

Memorandum

Environmental
Resources
Management

To: John Nelson, Director

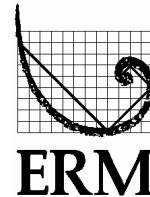
Company: Garrett County Planning and Land Development Office

From: Clive Graham

Date: February 1, 2007

Subject: Comprehensive Plan 2030 Growth Scenarios and Non-Residential Development Estimates

200 Harry S. Truman
Parkway, Suite 400
Annapolis, MD 21401
(410) 266-0006
(410) 266-8912 (fax)



This memo describes the proposed residential growth scenarios and estimated non-residential development for the 2008 Garrett County Comprehensive Plan. This memo updates the memo of November 6, 2006, reflecting comments from the public, elected officials, county staff, and the county's municipalities.

The scenarios show the amount and location of new growth that *could* occur through 2030 under different growth assumptions. The scenarios are based on careful analysis of development trends and land use patterns. The scenarios will be key components of the analyses and assessments that we will perform for the Comprehensive Plan related to land use, transportation, water, sewer and other community facilities, natural resources, and economic development.

The scenarios are different from growth *projections*, which will state what we think is most likely to happen. Rather, the scenarios show what, based on past trends, we think could likely happen. For prudent planning we want to explore the potential impacts of what could likely happen so that, if warranted, the Comprehensive Plan can include policies designed to address such growth. Until we do the analyses we do not know whether or not such policies will be needed.

Growth *projections* will be developed for the Comprehensive Plan. These may be lower than the rapid growth scenario described in this memo, but we do not expect them to be higher.

Residential Growth Scenarios

Table 1 shows the residential growth scenarios – expressed as the number of new housing units (all unit types) – for the County between 2005 and 2030. The scenarios are broken down by “sub-areas” of the County that will be analyzed for the plan. These sub-areas are the County’s major watersheds and municipalities. More detailed projections for the Deep Creek Lake area are also provided.

Figure 1 shows the boundaries of the County’s watersheds and municipalities, while Figure 2 shows the sub-watersheds that ERM delineated for the Deep Creek Lake Influence Area.

Table 1: Garrett County Comprehensive Plan Growth Scenarios Through 2030 (Housing Units)

