity Analysis (available capacity minus total demand); new septic systems required | 2.6 | 10,035 |

1: Approximately 30 percent of new residential development in 2005 was on septic. This analysis assumes that a slightly smaller share (25%) of future development would occur outside of sewer service areas, regardless of WWTP capacity.

4.4.3 Impacts on Water Quality

Deep Creek Lake’s pivotal role for the County’s economy and identity makes preservation of the Lake’s water quality a vital goal for residents, businesses, and visitors. Should the lake become impaired, the County’s economy could suffer irreparable harm. As part of this Comprehensive Plan, the County therefore commissioned an *Assessment of Water Quality Impacts from Potential Land Development, Deep Creek Lake* (the Water Quality Study, May 2007), which used existing water quality data to evaluate the impacts of projected development and the Development Capacity Analysis on the Lake’s water quality.⁷ The Water Quality Study’s key conclusions were:

- Projected development through 2030 is likely to have minor negative impacts on the lake’s water quality. Land use decisions related to projected development need not be *primarily driven* by concerns over water quality impacts.

It is realistic to assume that projected growth can be accommodated, as long as potential impacts on water quality are minimized by encouraging sewer connections, adequate septic system design, stormwater and runoff management, and other measures.
- Maximizing the watershed’s development capacity would likely have similarly minor negative impacts.⁸

The available data used for the Water Quality Study were quite limited, and the study recommended additional field observations and analyses before significant development—such as the amount of growth under Development Capacity Analysis, or the septic system volumes shown in Table 4.5—is allowed to proceed. In 2007, DNR began to collect much of the detailed information described above, with the aim of improving future water quality modeling.

⁷ The full document is included in the Comprehensive Plan Appendix.

⁸ This is true, in part, because runoff from agricultural land in the watershed already adds nitrogen (a primary factor in water quality degradation) to the Lake. The Development Capacity Analysis assumed that agricultural land would be converted to residential land, which would add nitrogen from septic systems.

4.4.4 *Conclusion and Recommendation*

Projected growth through 2030 in the Influence Area can be accommodated with minor improvements to the transportation system and expansion of water and wastewater systems, and would have minor negative impacts on the water quality of Deep Creek Lake.

However, the Development Capacity scenario is unsustainable, because it cannot be adequately accommodated by transportation and sewer infrastructure, and could pose a threat to the Lake's water quality. Sewer calculations suggest that development capacity should be reduced from 24,160 to approximately 13,000 new residential units in the Influence Area. Analysis of the transportation system indicates that a development capacity of as low as 8,000 new residential units may be preferable (although this estimate represents peak season conditions, which occur only a few times per year).

Based on these findings, the Future Land Use Plan for the Influence Area needs to reduce development capacity to a level that will be more sustainable for the transportation network, sewer and water infrastructure, and the Lake's water quality.

4.5 **Proposed Land Use Plan**

The Land Use Plan for the Deep Creek Lake Influence Area, as shown on Map 4.5,⁹ accommodates the projected residential and non-residential growth through 2030 (described in section 4.3.2), plus more than 60 years of development beyond 2030 (assuming approximately 170 new housing units per year—the average annual rate of growth implied by Table 4.2). At the same time, the Plan protects scenic and rural resources by extending AR and RR land classifications into the Influence Area, thereby reducing the maximum residential density in areas not served by water and sewer, and lowering the Influence Area's development capacity.¹⁰

4.5.1 *Changes from the 1995 Land Use Plan Map*

The Deep Creek Lake Master Plan makes significant changes to the 1995 Plan, as described in this section.

Elimination of the Rural Development Land Use

The Rural Development (RD) land use was first established in the 1974 Comprehensive Plan as a primarily residential area. It is currently codified in the Deep Creek Watershed Zoning Ordinance, with the purpose of accommodating "continued growth and development throughout rural areas, while providing minimum standards and safeguards against detrimental activities." The existing RD district covers the northern portion of the Cherry Creek sub-watershed, and allows single-family residential development on approximately half-acre lots.

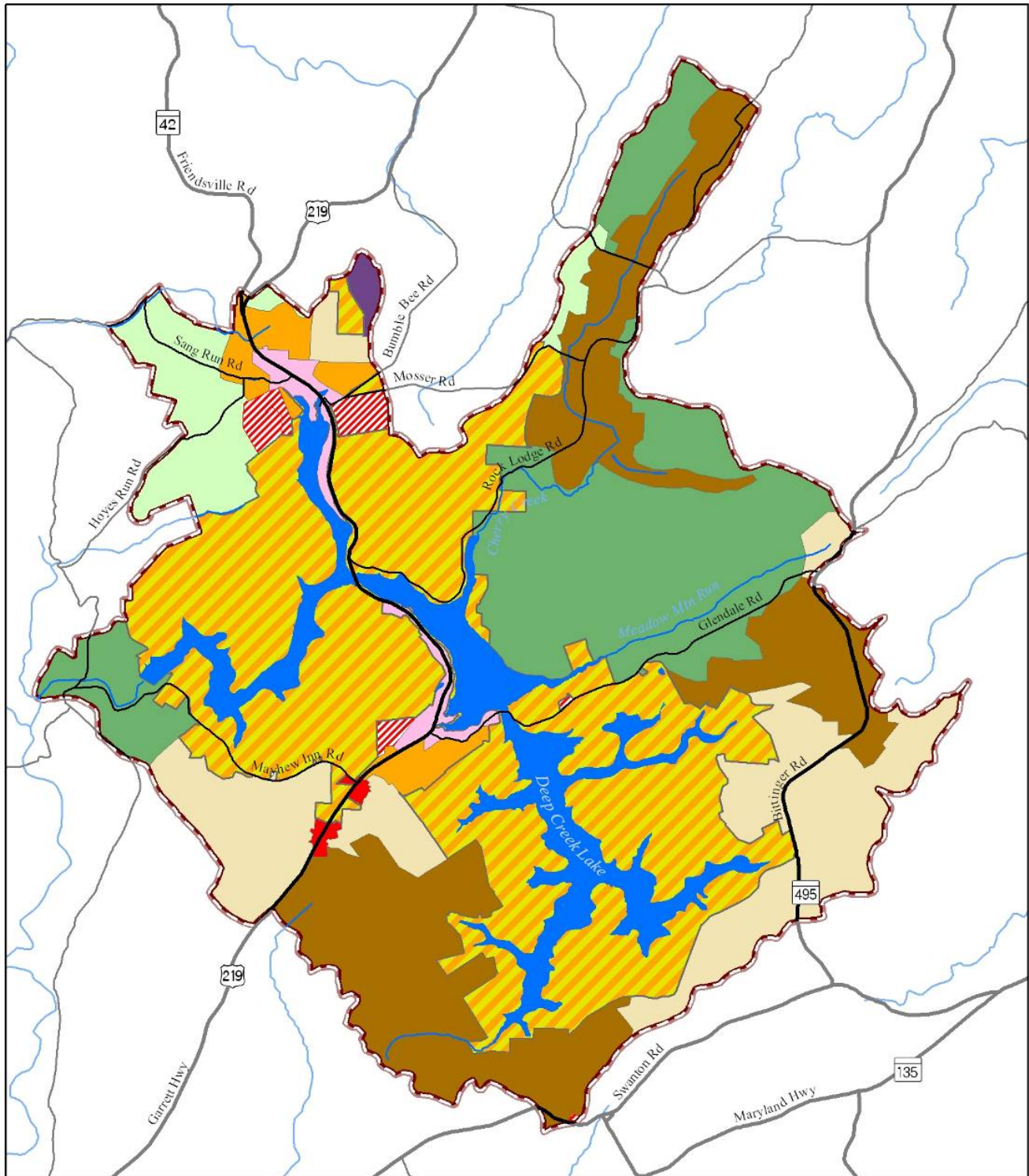
Much of the area in the RD zoning district is in the sensitive environmental area known as the Glades, is used for agriculture or forestry, or is preserved through ownership by the Nature Conservancy. None of the land in the RD district is in the future sewer service area (see Map 4.4). Given these factors, the RD area is recommended for re-designation as Rural Resource and Agricultural Resource land uses.¹¹

⁹ Zoning is based on parcel boundaries, while land classification follows the boundaries of the Influence Area. As a result, the boundaries of the revised zoning map will approximate, but may not exactly match the shapes shown in Map 4.5.

¹⁰ Please see "DCL Land Use Scenarios.doc" in the appendix for more detail on how the Land Use Plan was developed.

¹¹ Note that the "DCL Land Use Scenarios" document in the appendix did not initially convert any RD area to RR. This change was made as a result of public comments on the initial public draft of this chapter.

Map 4.5: Proposed Land Use, Deep Creek Lake Influence Area



Deep Creek Lake Influence Area Proposed Future Land Use

| | | |
|--------------------------------|--------------------|-----------------------|
| Deep Creek Lake Influence Area | General Commercial | Agricultural Resource |
| Town Center | Commercial Resort | Rural |
| Town Residential | Employment Center | Lake Residential 1 |
| Suburban Residential | Rural Resource | Lake Residential 2 |

0.5 0 0.5 1 Miles

Changes to Lake Residential Land Use

Lake Residential (LR) is the land classification applied by the 1995 Comprehensive Plan to rural areas within the Deep Creek watershed, intended for low residential densities (no greater than one residential unit per acre), family-oriented recreation uses, as well as continued farming and forestry.