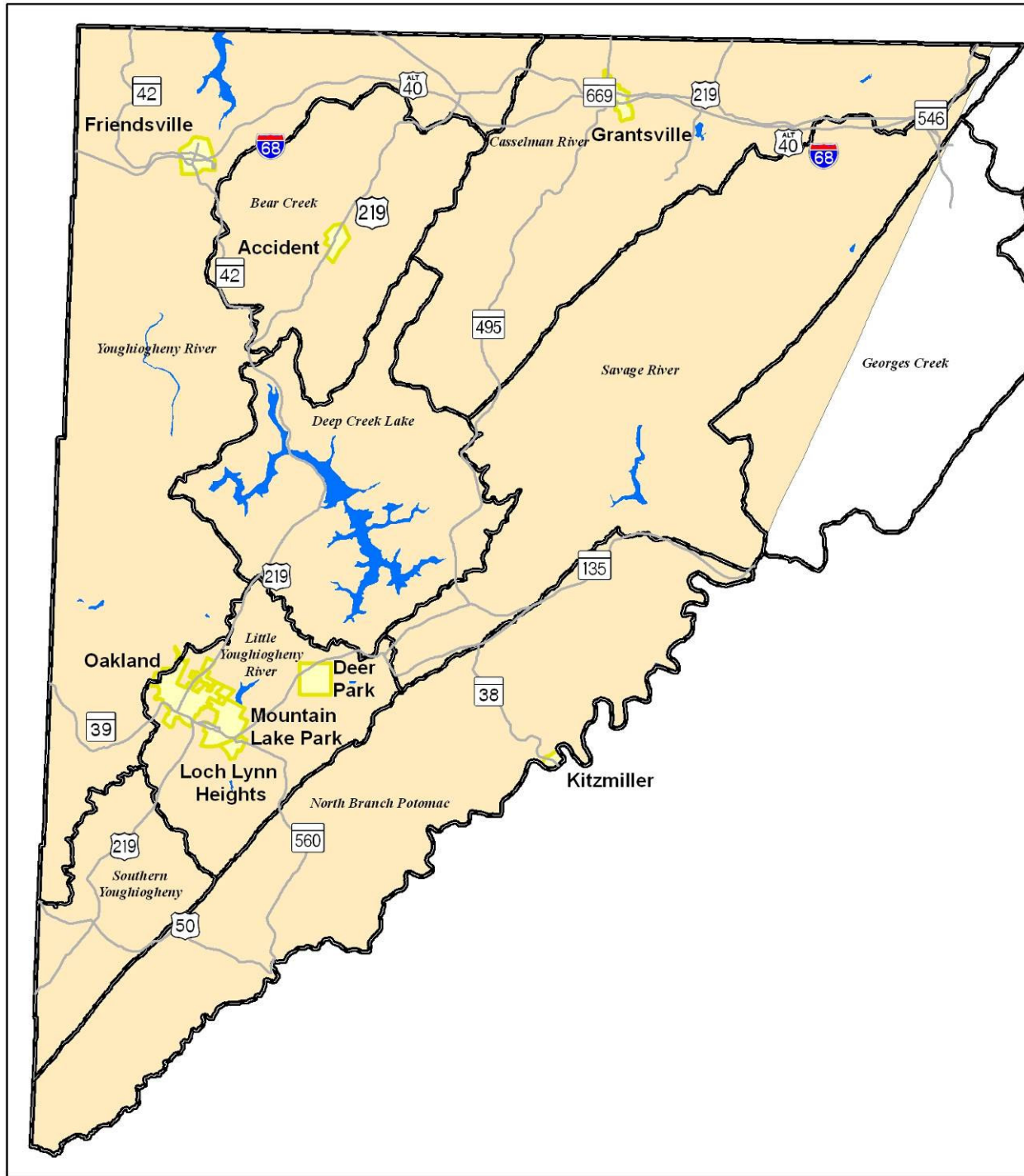
	2005 Existing ¹	Capacity (Current Regulations) ³	2030 Scenarios								Share of Capacity	1990 Existing ¹	Change 1990-2005	Share of County Units		Share of Growth: 1990-2005 ⁴	Units not in Deep Creek or Towns	
			Moderate Growth				Rapid Growth							1990	2005			County
			Pipeline ²	Planned ²	Scattered ²	Total	Pipeline	Planned	Scattered	Total								
Countywide Analysis																		
Watersheds																		
Youghiogheny River																		
Deep Creek Lake Influence Area ^{5,6}	124	1,076	252	996	25	1,273	252	1,121	50	1,423	132%	87	37	1%	1%	1%		
Bear Creek																		
Accident	168	166	-	-	25	25	-	-	25	25	15%	149	19	1%	0%	0%		
Remainder of Bear Creek	822	7,933	78	-	149	227	78	-	216	294	4%	595	227	4%	5%	5%	11%	
Southern Youghiogheny	386	5,008	7	-	40	47	7	-	54	61	1%	339	47	2%	1%	1%	2%	
Friendsville	281	61	-	-	25	25	-	-	50	50	82%	246	35	2%	1%	1%		
Remainder of Youghiogheny	2,680	28,723	94	18	551	663	94	18	747	859	3%	2,017	663	15%	15%	15%	33%	
Little Youghiogheny River																		
Oakland	961	537	-	-	250	250	-	-	300	300	56%	745	216	5%	5%	5%		
Loch Lynn Heights	210	108	-	-	25	25	-	-	50	50	46%	185	25	1%	1%	1%		
Mountain Lake Park	1,017	377	-	-	150	150	-	-	175	175	46%	810	207	6%	5%	5%		
Deer Park	181	1,088	-	-	75	75	-	-	100	100	9%	162	19	1%	0%	0%		
Remainder of Little Youghiogheny	1,306	8,188	16	17	179	212	16	17	242	275	3%	1,094	212	8%	5%	5%	10%	
Deep Creek Lake ⁷	5,559	23,084	735	1,342	700	2,777	735	1,842	1,250	3,827	17%	3,700	1,859	27%	41%	41%		
Casselman River																		
Grantsville	305	528	-	-	100	100	-	-	150	150	28%	237	68	2%	2%	2%		
Remainder of Casselman	1,955	16,201	24	-	408	432	24	-	536	560	3%	1,523	432	11%	10%	10%	21%	
Savage River	1,093	10,947	-	-	262	262	-	-	339	339	3%	831	262	6%	6%	6%	13%	
North Branch Potomac River																		
Kitzmilller	164	115	-	-	25	25	-	-	25	25	22%	154	10	1%	0%	0%		
Remainder of North Branch	1,048	19,995	23	-	152	175	23	-	204	227	1%	873	175	6%	4%	4%	9%	
Georges Creek	66	2,246	-	-	8	8	-	-	10	10	0%	58	8	0%	0%	0%		
Summary																		
Towns (10% of Total New Units)	3,287	2,980				675				875	29%	2,688	599	19%	18%	13%		
Deep Creek Lake Area (60% of Total)	5,683	24,160				4,050				5,250	22%	3,787	1,896	27%	31%	42%		
Rest of County (30% of Total)	9,356	99,241				2,025				2,625	3%	7,330	2,026	53%	51%	45%	100%	
County Total	18,326	126,381	1,229	2,373	3,148	6,750	1,229	2,998	4,523	8,750	7%	13,805	4,521	100%	100%	100%		