This 2008 Plan splits the LR land use into two new classifications: Lake Residential 1 (LR1) and Lake Residential (LR2). These classifications both support the same land use *types* as the existing LR areas, but differ in their envisioned maximum residential density. The establishment of the LR1 and LR2 land uses responds to the Deep Creek Lake Master Plan's vision by concentrating future development within sewer service areas (thus minimizing future water quality impacts on Deep Creek Lake), while reducing development potential in the more rural portions of the Influence Area.

- LR1 covers approximately 17,500 acres of land, or 40 percent of the Influence Area.¹² It includes all land currently designated LR that falls within existing or future public sewer service boundary. The land use types and maximum residential densities (one dwelling unit per acre) envisioned for LR1 are unchanged from those in the existing LR land classification.
- LR2 covers approximately 5,700 acres of land, or 13 percent of the Influence Area. It includes all land currently designated LR that falls outside of existing or future public sewer service boundaries. The land use types envisioned for LR2 are unchanged from those in the existing LR land classification. However, the maximum envisioned residential density for LR2 areas is one dwelling unit per two acres.

Extension of AR and RR Land Classifications

Large portions of the Influence Area—particularly areas not near the Lake—are essentially undeveloped, and are characterized by a mix of agricultural and forested land, like much of the rest of Garrett County. Outside of the Influence Area, the Land Use chapter of this Plan emphasizes resource conservation for agricultural and forest lands by expanding AR and RR land classifications. This Master Plan adopts the same approach, designating portions of the Influence Area (almost all of which are currently designated as LR) as either AR or RR.

- Rural Resource (RR) areas cover approximately 7,000 acres, or 16 percent, of the Influence Area, and comprise large, contiguous timber and forest lands. Deep Creek Lake State Park, the Rock Lodge Trust property and nearby portions of the Cherry Creek sub-watershed, and areas west of the Deep Creek Lake dam are designated RR.
- Agricultural Resource (AR) areas cover approximately 8,000 acres, or 18 percent, of the Influence Area, and comprise large contiguous areas predominantly devoted to agricultural use. Much of the Cherry Creek sub-watershed, upper portions of the North Glade Run sub-watershed, and the southwestern portion of the Influence Area (a continuation of a larger AR area that extends past Oakland into Pleasant Valley) are designated AR.

The development guidelines for AR and RR within the Influence Area are the same as those described in the Land Use chapter (sections 3.4.1 and 3.4.2).

¹² LR1 includes almost all of Deep Creek Lake's 3,700-acre surface area.

Extension of the McHenry Growth Area

A small cluster of residential and non-residential development exists near the public safety (State Police) complex, at the intersection of US 219 and Friendsville Road (MD 42). Although this area is outside of the Deep Creek Watershed, the public safety complex itself is served by public sewer, as are some surrounding properties (due to failing septic systems).

The Master Plan designates much of this area as Town Residential, thus expanding the McHenry growth area and making the area eligible for public sewer and water. Extension of TR *zoning* outside of the watershed to these properties is not recommended. Extension of the TR *land classification* recognizes the potential for development of this land to include affordable housing, which is in short supply in the Influence Area. Expanding the growth area north of McHenry would also reduce trips along US 219 in the vicinity of the impacted intersections described in Table 4.3, thus reducing traffic impacts of new development.

Additional Commercial (GC) Uses

McHenry and Thayerville are the two primary commercial and business areas serving the Influence Area, and will continue to play that role over the life of this Plan. However, additional commercial land may be needed to serve future development, particularly in the southern portion of the Influence Area. This Plan expands the existing clusters of General Commercial land on US 219 at Mayhew Inn Road and Sand Flat Road, adding approximately 75 acres of GC land. This new commercial land will serve residents and visitors to the southern portion of the Influence Area (as well as those from areas north of Oakland), and will also reduce some of the demand on the McHenry road network.

4.6 Transportation

The increased popularity of the Deep Creek Lake area as a vacation destination and as a location for permanent and seasonal homes has increased traffic on the roadways leading to and around the Lake, particularly on weekends and in peak summer and winter periods. Visitors come mainly from north and east of the County and travel along the county's rural roadway network to their Lake destinations. As the main access route to the Lake, US 219 is the most heavily impacted by traffic flows, although local roads in McHenry, such as Sang Run Road and Mosser Road also experience traffic impacts.

Given the importance of Lake-area tourism for the county's economy, safe and convenient access to the Lake area is a Countywide priority. It is also in the County's economic interest to provide an adequate circulation network (including non-motorized transportation) within the Lake area, to facilitate access to the area's growing number of commercial and recreational services.

4.6.1 Transportation Conditions and Issues

Most of the significant traffic issues in the Influence Area occur along or near US 219, particularly in the McHenry and Thayerville areas. More detailed planning considerations for these areas are discussed in Section 4.10 below.

Current Roadway Network Inadequacy

Peak-season traffic in the Influence Area varies considerably from average daily traffic. Thus, holiday weekends, and major events at the Wisp Resort (including the Adventure Sports Center) or the Fairgrounds have, and will continue to have a significant traffic impact on the transportation system. During the winter ski season in particular, the intersection of US 219 at Sang Run Road becomes congested, and traffic back-ups along US 219 are common. The evaluation in Table 4.3 shows that traffic has difficulty accessing US 219 from Sang Run Road and Rock Lodge Road. Similar difficulties have been reported for vehicles

turning onto US 219 from Pysell Road. Installation and optimization¹³ of traffic signals on US 219 at Sang Run Road and Rock Lodge Road would alleviate such problems. The new signals, combined with geometric improvements at other intersections (recommended in Chapter 6, the Transportation Element) would alleviate concerns at Pysell Road by creating gaps in the traffic flow to allow safe turning movements onto or off of US 219.¹⁴ Similar improvements are recommended along US 219 at Mayhew Inn Road.



US 219 in McHenry is heavily traveled by local, seasonal, and through traffic.

Future Roadway Network Inadequacies

After traffic signals are installed and optimized, intersections through the Deep Creek Lake area will be able to handle projected traffic volumes through 2030. However, other factors may lead to future inadequacies. US 219 through the Influence Area is characterized by roadside development with numerous driveways, as well as pedestrian and bicycle use. US 219 is mostly two lanes (one lane in each direction), and there are few areas with passing lanes. US 219 also carries a mix of local, recreational, and long-distance traffic (as evidenced by trucks and other heavy vehicles that comprise approximately 10 percent of traffic on US 219).¹⁵

Passing lanes can help to improve LOS on such roads, and the lack of passing lanes on US 219 will result in conditions approaching LOS E by 2030, an unacceptable level.¹³ To avoid such degradation in operating condition, the County and State will need to find ways to improve traffic flow, provide for safe pedestrian and bicycle movements, and separate—to the extent possible—short- and long-distance traffic in the Influence Area. One potential approach is to improve the MD 495 corridor as an alternative access route to serve the Lake area and the municipalities in the Little Youghiogheny River watershed, as discussed in Chapter 6, the Transportation Element.

Development of the White Face Farm business park, as well as associated residential development near the County airport (just outside of the Influence Area) will impact the Influence Area's road network, specifically Bumble Bee Road, Mosser Road, and US 219. The Transportation Element (Chapter 6) contains a more detailed description of this issue.

Pedestrian and Bicycle Conditions and Issues

Sidewalks are generally nonexistent in the Influence Area. While US 219 has shoulders along most of its length, most other road rights-of-way are not wide enough to allow safe use of whatever narrow shoulders exist, or the addition of sidewalks. However, there is an increasing amount of pedestrian activity occurring along, and even in roadways. Particularly

¹³ Optimization refers to setting signal cycles to vary with time-of-day and time-of-year traffic flows, and installing signal equipment that allows for actuation (e.g., where the signal changes from blinking-yellow to a standard green-yellow-red cycle, based on the presence of cross-traffic during an otherwise low-volume time of day).

¹⁴ Once the signal at Sang Run Road is installed and optimized, the Pysell Road/US 219 intersection could be further evaluated to determine the need for signalization.

¹⁵ See the Transportation Technical Report in the Plan Appendix.

in McHenry, visitors walk and bicycle along the edge of, or even within the roadway to visit restaurants and stores, or simply for recreation. This pedestrian and bicycle activity, combined with increased vehicular traffic, increases the potential for conflicts between vehicles and pedestrians/bicycles.

That potential danger is particularly high in the McHenry area. Pedestrian and bicycle activity is high on Deep Creek Drive and Marsh Hill Road, which serve the most intensely developed portions of the Influence Area. The Market Square Shopping Center, new housing, the Fairgrounds, the proposed hotel/water park, and other development along US 219 has also spurred (and will continue to spur) increased pedestrian activity along and across US 219, creating additional conflicts. The safety problem for pedestrians is worsened in the winter, when plowed snow is piled up along the roadside, or when illegally parked cars extend into the roadway.



Wide shoulders and signage for bicycle/pedestrian use along US 219. Note the marked crosswalk in the background.

The Maryland State Highway Administration (SHA) has designated US 219 as a bicycle route, and the segment of US 219 in the McHenry area has posted bicycle route signs and the wide paved shoulders. Other segments of US 219 in the Influence Area were identified by the County for improvements (refer to the Bicycle Needs List in the Plan Appendix). The 2003 Recreational Trails Plan Update (which was incorporated into the 2005 LPPRP, and which is in turn adopted by reference in this Plan) also recommended on-road trails along Glendale Road (from US 219 to MD 495), and along State Park Road, from Glendale Road to Deep Creek Lake State Park (see Section 4.9).

4.6.2 *Transportation Recommendations*

Deep Creek Lake Influence Area Transportation Improvement Fund

The County typically pays for needed transportation improvements through general fund revenues, and has generally avoided the use of eminent domain to acquire right-of-way. As a result, it is difficult for the County to widen roads, improve intersections, or construct pedestrian improvements, particularly in developed areas. In addition, the County will find it difficult to fund the road, bicycle, pedestrian, transit, and other improvements (described in this Master Plan) needed to accommodate projected residential and non-residential development in the Influence Area.

Several approaches exist to expand the County's ability to fund these transportation system improvements. The most common funding mechanisms, and their applicability to the County, are described below.

- Excise Tax. A tax or fee charged for new development. Revenues can be used to pay for capital and operating costs associated with new development, as well as existing needs

or deficiencies. The excise tax can be collected and applied Countywide, or within a designated taxing area. The authority to levy an excise tax must be expressly granted by the Maryland General Assembly. This would likely be the most desirable mechanism for the County, since it allows the greatest degree of freedom in how and where revenues are spent.

- Impact Fees: A fee charged for new development within a designated geographic area. Revenues can only be used to pay for capital costs associated with new development in that geographic area. For example, an impact fee for new development in the Influence Area could pay for bicycle, pedestrian, transit, and road needs that would occur as a result of growth, but could not be used to fund improvements necessary to address existing deficiencies. The County has obtained authority to levy impact fees from the Maryland General Assembly, but has not yet created an impact fee. This tool is more limited than, and not as desirable as, an Excise Tax, but should still be investigated. Collecting an impact fee to pay for transportation upgrades associated with future growth would free up General Fund revenues to pay for transportation improvements associated with existing needs.
- Adequate Public Facilities Ordinance: A tool that links the timing of new development to the availability and adequacy of public facilities (in this case, transportation facilities) needed to service it. APFOs require a development to fund necessary improvements to nearby intersections or roads. However, transportation needs in the Influence Area are more cumulative in nature (e.g., the need for traffic signals along US 219 cannot be tied to a single development). In addition, APFOs are complicated to enforce and manage. Therefore, this mechanism is not recommended.
- Road Clubs: An agreement between developers to jointly fund transportation improvements on a road or roads that serve their developments. Because projected development in the Influence Area will not be concentrated along one road (or even a small set of roads), this mechanism is not recommended.

The majority of new residential development and almost all significant transportation network needs (including existing deficiencies and likely future needs) in the County are in the Deep Creek Lake Influence Area. This Comprehensive Plan recommends that the County create a Deep Creek Lake Influence Area Transportation Improvement Fund. This Fund should take the form of an excise tax (or impact fees, if found to be more suitable) on new development in the Deep Creek Lake Influence Area, and should be used to pay for transportation and circulation improvements, including right-of-way acquisition, within the Influence Area. The size of the tax or fee should be set following a study that would estimate the costs of needed improvements against the amount of anticipated new development.

Traffic Impact Studies

A limited number of roadways provide access to and circulation through the Influence Area, and SHA frequently requires traffic impact studies for development along state roads. However, the County does not have the clear authority to require such studies for proposed developments on County roads. For example, even very large developments such as the Wisp Resort PRD and the Ridgeview Valley PRD were not required to prepare traffic impact studies.

The Subdivision Regulations should therefore be amended to give the Department of Planning and Zoning clear authority (in consultation with the Roads Department) to require a traffic impact study prior to final plat approval. A traffic impact study would be required when one or more of the following criteria are met:

- The proposed development would contain approximately 50 or more residential units, or non-residential development likely to generate a comparable amount of traffic.

- The proposed development would be near (but not on) a state road, but where a SHA traffic impact study is not required.
- The proposed development would be on a County road or near an intersection of County roads where significant traffic, geometric, or safety concerns exist (including the potential for conflicts between vehicles and pedestrians or bicyclists).

A traffic impact study would be in addition to the cumulative impacts addressed by the Transportation Improvement Fund described above. SHA staff should be allowed to review and comment on such impact studies, in conjunction with the County, to ensure coordination of improvements on County and state roads.

Access Management

To avoid future traffic congestion problems on US 219, the County should work with MD SHA to create an access management plan for US 219 in the Influence Area—or, at minimum, the portion of the highway that passes through McHenry. The Plan should identify access management strategies, such as allowing right-in/right-out access only, shared access points, or other solutions to minimize future traffic conflicts due to adjacent development.

As development plans are proposed in the Deep Creek area, in order to preserve capacity and optimize mobility, the County should also consider access management strategies along significant County roadways in the Influence Area, particularly on Glendale Road, Deep Creek Drive, Mosser Road, and Sang Run Road. Absent such strategies, the Planning Commission should carefully assess access management opportunities when new development is proposed along County roads.

Transit Service

The County should assess the future role for a transit shuttle as a service for visitors in the McHenry area, particularly during the busy summer and winter seasons (incorporating or building on the existing Wisp shuttle). In combination with enforcement of parking restrictions along narrow roads such as Marsh Hill Road and Deep Creek Lake Drive, this type of shuttle could help to reduce congestion, as well as illegal parking.

Road Network Recommendations

The County should implement the following improvements to the road network in the Deep Creek Lake Influence Area, in coordination with SHA:

- New traffic signals on US 219 at Sang Run Road and Rock Lodge Road, per table 4.3, to accommodate projected growth. The timing of the installation of these signals will depend on a traffic signal warrant analysis and SHA approval.¹⁶ Once new signals are installed on US 219, work with SHA to optimize signal timing along US 219.
- Improve wayfinding signage in McHenry, especially to guide visitors to parking areas and Wisp Resort shuttles during ski season.
- Reserve right-of-way for and build a new connector road from US 219 at Sky View Drive to the intersection of Sang Run Road and Hoyes Run Road (see Figure 4.2 in Section 4.10). This would provide direct access to the Wisp Resort (via the planned Wisp Resort access road connecting Hoyes Run Road to the resort's road network), relieving congestion at the US 219/Sang Run Road intersection.

¹⁶ A traffic signal warrant analysis is an evaluation of the need for a traffic signal, using the Manual of Uniform Traffic Control Devices (MUTCD), a standard traffic and transportation reference. Even if the warrant analysis indicates the need for a new signal, SHA will make the final decision to install a signal.

Bicycle and Pedestrian Recommendations

Use the 2003 Recreational Trails Plan Map (reproduced as Map 4.8 in Section 4.9) and the trails recommendations for McHenry and Thayerville (see Section 4.10) as the basis for working with property owners and developers to implement a network of paths and sidewalks within and outside of road rights-of-way.

4.7 Water Resources

This section briefly describes the public water system in the Influence Area, and its ability to support future growth. Section 4.4.2 above describes the public sewer system. Chapter 5, the Water Resources Element, presents a more detailed analysis of Countywide water, wastewater, stormwater, and non-point source issues, pursuant to the requirements of House Bill 1141, passed in 2006.

4.7.1 Drinking Water System Conditions and Issues

McHenry Water Service Area

The McHenry Water Service Area provides drinking water for residential, resort, and commercial properties on the west side of US 219 in the vicinity of McHenry, along Marsh Hill Road, and for the Wisp Resort (see Map 4.3). Groundwater wells provide the source for McHenry's water. The McHenry system is currently permitted to withdraw 215,000 gallons per day (gpd), or approximately 819 ERUs.

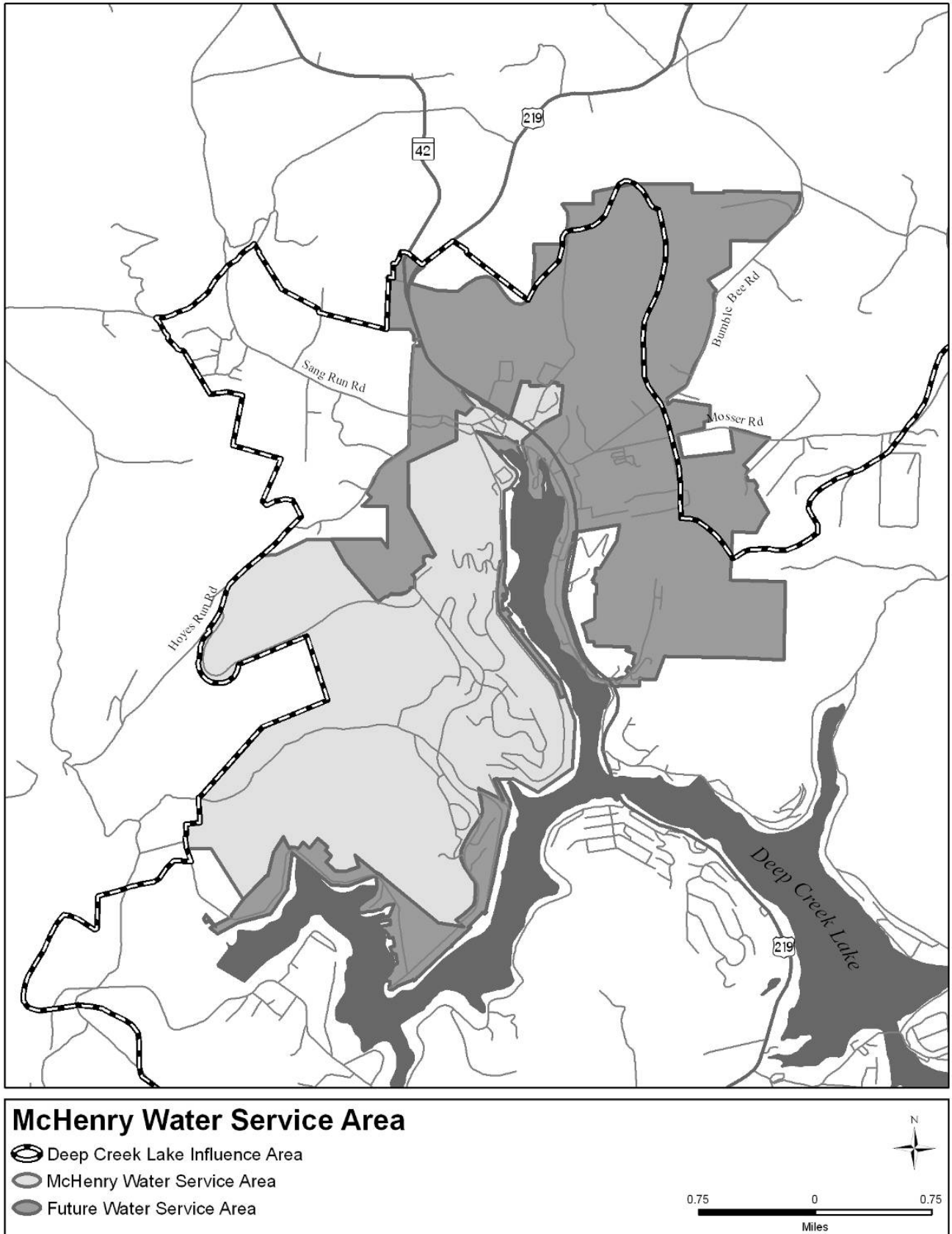
To satisfy additional water demand in the existing (2007) McHenry water service area, the Department of Public Utilities (DPU) is developing the following enhancements:

- A new well and treatment facility on Gravely Run Road, along with a 500,000 gallon storage tank.
- New water transmission lines to link the Gravely Run Road well with an existing water line at Garrett College. In addition to expanding the system boundaries, this "loop" line will add water pressure to the entire McHenry distribution system.
- Two additional wells and treatment facilities in the Wisp Resort PRD.
- An increased groundwater allocation rate from the existing McHenry well.
- Other wells and water sources as necessary.

The planned wells and allocation increases, if approved, would provide approximately 365,000 gpd of drinking water. An additional 470,000 gpd would be required to achieve the desired 1 MGD system capacity (see Chapter 5). These enhancements will expand the water service area to serve the Wisp Resort PRD, the 328-unit Ridgeview Valley PRD, the Exhibition Center (at the fairgrounds), and a number of other existing and proposed subdivisions, homes, and businesses using private wells, some of which are outside of the Influence Area.

DPU is working with the Maryland Department of the Environment (MDE) to finalize the size and capacity of the wells, treatment facilities, and transmission lines described above.

Map 4.6: McHenry Water Service Area



The McHenry system, expanded as described above, will produce enough water to serve the projected development through 2030 within the expanded water service area. In developing this expanded water system, consideration should be given to the broader impacts of large water withdrawals. The relationship between groundwater supply and surface water flows in Hoyes Run and other nearby streams should be taken into account, as should the potential impacts on existing wells near the future water service area.

Thayerville Water Service

Thayerville has public sewer service, but no existing or planned public water service. Citing inadequate water quantity, concerns about water quality in the area, and even the complete loss of production in some residential wells,¹⁷ residents and business owners in Thayerville have petitioned the County to develop a Thayerville water service area. The County has conducted initial engineering studies, and is in the process of locating an appropriate source (including improvement of existing privately-owned wells in the area) to serve Thayerville. Once adequate source water is found, the County will designate a water service area.

4.7.2 Water Resources Recommendation

As described in Section 4.4.2, the Deep Creek Lake Wastewater Treatment Plant may need to be expanded to its full 3.9 MGD capacity by approximately 2025, to accommodate growth through and beyond 2030. In its next Comprehensive Plan (likely 2014), the County should make a more detailed evaluation of the need for such expansion.

The County should create a Thayerville water service area, and the Department of Public Utilities should continue its efforts to develop water sources to serve such a district. If possible, the Thayerville water service area should include the proposed/expanded commercial nodes at Mayhew Inn Road and Sand Flat Road.

4.8 Sensitive Areas and Development Character

This section summarizes the sensitive natural and visual resources in the Influence Area, as well as issues and recommendations related to the way that new development relates to existing development. Mapping and more detailed data are presented in Chapter 7.

4.8.1 Sensitive Natural Resources

Some 110 miles of streams exist in the Deep Creek watershed. Cherry Creek (which drains the southern portion of the Glades) and Meadow Mountain Run are the largest tributaries to Deep Creek Lake.

The 100-year floodplain extends along many of these waterways, and the entire shoreline of Deep Creek Lake is also in the 100-year floodplain. Wetlands in the Influence Area are typically found near the confluence of small streams with Deep Creek Lake. The Glades, which extends from the Cherry Creek sub-watershed into the Bear Creek watershed, is one of the County's largest and most unique wetland areas, containing naturally-occurring peat bogs. These bogs provide habitat for species not otherwise present in the region, and serve important natural flood protection functions.

The Lake itself is also ringed by mountains, many of which are at or above 30 percent slope. Steep slopes are also found along some stream corridors. Limited areas of steep slopes (greater than 30 percent) also follow some waterways.

¹⁷ Source: Garrett County Department of Public Utilities. Some residents of the Mountainside subdivision on Roman Nose Hill had to drill new, deeper wells to replace their original service.

4.8.2 Scenic Protection Areas

The contrast between Deep Creek Lake's serene waters and the high ridges and peaks that surround the Lake create a series of scenic views of the mountains from the Lake and shoreline, and equally scenic views of the lake from surrounding hills. The main threat to scenic qualities in the Influence area has been development on slopes and especially along ridge crests.

The 2004 *Watershed Study* recommended the designation of Scenic Protection Areas—areas where new buildings would have to meet scenic protection criteria that would be set forth in the zoning ordinance. Map 4.7 shows the proposed Scenic Protection Areas in the Influence Area.¹⁸ Scenic Protection Areas include land that:

- Is undeveloped or lightly developed, and has views of, or is visible from the shore of Deep Creek Lake.
- Has a slope between 15 and 30 percent.
- Is not already protected by state or County ownership, and is free of slopes greater than 30 percent—where development is already limited by the Sensitive Areas Ordinance (see Chapter 7).

Given the generalized nature of the Scenic Protection Areas shown on Map 4.7, landowners should be allowed to submit detailed viewshed analyses (in lieu of Map 4.7) to more precisely delineate the portions of their property that meet the criteria described in this section.

The provisions listed below, mandatory in Scenic Protection Areas, should be added to the Zoning Ordinance, and should apply at the time of final plat approval.

Building on Slopes and Crests in Scenic Protection Areas (See Figure 4.1).

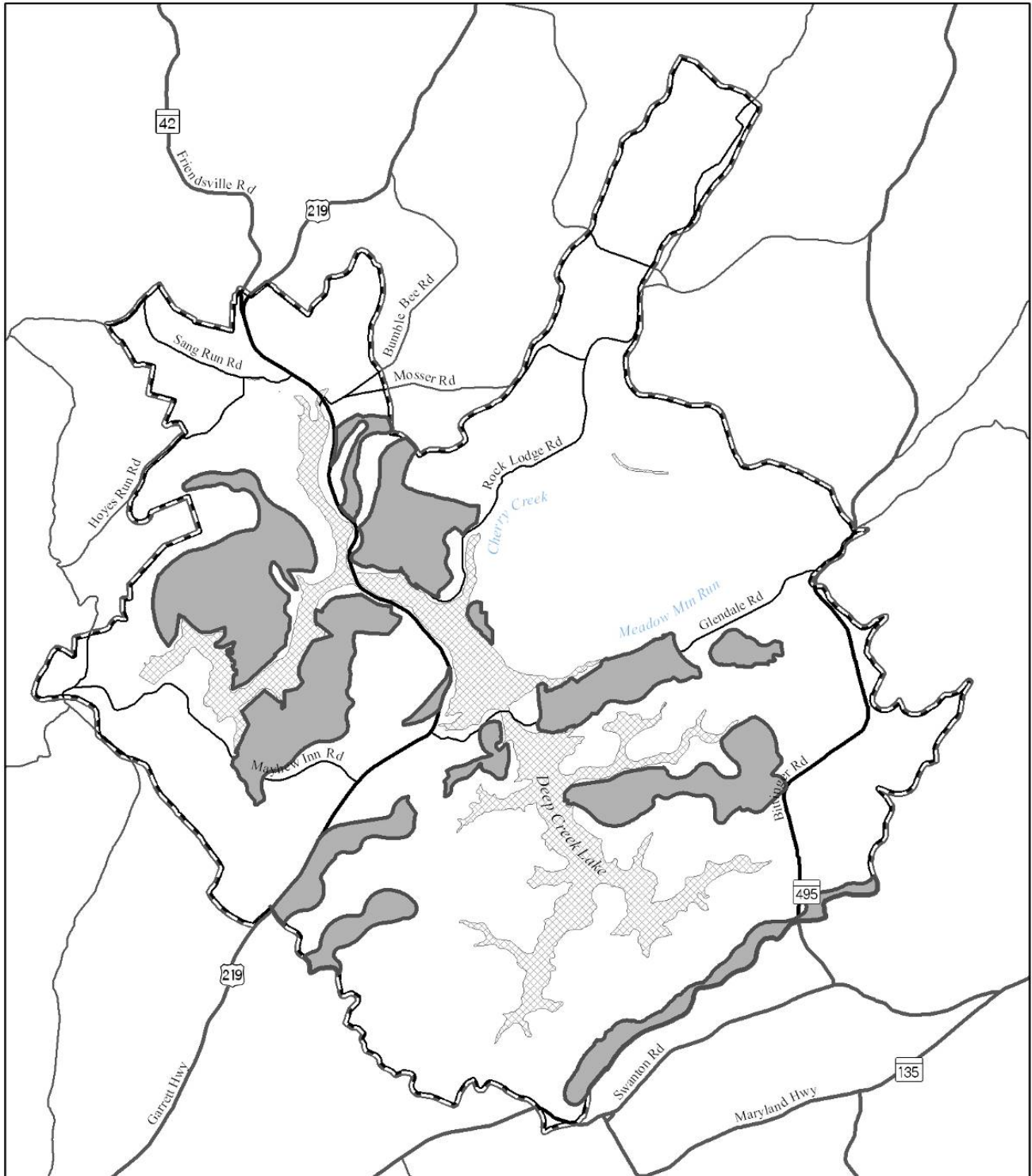
1. Locate buildings below or behind the slope crest, if possible.
2. If building on the slope crest:
 - Retain an 80 percent (summer) screen around buildings;
 - Retain trees at the rear (downhill side) of buildings.
 - Buildings may be no taller than trees to rear of building.
 - Agree to retain and/or replant trees after construction.
 - Replant or replace trees in previously cleared areas.