Deep Creek Lake Influence Area ⁷	2005 Existing ¹	Capacity (Current Regulations) ³	2030 Scenarios								Share of Capacity	1990 Existing ¹	Change: 1990-2005 Units	Share of DCL Area		Share of DCL Area Growth: 1990-2005
			Moderate Growth				Rapid Growth							1990	2005	
			Pipeline	Planned	Scattered	Total	Pipeline	Planned	Scattered	Total						
Deep Creek Lake Watershed																
1 Cherry Creek	128	3,237	13	-	20	33	13	-	20	33	1%	92	36	2%	2%	2%
2 Meadow Mountain		1,709	-	-	15	15	-	-	20	20	1%	-	-	0%	0%	0%
3 Marsh Run	1,294	1,804	80	348	50	478	80	348	100	528	29%	883	411	23%	23%	22%
4 Lower Deep Creek	335	1,615	-	673	20	693	-	948	40	988	61%	242	93	6%	6%	5%
5 Shingle Camp Hollow	129	184	126	-	5	131	126	-	15	141	77%	42	87	1%	2%	5%
6 Cherry Creek Cove	212	543	-	-	25	25	-	-	40	40	7%	123	89	3%	4%	5%
7 Meadow Mountain Run	204	1,166	12	-	25	37	12	-	40	52	4%	135	69	4%	4%	4%
8 Roman Nose Hill	386	203	-	-	20	20	-	-	40	40	20%	215	171	6%	7%	9%
9 Smith Run	79	238	96	-	25	121	96	-	50	146	61%	23	56	1%	1%	3%
10 Bee Tree Hollow	82	258	32	40	50	122	32	40	100	172	67%	49	33	1%	1%	2%
11 Red Run	231	1,053	-	-	25	25	-	-	50	50	5%	165	66	4%	4%	3%
12 Thayerville	250	1,596	117	-	85	202	117	-	200	317	20%	179	71	5%	4%	4%
13 North Glade Run	734	2,773	155	99	50	304	155	174	75	404	15%	457	277	12%	13%	15%
14 Green Glade Run	641	2,456	40	150	60	250	40	300	100	440	18%	510	131	13%	11%	7%
15 Hoop Pole Run	314	462	-	26	50	76	-	26	100	126	27%	228	86	6%	6%	5%
16 Blakeslee	99	245	31	-	75	106	31	-	125	156	64%	53	46	1%	2%	2%
17 Pawn Run	243	1,898	2	-	50	52	2	-	75	77	4%	176	67	5%	4%	4%
18 Upper Deep Creek	198	1,644	31	6	50	87	31	6	60	97	6%	128	70	3%	3%	4%
Deep Creek Lake Watershed Total	5,559	23,084	735	1,342	700	2,777	735	1,842	1,250	3,827	17%	3,700	1,859	98%	98%	98%
Youghiogheny River Watershed	124	1,076	252	996	25	1,273	252	1,121	50	1,423	132%	87	37	2%	2%	2%
DCL Influence Area Total	5,683	24,160	987	2,338	725	4,050	987	2,963	1,300	5,250	22%	3,787	1,896	100%	100%	100%