Scenic views of Deep Creek Lake and the surrounding mountains are important to County residents and visitors.

¹⁸ Scenic Protection Areas were identified through a GIS viewshed analysis, using the Deep Creek Lake shoreline as the viewing location.

Map 4.7: Scenic Protection Areas



Scenic Protection Areas

Legend

- Scenic Protection Areas
- Deep Creek Lake Influence Area

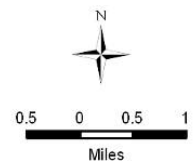
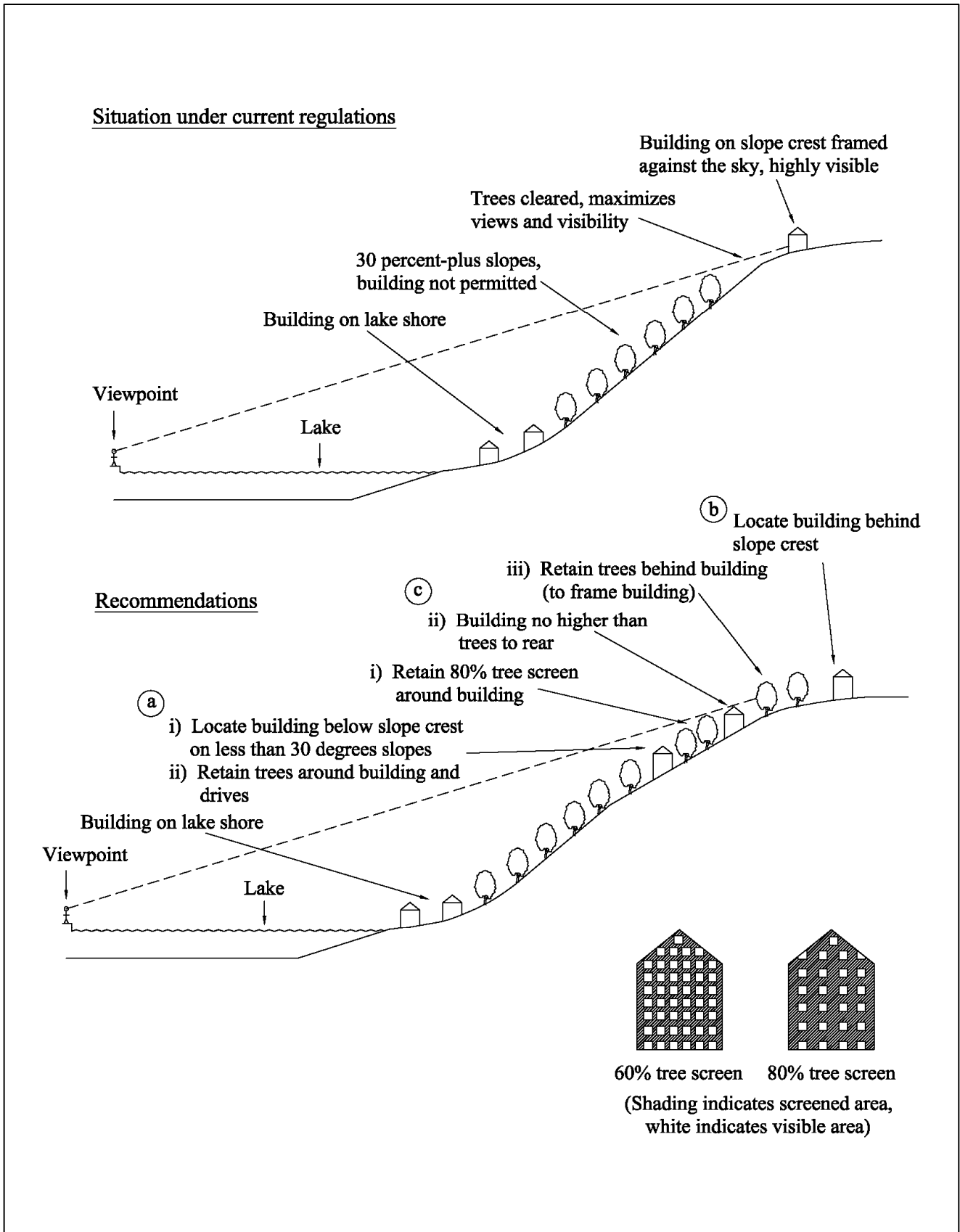


Figure 4.1: Development Options on Slope Crests



Landowners who harvest timber in scenic protection areas should be required to replace trees, should building occur on a site before the forest has regenerated. Landowners would need to be made aware of this requirement when they submit a timber harvest plan. In implementing this policy, a number of details would need to be worked out including what percentage of a harvest would trigger the bonding requirement (a select harvest might not, for example), and what size (e.g., caliper) of trees would have to be replanted.

4.8.3 *Development Character*

The 2004 *Watershed Study* highlighted concerns about the compatibility of new construction with existing development.¹⁹ The *Watershed Study* highlighted the trend toward larger homes, and the problems that can arise as these newer, larger homes are built next to much smaller existing homes. Similarly, the *Watershed Study* identified the need to ensure that new commercial development was compatible with existing commercial uses. To address these issues, the Planning Commission recommended the following actions, which are also recommendations of this Comprehensive Plan.

- Limit the enlargement or extension of existing nonconforming structures under Section 801 of the Zoning ordinance.

This recommendation particularly addresses the development of new large houses (or the major expansion of existing houses) on relatively small lots. Please see Recommendation 4iii.d in the *Watershed Study Recommendations* document in the Plan Appendix for more detail.

- Add additional construction standards (such as building material, roof styles, or similar standards) in the Zoning Ordinance for commercial buildings (see Recommendation 7 in the *Watershed Study Recommendations* document in the Plan Appendix).

4.9 **Community Facilities**

4.9.1 *Parks and Recreation*

Parks

The 1,400-acre Deep Creek Lake State Park is the largest concentration of protected land in the Influence Area, and is also the only public park. The Maryland Department of Natural Resources owns and manages Deep Creek Lake, as well as a buffer strip of land around the lake. The Lake and its entire perimeter are public areas on state-owned land, but aside from Deep Creek Lake State Park, there are no public access points to the Lake.

The McHenry Community Park on Bumble Bee Road is just outside of the Influence Area, although it does serve the Influence Area, particularly McHenry.

Recreational Trails

Existing off-road trails in the Influence Area include the Deep Creek Lake State Park trail system, with approximately 9.5 miles of hiking and mountain biking trails. The Wisp Resort also includes a hiker/biker trail system.

In addition to the on-road trails identified in Section 4.6.1, the 2003 Recreational Trails Plan Update recommends that two off-road trails be developed to serve the Influence Area: a trail connecting Deep Creek Lake State Park and Grantsville (generally via the Pleasant Valley 4-H Center and along Meadow Mountain); and a trail connecting the Wisp Resort with

¹⁹ See Recommendations 4iii.d, 4iv, 7, and 8i in the *Watershed Study Recommendations* document in the Comprehensive Plan Appendix.

Herrington Manor State Park (to be developed in conjunction with the Wisp Resort). Existing trail systems at Deep Creek Lake State Park and the Wisp Resort could be part of these recommended connections. Map 4.8 shows these recommended on-road and off-road trail improvements.

Extending snowmobile trails into the Influence Area would also enhance winter recreational opportunities.

Recreation Center

As described in Chapter 8 (Community Facilities), a new Community Athletic and Recreation Center (CARC) will be built on the campus of Garrett College. This facility will provide indoor recreational opportunities for the Influence Area and the County as a whole.

4.9.2 *Lake Access*

Public access to Deep Creek Lake is an important and sensitive issue. On one hand, the Lake is a publicly-owned resource. On the other hand, owners of lakeside property are concerned about trespassing and nuisances that could result from uncontrolled access. However, as the 2004 *Watershed Study* pointed out,

in the long run...providing more places where these activities can take place will reduce trespassing and nuisance occurrences in places where public access is not desirable. Pressure for Lake access is bound to increase, given continuing development of properties away from the Lake.