Notes

- Source: MD State Department of Assessment and Taxation (SDAT) Maryland Property View 2005 reflecting existing units as of August 1, 2005. Minor differences may exist between SDAT and census data, due to different data collection methodology.
- Pipeline units are those in Major subdivisions with approved plats, approved condominiums, or approved phases of Planned Residential Developments (PRD). Planned units indicate other development that has been proposed or is projected to occur by 2030. Scattered development refers to all other units to be constructed by 2030.
- Source: Maryland Department of Planning, Development Capacity Analysis, November 1, 2006. Capacity is the capacity of existing (2005) undeveloped or underdeveloped land.
- Indicates the percent of the fifteen-year countywide growth that occurred in each geographic area (e.g., watershed or town).
- It is assumed that 70% of the DC Development PRD and would be built out in the Moderate scenario; 90% in the Rapid Scenario, with the development split evenly between the Deep Creek Lake and Youghiogheny watersheds.
- The Deep Creek Lake Influence Area includes all of the Deep Creek Lake watershed, as defined by MDE, plus a small portion of the Youghiogheny River watershed, near the WISP Resort and Sang Run Road. Subwatersheds within the Deep Creek Lake Watershed were defined and named by ERM for the Comprehensive Plan process. They do not necessarily reflect Maryland Department of the Environment watershed boundaries. In cases where a parcel spanned multiple watersheds, the parcel was assigned to the watershed that contained more than half of the parcel's acreage, based on the County's tax assessment maps.
- It is assumed that half of the Thousand Acres property would be developed under the Moderate scenario; and that the entire property would be developed under the Rapid scenario.

Figure 1



Comprehensive Plan Watersheds

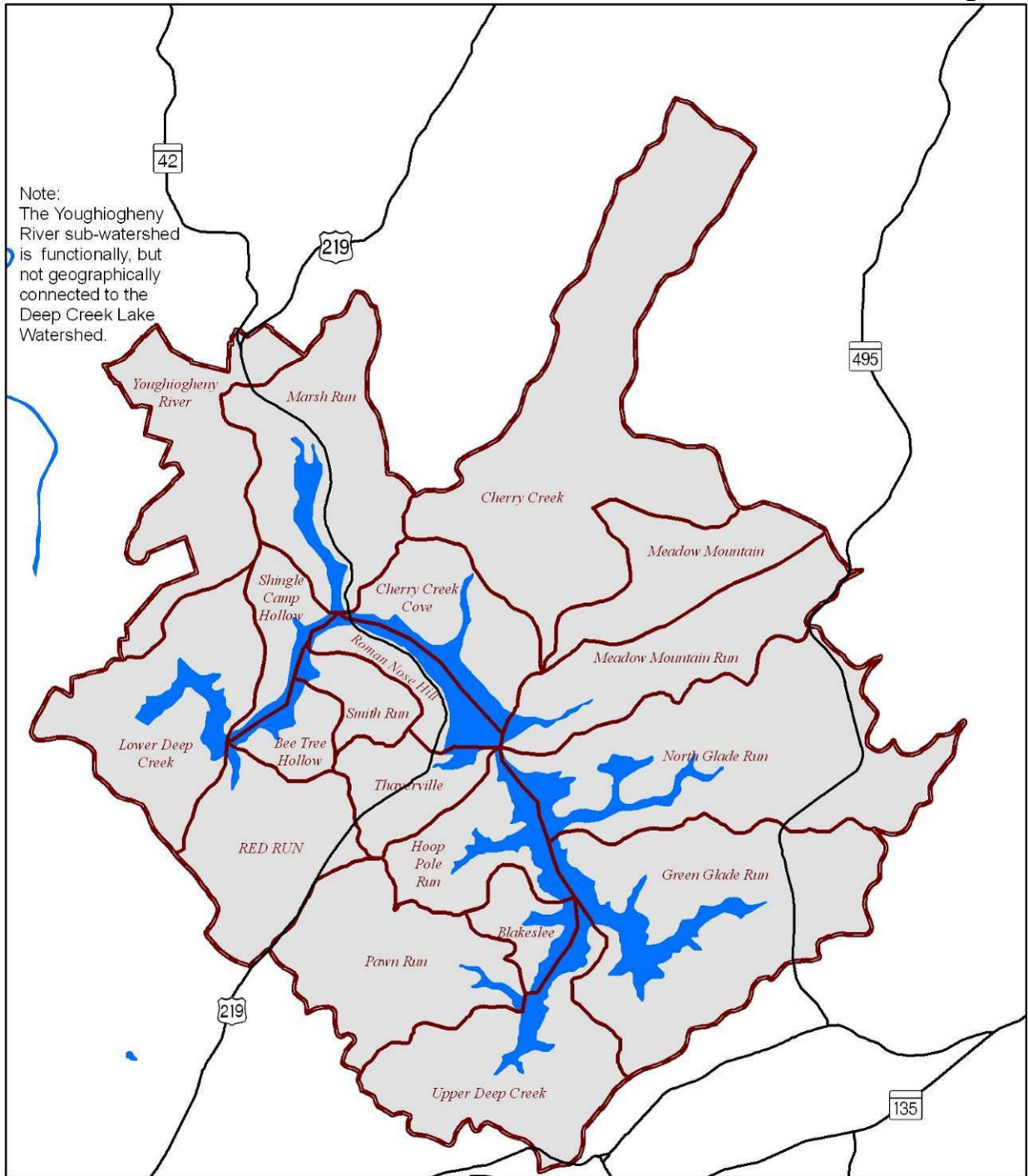
Legend

-  Watersheds
-  Municipalities

Note: Bear Creek and the Southern Youghiogheny are geographically part of the Youghiogheny River Watershed, but are treated separately due to distinct cultural and land use patterns.





Figure 2



Deep Creek Lake Sub-Watersheds

Legend

-  Sub-Watersheds
-  Deep Creek Lake Influence Area



Guide to Residential Growth Scenarios (Table 1)

Top Half of Table 1 (Moving left to right through the columns)

Watersheds: The Land Use element of the 2008 Comprehensive Plan will reflect the County's geography, specifically its major watersheds. The Maryland Department of the Environment defines seven such "eight digit" watersheds (referring to their hydrologic classification number) in Garrett County: the Casselman River, Deep Creek Lake, Georges Creek, the Little Youghiogheny River, the North Branch of the Upper Potomac River, the Savage River, and the Youghiogheny River. In Table 1, the Youghiogheny River watershed is further divided to reflect special land use and cultural patterns in the Bear Creek and Southern Youghiogheny sub-watersheds. These two watersheds each incorporate several smaller "12-digit" sub-watersheds (as defined by the MD Department of Natural Resources).

2005 Existing: The State Department of Assessment and Taxation (SDAT)'s 2005 Maryland Property View (MPV) database was used to calculate existing housing units in the County, its towns, and its watersheds. The 2005 database (the most up-to-date version that was available at the time of analysis) reflects units in place as of August 2005. Due to different data collection methods, there are slight variations between MPV database's unit totals and census data. The figures in this column were used primarily to compare relative sizes and relative growth within the various County geographies.

Capacity (Current Regulations): This column reflects the Maryland Department of Planning (MDP)'s Garrett County Capacity Analysis. MDP has prepared a separate memorandum describing the Capacity Analysis. "Capacity," as calculated by MDP, indicates the total number of units that could be built in different parts of the County under existing land development regulations. By comparison, the growth scenarios in Table 1 indicate the growth that could occur by 2030 (the Comprehensive Plan's horizon).

Please note that the total County capacity declined from 129,521 in the November 6, 2006 memo to 126,381 in this memo. The decline of 3,140 was due to an error in the MPV database in the Marsh Run sub-watershed. MDP has corrected its Capacity Analysis to reflect this change.

2030 Projected Moderate Growth and Rapid Growth Scenarios: These eight columns reflect two growth scenarios, both of which will be considered in the Comprehensive Plan.

The Moderate Growth Scenario assumes that development in Garrett County will continue at a pace slightly slower than what occurred during the 1990-2005 period. An average of 289 building permits (for new residential units) were issued per year during that period. This total excludes new mobile home permits.¹ The Moderate Growth Scenario assumes an average of 270 new residential units per year, for a total of 6,750 new units through 2030.