The *Watershed Study* recommended, and the Planning Commission endorsed, the creation of public and private/quasi-public areas for access to Deep Creek Lake. Such Lake access points would ideally accommodate or include some or all of the following: scenic views, fishing, picnic tables, put-ins for car-top boats (e.g., canoes or kayaks), and possibly a limited amount of parking. Clear signage should direct visitors to these locations. DNR's 2004 Deep Creek Lake Boating and Commercial Use Carrying Capacity Study specifically called for car-top boat put-ins. New Lake access points would not include boat ramps or other major recreational facilities.

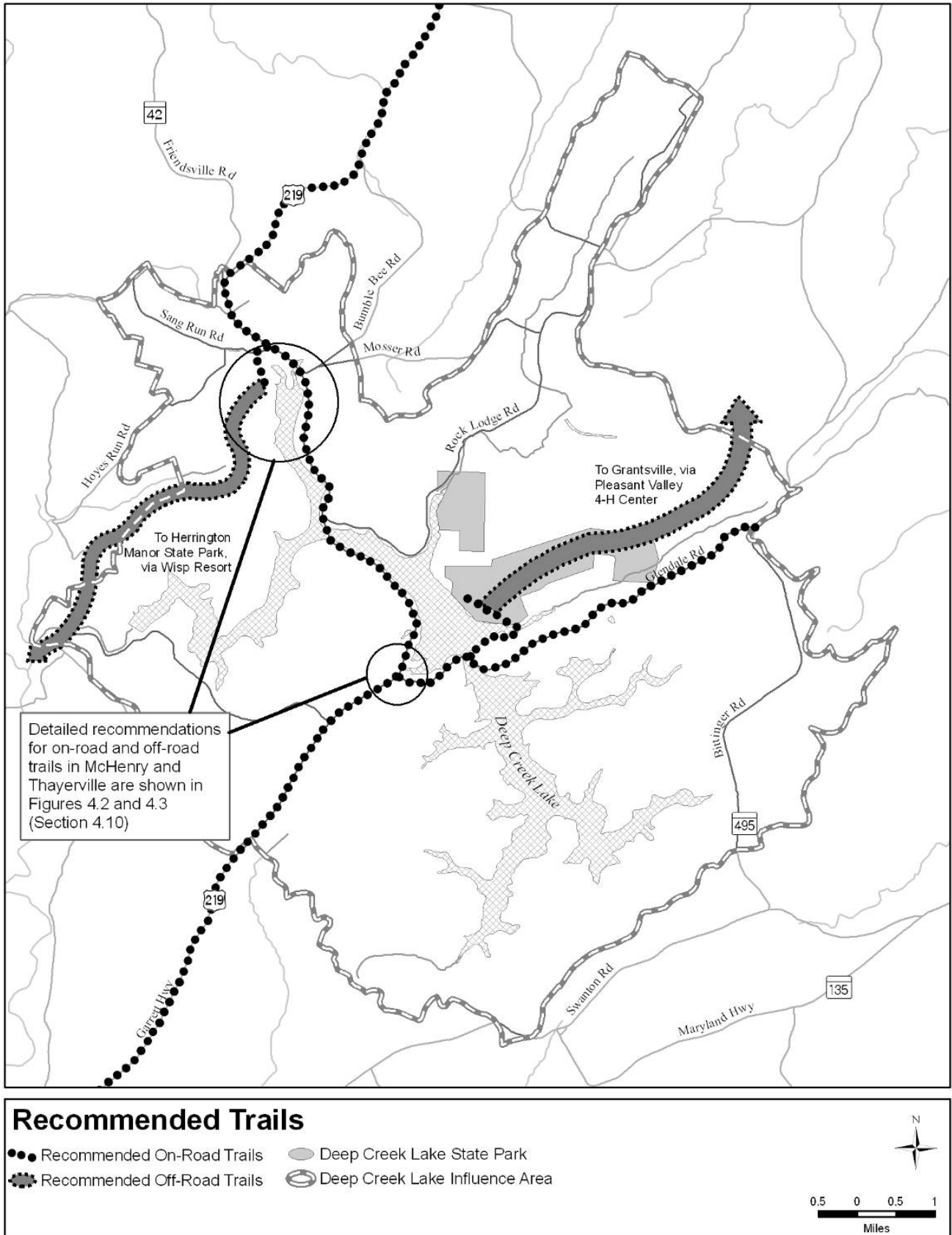
Private/quasi-public access points, such as the areas behind the Honi-Honi Bar or the planned Up the Creek restaurant in Thayerville, are typically created during the site development process, and are encouraged wherever feasible.

The County, in cooperation with DNR, is investigating the following potential public access points:

- Near the Deep Creek Lake dam, with access from Mayhew Inn Road.
- On DNR-owned land along Cherry Creek Cove, near the intersection of Rock Lodge Road and State Park Road.
- Deep Creek Lake State Park, near the Administrative Office.
- South of Point View Inn, near McHenry (see Figure 4.2).
- On the south side of the Deep Creek Bridge (US 219), where there is an existing DNR-owned parking lot and fishing access area.

In addition, the McHenry and Thayerville Improvement Plans (see Section 4.10) recommend other locations for public lake access.

Map 4.8: 2003 Recreational Trails Plan Update – Recommendations



4.9.3 *Public Safety*

The Deep Creek Volunteer Fire Department, located along Deep Creek Drive in McHenry, is the first responder for fire and medical emergencies (including water rescue) in the Influence Area, although fire and medical services from Oakland, Deer Park, and Accident may occasionally be called.

Police protection is provided by the Garrett County Sheriff's Office, based in Oakland, and the Maryland State Police, whose barracks are located at the Garrett County Public Safety complex at the intersection of US 219 and MD 42, north of McHenry.

Tourist activity in the Influence Area, particularly skiing and other outdoors-oriented activities, generates considerable demand for medical services in the Influence Area, and this demand is expected to rise as new seasonal residences are constructed, and as the Lake Area's attractions expand.

In addition, the Deep Creek VFD is surrounded by heavily traveled roads and intersections. As described in Chapter 8, moving the fire station out of central McHenry, to a location on US 219 north of McHenry (possibly at or near the Public Safety Complex) is under consideration.

4.9.4 *Community Facilities Recommendations*

This Plan makes the following recommendations for community facilities in the Influence Area:

- The County should continue to work with the Chamber of Commerce, DNR, and private land owners (including the Wisp Resort) to complete the recommended on-road and off-road recreational trails shown in Map 4.8, as well as the pedestrian and bicycle recommendations described for McHenry and Thayerville (Section 4.10).
- The County should continue to work with DNR to establish public Lake access points, particularly those described in Sections 4.9.2 and 4.10.
- The County should support the relocation of the McHenry Volunteer Fire Department to the area near the Public Safety Complex.

4.10 **Improvement Plans for Centers**

McHenry and Thayerville are the Deep Creek Lake Influence Area's two business and commercial centers, and also the largest Priority Funding Areas near the Lake. These two centers serve residential areas around the lake, as well as other parts of the County, particularly Accident and areas north of Oakland. The 2004 *Watershed Study* recommended Improvement Plans be developed for both centers. Those Plans, described in this section, detail the improvements necessary to enhance McHenry and Thayerville as centers for the Influence Area and the County as a whole.

4.10.1 *McHenry*

For most visitors, McHenry is the gateway to Deep Creek Lake, and is the Lake area's focal point for retail stores, restaurants, and other forms of entertainment. It also has a concentration of community service facilities, such as the Influence Area's only post office and fire station, the Fairgrounds, Visitor Center, Garrett College, and (north of McHenry itself) the County Public Safety Complex. Much of the projected residential and non-residential development in the Influence Area will occur near, or will use the businesses and services located in McHenry.

Issues and Concerns

The basis for the McHenry Improvement Plan is a two-day public workshop that was held on May 4th and 5th, 2007 at Garrett College. The evening of May 4th was devoted to data sharing and description of the key issues facing McHenry. May 5th was reserved for the development and refinement of recommendations for land use, traffic and circulation, urban design, and public facilities in McHenry. Approximately 60 property owners, residents, business owners, and other participants attended.



A break-out group at the McHenry Work Session

The work session focused on the central portion of McHenry (see Figure 4.2), but also considered needs in the broader area around McHenry. Work session participants identified the following major issues that the Comprehensive Plan should address:

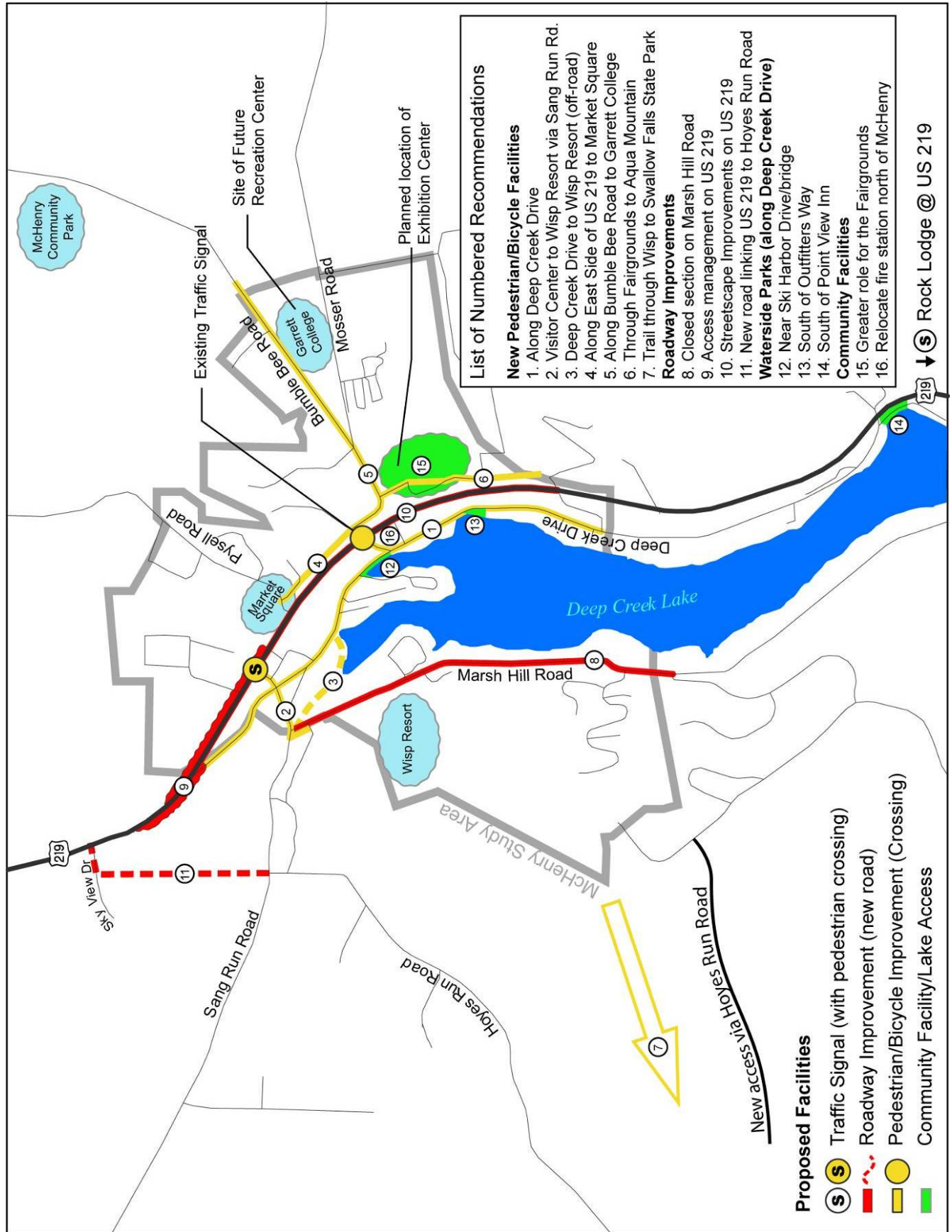
- The types and locations of land uses in McHenry are generally good, but these land uses need to be better linked, especially via pedestrian and bicycle connections.
- There is almost no public access to the lakefront, no public park or open space, and few safe places to walk or bicycle in McHenry. This severely limits recreational opportunities—one of the primary reasons for visiting the area.
- The lack of pedestrian and bicycle connections also forces residents and visitors to use automobiles for nearly all trips. This increases traffic congestion (especially on US 219) and also threatens the safety of those individuals who do choose to walk (often on narrow shoulders or on the road itself), or who wish to cross US 219 to access services and stores.
- Traffic congestion and conflicts on US 219 are worsened by multiple driveways and access points.
- Parking for major events (peak weekends at Wisp, the County Fair) needs to be better controlled, perhaps with enhanced shuttle bus service.
- The fairgrounds (owned and operated by a private entity) host a few events each year (most notably, the annual Agricultural Fair), but are not heavily used at other times, despite their location in the heart of McHenry.
- Signage for parking and services is needed, and should be uniform in design.

Recommendations

The major recommendations that emerged from the work session to address these issues are shown in Figure 4.2, and are described below. Many of the road and pedestrian/bicycle recommendations developed during the work session are described in greater detail in Section 4.6.2, while the potential relocation of the fire station is described in Section 4.9.3.

- #1: Pedestrian/bicycle improvements along Deep Creek Drive. This Plan's primary recommendation is to consider the feasibility of narrowing vehicular lanes or acquiring right-of-way to install a marked bike/pedestrian path on Deep Creek Drive and Marsh Hill Road. The County may also wish to consider the feasibility of converting some segments of Deep Creek Drive to a one way operation, so that an existing travel lane could be converted for bike and pedestrian use.

Figure 4.2: Recommended Improvements for the McHenry Area



- #8: Reconstruct Marsh Hill Road as a closed section. “Closed section” refers to a road that has curb and gutter.
- #9: Access Management on undeveloped properties with TC zoning. The County should work with SHA to develop access management plans for the portions of US 219 shown on Figure 4.2.
- #10: Streetscape improvements along US 219. This recommendation would upgrade the visual character of the segment of US 219 through McHenry (generally from Deep Creek Drive to Timber Ridge Road), and would include geometric improvements, signage, and other measures to enhance pedestrian/bicycle safety (in addition to the pedestrian crossings already described).
- #12-14: Waterside parks. These parks would provide public Lake access, as defined in Section 4.9.2.
- #15: The County should work with the Garrett County Agricultural Fair Board of Directors to encourage additional community events at the Fairgrounds.
- Pedestrian crossings of US 219 at Mosser Road and Sang Run Road. These crossings could include special high-visibility pavement, special lighting, or raised crosswalks, as well as pedestrian islands in between the northbound and southbound lanes of US 219.



Pedestrians and bicyclists often travel on Deep Creek Drive, despite a lack of safe paths or shoulders

4.10.2 *Thayerville*

While much smaller than McHenry, Thayerville is an important commercial hub for the southern and central portions of the Influence Area. Thayerville is home to a cluster of restaurants (including a proposed new restaurant) and stores, as well as the Influence Area’s only movie theater. Figure 4.3 shows the study area used for the Thayerville Improvement Plan, generally the area surrounding the intersection of US 219 and Glendale Road.

Issues and Concerns

A few property owners have expressed interest in development or redevelopment in the Thayerville study area, specifically the Keystone Lime property, the former mini-golf site, and the MUG, LLC property at the corner of US 219 and Glendale Road (as identified on Figure 4.3). No new development has officially been proposed for these locations. However, local landowners and developers believe residential development in the southern portion of the Influence Area and increased traffic in McHenry will continue to make Thayerville an attractive location for commercial development to serve areas outside of McHenry.

The planned Up the Creek restaurant (at the northeast corner of US 219 and Glendale Road) responds to this demand.²⁰ The owners of the Keystone Lime property have also

²⁰ Source: Personal Interview. October 24, 2007. Representative from Land Management, Inc, which manages the Up The Creek site, as well as the Pizzeria Unos/Arrowhead Market/Honi-Honi Bar property.

investigated redevelopment of their property, which was once envisioned as the location of the Exhibition Center, now destined for the Fairgrounds in McHenry. While Keystone Lime plans to continue existing industrial activities in the near future, long-term development options are being considered.

As described in Section 4.7, the lack of public water service in Thayerville is a significant concern for residents and businesses, and is being addressed by the County.

The commercial core of Thayerville has a compact, walkable scale—the Pizzeria Unos/Arrowhead Market/Honi-Honi Bar property is only approximately one-third of a mile from Dry Dock Plaza. Existing and proposed residential areas (Alpine Village, Silver Ridge, and Timberlake) are also within one-quarter mile of the intersection of US 219 and Glendale Road. However, the only pedestrian/bicycle facility in the area is a path and boardwalk along US 219 between the Garrett 8 Theater and Glendale Road.

There are no opportunities for public lake access in Thayerville, although there is private-quasi-public access behind the Unos/Honi-Honi Bar and the planned Up the Creek restaurant. Additional public access or private-quasi-public access (as defined in Section 4.9.2) is desirable.