The Rapid Growth Scenario recognizes the higher growth that has occurred recently, and assumes a future pace of growth similar to what occurred during the 2001-5 period: an average of approximately 350 new permits (for new residential units) per year, for a total of 8,750 new units through 2030.

¹ This number is not insignificant. Between 2002 and 2006 (inclusive), an average of 24 permits per year were issued for mobile home units (1 per year in the Deep Creek Lake watershed), and 26 permits per year were issued for double-wide units (3 per year inside the watershed).

<i>Pipeline growth:</i>	Pipeline growth refers to new units that would be built as part of major subdivisions or other developments that are already approved: plats, condominiums, and portions of Planned Residential Developments (PRDs).
<i>Planned growth:</i>	Planned growth refers to new units that would be built as part of known major subdivisions or other developments that are not yet approved.
<i>Scattered growth:</i>	Scattered growth refers to new units that would be constructed as part of minor subdivisions, new development in the municipalities, and any development not otherwise categorized.
Share of Capacity	This is the amount of residential development in each watershed and subwatershed (under the Rapid Growth Scenario) expressed as a fraction of the available capacity (as calculated in the MDP Development Capacity Analysis).
1990 Existing:	The 2005 MPV database was used to count the number of housing in the County units built during or before 1990.
Change 1990-2005:	This column calculates the number of new units built between 1990 and 2005. (2005 Existing minus 1990 Existing)
Share of County, 1990 and 2005:	These two columns show the percentage of Countywide housing units that were present in a given geography in either 1990 or 2005. For example, the 1,093 units in the Savage River watershed in 2005 represent approximately six percent of the 18,326 housing units that were present in the County in 2005.
Share of Growth, 1990-2005, Entire County:	This column calculates the share of the County’s overall housing unit growth between 1990 and 2005 that occurred in a given geography. For example, the 262 new units built in the Savage River watershed represent six percent of the 4,521 new housing units that were built throughout the County from 1990-2005.
Share of Growth, 1990-2005, units not in Deep Creek or Towns	This column calculates the share of the County’s overall housing unit growth between 1990 and 2005 that occurred in the most rural parts of the County – areas not in the Deep Creek Lake Influence Area (see below) or in the towns. These areas together accounted for approximately 2,000 new housing units between 1990-2005. Of that total, for example, 663 units, or approximately 33 percent, occurred in the remainder of the Youghioghenny River watershed.

Bottom Half of Table 1

Deep Creek Lake Influence Area	The Influence Area includes the entire Deep Creek Lake watershed, plus a portion of the Youghioghenny River watershed on Marsh Mountain and along US Route 219 north of McHenry (see Figure 2). The Influence Area represents areas where development will impact infrastructure and services (specifically roads, emergency services, and possibly water and wastewater) within the Deep Creek Lake watershed – even though the Youghioghenny River portion of the Influence Area is not geographically part of the Deep Creek Lake watershed.
Deep Creek Lake Sub-watersheds:	These sub-watersheds were delineated and named by ERM, and will be used in the Comprehensive Plan’s Deep Creek Lake water quality assessment.
Share of Deep Creek Lake Influence Area Growth:	This column calculates the share of the Deep Creek Lake Influence Area’s overall housing unit growth between 1990 and 2005 that occurred in each of the sub-watersheds. For example, the Thayerville sub-watershed added 71 new housing units, or approximately 4 percent of the 1,896 new units added throughout the Influence Area.

Methodology

The scenarios use a base year of 2005, and a horizon year of 2030. The numbers in the scenarios were developed using the following process:

- Step 1. The total amount of growth for the 2005-2030 period was established based on past building permit trends and approved major subdivisions. As described above in the “growth scenarios” discussion, two separate scenarios were produced:
- a. The Moderate Growth Scenario assumes that development in Garrett County will continue at a slightly slower pace than what occurred during the 1990-2005 period: an average of approximately 270 new units per year, for a total of 6,750 new units through 2030.
 - b. The Rapid Growth Scenario recognizes the higher growth has occurred recently, and projects a future pace of growth similar to what occurred during the 2001-5 period: an average of approximately 350 new units per year, for a total of 8,750 new units through 2030.