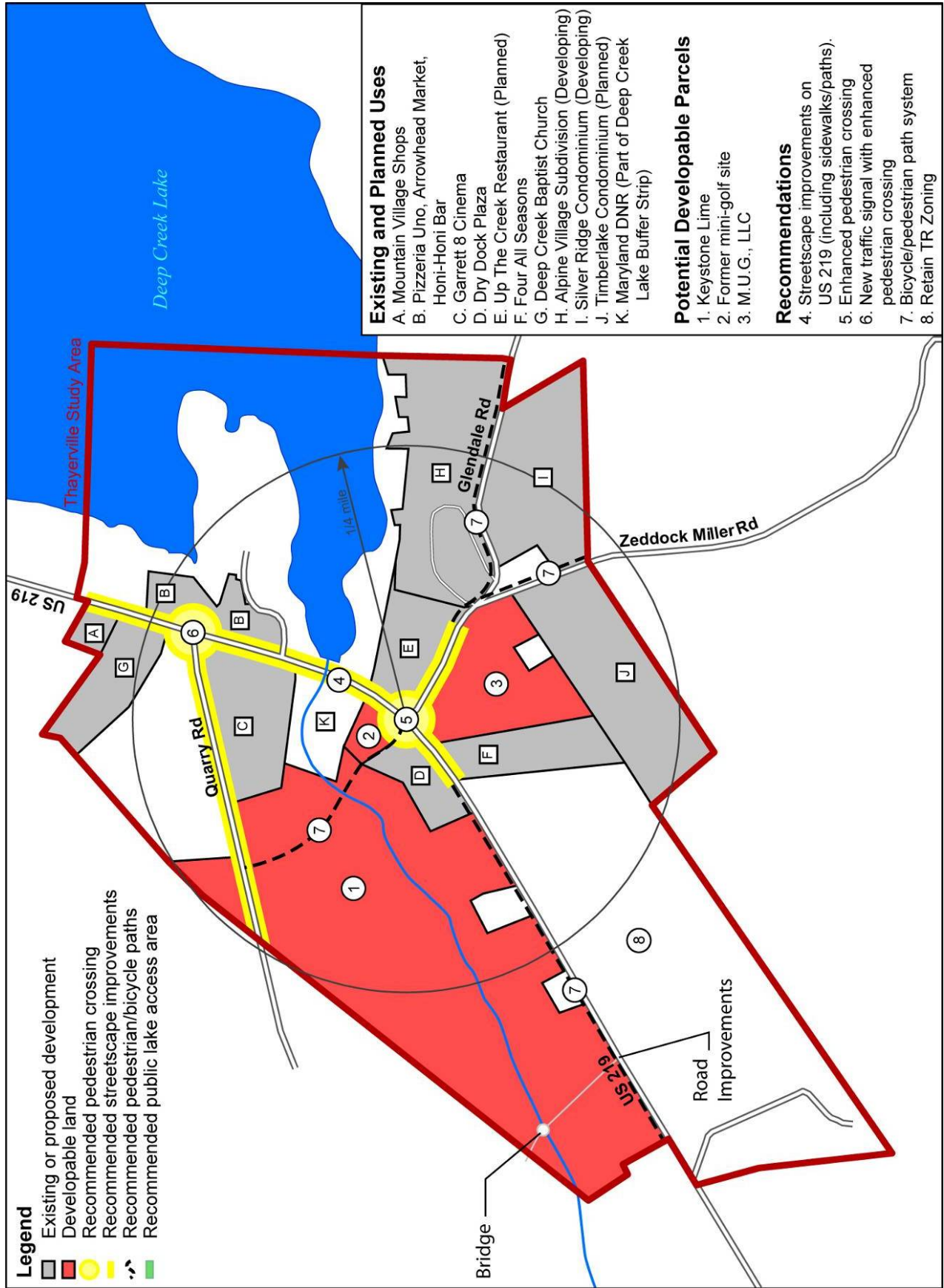
Recommendations

- Recommended improvements for the Thayerville area are shown in Figure 4.3 and described in detail below.
- Streetscape improvements along US 219 and Glendale Road would include a sidewalk or path system, pedestrian-scaled lighting, and a more clearly marked crossing at Glendale Road (perhaps with special high-visibility pavement or raised crosswalks).
- A new traffic signal at the US 219/Quarry Road intersection, with pedestrian crossing amenities similar to those described above for the Glendale Road intersection. This signal could be pedestrian-activated prior to redevelopment of the Keystone Lime property, but would likely need to be converted to standard operation once the Keystone Lime property is redeveloped.
- A new pedestrian path extending from the US 219/Glendale Road intersection to Quarry Road, via the Keystone Lime property.
- New development or redevelopment—particularly commercial uses—in the Thayerville study area should be clustered within one quarter mile of the US 219/Glendale Road intersection.

This particularly applies to the Keystone Lime property, where a previous conceptual plan indicated the possibility of a significant amount of new construction. Redevelopment on this property should cluster higher density/intensity uses at the northern end of the site (near Quarry Road), where they will reinforce the existing and planned activities in Thayerville's core. The circulation system within the redeveloped Keystone Lime property should connect US 219 and Quarry Road, via the planned road and completed bridge over the creek that feeds Arrowhead Cove (shown at the western end of the property on Figure 4.3).

- Areas south of US 219 and west of the Four All Seasons store should retain their TR zoning (which also covers the Silver Ridge and Timberlake properties). All other parts of the study area are zoned TC, and should retain this zoning.
- Encourage private/quasi-public lake access where possible.

Figure 4.3: Recommended Improvements for the Thayerville Area



4.11 Organization and Management

In addition to calling for the creation of this Master Plan, the 2004 *Watershed Study* recommended specific actions to help the County and the Influence Area's citizens manage the increasingly complex land use, transportation, community facility, and other challenges facing the Influence Area. The October 2006 amendments to the Zoning Ordinance implemented many of the *Watershed Study's* recommendations.

This section of the Comprehensive Plan lists the remaining *Watershed Study* recommendations that were endorsed by the Planning Commission, and adopts them by reference.

Adopt a More Proactive Stance Toward Management and Enforcement

In most cases, the zoning, subdivision, and other ordinances are adequate to guide development in the Influence Area. However, enforcement of those ordinances should be improved to ensure that the County's regulatory intent is implemented. Specifically, the County should:

- Support increased state inspection and enforcement of sediment and erosion control standards.
- Hire a zoning inspector.
- Issue citations for illegal parking on public streets.

Waterfront Business

The high value of waterfront property and the residential densities permitted by TC zoning make it difficult to recruit and retain waterfront businesses (such as restaurants), despite the community's desire to retain such establishments. To address this issue, the County should:

- Work "one on one" with individual waterfront businesses at risk of being lost.
- Explore with the local tax assessor the potential for changes in the way that property assessment values are prepared for waterfront businesses.

4.12 Policies and Actions

1. Use the Land Use Plan Map as the basis for revisions to the Deep Creek Watershed Zoning Ordinance and zoning map.
2. Amend the text of the Zoning Ordinance:
 - Remove the RD zoning district.
 - Replace the existing LR district with the LR1 and LR2 districts, as described in Section 4.5.1.
 - Create the AR and RR districts, with the same permitted land use types as LR, and clustering and site layout provisions that match the recommendations for AR and RR Land Classifications in Chapter 3 of this Plan. AR and RR districts would not be eligible for public sewer service.
 - Establish Scenic Protection Areas, with the following provisions, as described in section 4.8.2:
 - Encourage clustering of homes.
 - Encourage placement of non-residential development on the most suitable portion of a tract to preserve open space within developed areas.
 - Establish standards for identifying areas of outstanding scenic quality and for providing incentives to assure that development in such areas is harmonious with their scenic value.
 - At the time of plat submittal, the applicant may submit their own detailed viewshed analysis to determine the extent of Scenic Protection Areas on their property, in lieu of the generalized areas shown on Map 4.7.
 - Limit the enlargement or extension of existing nonconforming structures under Section 801 of the Zoning ordinance, as per Recommendation 4iv of the *Watershed Study*.
 - Add additional construction standards (such as building material, roof styles, or similar standards) in the Zoning Ordinance for commercial buildings, as per Recommendation 7 of the *Watershed Study*.
3. Extend the McHenry growth area (PFA) and TR land classification to include the properties near the intersection of US 219 and MD 42 (as shown on Map 4.5), but do not extend zoning to these properties.
4. Construct the following roadway and pedestrian/bicycle circulation improvements:
 - New traffic signals on US 219 at Sang Run Road and Rock Lodge Road.
 - Improved wayfinding signage in McHenry, particularly to identify parking for tourist activities such as the Wisp Resort.
 - Transportation and circulation system improvements for McHenry as shown in Figure 4.2 and described in Section 4.10.1.
 - Transportation and circulation system improvements for Thayerville as shown in Figure 4.3 and described in Section 4.10.2.
5. Implement the following transportation-related strategies, as described in section 4.4.3:
 - Amend the Subdivision Regulations to give the Department of Planning and Zoning clear authority (in consultation with the Roads Department) to require a traffic impact study prior to final plat approval.
 - Ensure that MD SHA has the opportunity to review and comment on traffic studies related to development near state roads.

- Work with MD SHA to develop an access management plan for US 219 in the Influence Area, focusing specifically on the portion of the highway that passes through McHenry.
 - Develop a County-maintained access management strategy for Glendale Road, Deep Creek Drive, Mosser Road, and Sang Run Road.
 - Consider establishing transit service in the McHenry area for busy summer and winter seasons, incorporating or building on the existing Wisp shuttle.
6. Work with SHA to add the transportation improvements recommended above to the Highway Needs Inventory (HNI) and Consolidated Transportation Program (CTP).
7. Conduct a study to determine the amount of revenue necessary to fund the transportation system improvements, including (but not limited to) the road, pedestrian, bicycle, transit, and other strategies described in this Master Plan. Obtain authority from the Maryland General Assembly to levy an excise tax, and establish such an excise tax (or an impact fee, if an excise tax is not desirable) to pay for these improvements. The final funding mechanism would be designed to balance the need for transportation improvements with economic development considerations.
8. As part of the next Comprehensive Plan update (approximately 2014), evaluate the need to expand the Deep Creek Lake WWTP to its full 3.9 MGD capacity.
9. Update the Water and Sewerage Master Plan as follows:
- Expand the McHenry water system as described in Section 4.7.
 - Define a new Thayerville water service area (based on ongoing efforts to identify water sources to serve development in this area). Consider extending the Thayerville water service area to include the commercial nodes along US 219 at Mayhew Inn Road and Sand Flat Road.
10. Develop public access points at various locations around Deep Creek Lake, including, but not limited to those described in Section 4.9.2 and 4.10.
11. Support relocation of the McHenry Fire Department to the area near the Public Safety Complex.
12. Work with DNR to continue monitoring of water quality in Deep Creek Lake.
13. Adopt a more proactive stance toward management and enforcement:
- Hire a zoning inspector
 - Increase state inspection and enforcement of stormwater management and sediment and erosion control standards (see Policy 6 in Chapter 7, the Sensitive Areas Element).
 - Issue citations for illegal parking on public streets.
14. Support efforts to retain and attract waterfront businesses:
- Work “one on one” with individual waterfront businesses at risk of being lost.
 - Explore with the local tax assessor the potential for changes in the way that property assessment values are prepared for waterfront businesses.