The methodology for distributing growth (Steps 2 and beyond) was the same in each scenario.

- Step 2. The totals (6,750 and 8,750) were allocated to three geographic “pools” of development:
- a. Development in the Deep Creek Lake Influence Area: 60 percent of new units (Moderate: 4,050 units; Rapid: 5,250). Table 1 (the “share of growth” column) shows that the lake area captured 41 percent of all new County residential units during the 1990-2005 time period. During the 2001-2005 time period the share was 55 percent, according to County building permit data. Increasing this share to 60 percent for the growth projections reflects the County’s interest in preserving rural areas and encouraging development near existing services and infrastructure. This also recognizes the impact of major planned new developments within the Influence Area, such as Ridgeview Valley, Thousand Acres, and the WISP Resort.
 - b. Development in the Towns: 10 percent of new units (Moderate: 675 units; Rapid: 875). The towns captured 13 percent of all new residential units during the 1990-2005 time period, but only 6 percent during the 2001-2005 time period. Increasing this share to 10 percent for the growth projection exercise reflects the County’s interest in encouraging development near existing services and infrastructure.

- c. Development in the rest of the County: 30 percent of new units (Moderate: 2,025 units; Rapid: 2,625). The remainder of the County – typically the more rural areas outside of the towns and Deep Creek Lake Influence Area – would receive the remainder of new growth.

Step 3. Within Step 2's three geographic "pools," development was assigned to individual towns, watersheds, and sub-watersheds as follows:

- a. Deep Creek Lake Influence Area: The Influence Area was divided into 19 sub-watersheds (including a small portion of the Youghiogheny River watershed), as described above.
- b. Towns: Future growth in towns was assigned – in increments of 25 units – based on each town's existing size, its past development trends, and existing development capacity – as estimated by MDP. A separate memo was prepared to describe this process and solicit input from the towns.
- c. Rural Areas: Development outside of the Influence Area and outside of the Towns (the "30 percent" described in Step 2c above) was assigned according to the share of "rural" growth in each watershed during the 1990-2005 period. For example, the Savage River watershed received 13 percent of the County's "rural" growth in the past 15 years. That watershed is therefore shown as receiving 13 percent of future "rural" growth, or approximately 262 new housing units in the Moderate Growth Scenario.

Step 4. The watershed-level growth described in Step 3 was then separated into Pipeline, Planned, and Scattered development, as described above. The location and size of major subdivisions, condominium projects, and approved PRD phases was mapped and listed as either Pipeline or Planned development for the corresponding watershed or sub-watershed.

Any units assigned to a watershed that were not included in the Pipeline or Planned category were assumed to be Scattered future development. For example, Bear Creek (excluding Accident) is assigned a total of 227 new units in the Moderate Growth Scenario by 2030, of which 78 are in major subdivisions (Pipeline), and the remaining 149 units are in scattered development.

Pipeline and Planned developments were not broken out for the towns, so all town-level future development is assigned to the "Scattered" column.

Step 5. Scattered development in the Deep Creek Lake Influence Area was assigned to each subwatershed based on past development activity, available infrastructure, and MDP's development capacity analysis.

Non-Residential Growth

Understanding non-residential growth trends is also an important aspect of the Comprehensive Plan. In particular, non-residential growth can have impacts on the transportation network and on community facilities and services. Table 2 shows the anticipated non-residential growth. Alternate scenarios were not prepared for non-residential development. Non-residential development in Garrett County is for the most part in concentrated areas where the impacts of any greater than estimated development can be assessed on a site or local area basis.

Guide to Non-residential Growth (Table 2)

Top Half of Table 2 *(Moving left to right through the columns)*

Business/ Industrial Sites: These sites are the locations of existing or planned business parks, industrial parks, or major employment centers, as well as locations where employment centers could be developed. Many of these sites were identified in the 1995 Comprehensive Plan (listed as “Employment Center” land uses). Other sites were identified by the Planning and Land Development Office and the Garrett County Department of Economic Development.

General Location: This column identifies the site’s location within the County, for reference purposes.

Total Acres: Existing (2005) The gross acreage of the site, including developed and undeveloped areas.

Total SF: The approximate amount of developed floor area (in square feet) at the site.

Jobs: The total jobs at the site (estimated by the Dept. of Economic Development).

Built Out: The estimated share of total acres that is already developed.

Future (2030)

Additional SF: The amount of usable area estimated to be built by 2030, based on input from the Department of Economic Development. This reflects both the site’s build-out status, as well as estimated market demand.

Additional Jobs: The number of new jobs that would be associated with new non-residential construction, as estimated by the Department of Economic Development.

Bottom Half of Table 2 *(Moving left to right through the columns)*

Commercial and Retail Areas: These locations represent the major concentrations of commercial, retail, hotel, restaurant, and other retail/entertainment uses in the County.

Estimated Total SF (2005): Square footage is derived from 2005 Maryland Property View (MPV) data.

Existing Jobs (2005): Total number of jobs in the Retail, Arts and Entertainment, and Accommodation and Food Service categories, according to the US Census’ County Business Patterns database.

Future (2030) Additional SF: Estimated growth in each commercial/retail area, based on land availability and development trends (estimated by the Planning and Land Development Office, and to be further reviewed during the Comprehensive Plan Process).

Table 2: Nonresidential Development in Garrett County

Business/Industrial Sites	General Location	Total Acres	Existing (2005)			Future (2030)	
			Total SF	Jobs	% Built Out	Additional SF	Additional Jobs
Central Garrett Industrial Park	Accident	67	121,618	189	90%	20,000	25
Northern Garrett Industrial Park	Grantsville	66	152,656	158	85%	320,000	260
Southern Garrett Business & Technology Park	MD 135	224	228,090	549	85%	277,000	140
County Public Works Property	MD 135	114	-	-	0%	25,000	-
Keyser's Ridge Business Park	I-68 at US-219S	240	-	-	0%	300,000	450
Chestnut Ridge	I-68 at US-219N (NW Quadrant)	400	-	-	0%	100,000	150
Garrett Information Enterprise Center (Incubator)	GCC	n/a	12,795	35	80%	-	50
White Face Farm	Airport Area	340	-	-	0%	350,000	400
Exhibition Hall	Fairgrounds	n/a	-	-	0%	30,000	2
Southern Garrett Industrial Park (B & L)	MD 135	80	117,178	45	50%	125,000	100
Parcel 114 (adjacent to Public Works)	MD 135	228	-	-	0%	40,000	25
Oakland Lowes	North of Oakland	35	-	-	0%	110,000	90
Aspen Woods East	McHenry	98	-	-	0%	-	-
Wisp Resort, Adventure Sports	Marsh Mountain				Data to be collected.		
Sand Flat Plaza	Outside Thayerville	9	-	-	0%	30,000	-
Hotel/Water Park	McHenry	13	-	-	0%	266,660	-
Keystone Lime	Thayerville	16	-	-	0%	175,000	-
Recreation Center	GCC	n/a	-	-	0%	-	-
Total, Business and Industrial		1,892	632,337	976		1,697,000	1,692
Total Jobs, Garrett County, 2005^a				19,700			22,300
Total Business/Industrial Jobs, 2004^b				1,470			n/a

Commercial and Retail Areas (Includes retail, hotel, restaurant, entertainment, etc.)	Estimated Total SF (2005) ^c	Existing Jobs (2005) ^d	Future (2030) Additional SF
Oakland/Mountain Lake Park	1,702,000	3,800	300,000
Grantsville Area	317,000		100,000
Friendsville Area	91,000		20,000
Chestnut Ridge	267,000		75,000
Keyser's Ridge	37,000		100,000
McHenry	387,000		350,000
Thayerville	169,000		150,000
Total, Commercial and Retail	2,970,000		

Notesa: Source: Maryland Department of Planning, http://www.mdp.state.md.us/msdc/projection/Jobs/TotalJobProjections_2005.pdf

b: Includes the following industry codes, as listed in County Business Patterns: Manufacturing, Wholesale Trade, Transportation/warehousing

c: Source: Maryland Property View 2005

d: Includes the following industry codes, as listed in County Business Patterns: Retail, Arts and Entertainment, Accommodation and Food Service