

URBAN GROWTH BOUNDARY PLAN CECIL COUNTY, MARYLAND

Prepared for
Cecil County Offices of Planning and Zoning
and Parks and Recreation
129 E. Main Street
Elkton, Maryland 21921

June 2000

URS Corporation
Tatman & Lee Division
1200 Philadelphia Pike
Wilmington, Delaware 19809

(302) 791-0700

8500111099.01 99UGB

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGES</u>
I EXECUTIVE SUMMARY	I-1 to I-3
II BACKGROUND PLANNING	II-1 to II-4
III DEMOGRAPHICS AND LAND USE	III-1 to III-8
IV MUNICIPAL FACILITIES	IV-1 to IV-10
V URBAN GROWTH BOUNDARY	V-1 to V-20
VI MUNICIPAL SERVICE TO URBAN GROWTH BOUNDARIES	VI-1 to VI-12

MAPS

II-1 LAND USE DISTRICTS	II-3
III-1 PERCENT OF TOTAL POPULATION CHANGE 2000-2020	III-4
III-2 ABSOLUTE TOTAL POPULATION CHANGE 2000-2020	III-5
V-1 CECILTON	V-13
V-2 CHARLESTOWN	V-14
V-3 CHESAPEAKE CITY	V-15
V-4 ELKTON	V-16
V-5 NORTH EAST	V-17
V-6 PERRYVILLE	V-18
V-7 PORT DEPOSIT	V-19
V-8 RISING SUN	V-20

TABLES

III-1 POPULATION CHANGE 1970-1990, CECIL COUNTY	III-1
III-2 POPULATION CHANGE 1990-1998, CECIL COUNTY	III-1
III-3 POPULATION CHANGE 1990-1998, MARYLAND COUNTIES	III-2
III-4 POPULATION PROJECTIONS 1990-2020	III-3
III-5 ANNUAL AVERAGE GROWTH RATE BY DECADE	III-3
III-6 POPULATION PROJECTION 2000-2020	III-7 to III-8
IV-1 EXISTING AND FUTURE TOTAL WATER DEMAND, ELKTON	IV-4
VI-1 WATER NEEDS	VI-3
VI-2 WASTEWATER NEEDS	VI-4

APPENDICES

A SUSQUEHANNA RIVER BASIN COMMISSION CORRESPONDENCE	
B MARYLAND DEPARTMENT OF THE ENVIRONMENT CORRESPONDENCE	
C NORTH EAST SERVICE AREA AGREEMENTS	
D TOWN COMMENTS	



A report of the Maryland Coastal Zone Management Division, Department of Natural Resources pursuant to National Oceanic and Atmospheric Administration Award No. NA87OZ0236.

PURPOSE

The purpose of this Urban Growth Boundary Study is to create areas around each of the Towns, whereby the provision of water and sewer infrastructure would be closely coordinated between the County and the respective Towns. The primary focus of this Study has been to seek input from the Towns on their existing ability to serve areas currently outside incorporated boundaries, and to evaluate ways to effectuate that service. In the Route 40 corridor, the Urban Growth Boundaries (UGB's) are subareas of the larger Development and Suburban Districts. In the outlying areas, around the Towns of Rising Sun, Chesapeake City and Cecilton, the UGB's correspond to those areas designated as Town-Residential (TR) Zoning.

COMPREHENSIVE PLAN

The provision of a long-term wastewater system and water supply and distribution system into the I-95/Route 40 corridor, is the central tenet of the 1990 Cecil County Comprehensive Plan. Not only would a stable water and wastewater infrastructure provide one of the primary components needed to attract business and industry, but such infrastructure would also allow the County to focus new growth away from the northern and southern agricultural areas. Page 2 of the 1990 Comprehensive Plan, under Major Plan Features, states:

“Over the 20-year planning horizon to which this Plan is directed, the County is forecasted to grow from its present 78,000 residents to approximately 99,300. (Editor’s note: The 1990 Census later confirmed the population to be 71,347. See Section Three for latest year 2020 projections.) The distribution of new development will depend to large extent on the County’s ability to provide a public water supply and a sewer system to the Development, Town, and Suburban Districts recommended in this Plan. Development in these districts is currently limited by insufficient water supply and sewerage infrastructure. The County is studying the feasibility of a major water supply line along the I-95 and U.S. Route 40 corridor from an intake in the Susquehanna River. Until the water supply is available and sewerage collection and treatment facilities are constructed, a significant amount of the growth in the County will occur at low densities in the Rural Conservation and Resource Protection Districts. When the districts recommended for more intense development have the necessary infrastructure, the County should implement measures to attract development into these districts and discourage development in the Rural Conservation and Resource Protection Districts.”

This long narrative from the Comprehensive Plan is necessary to emphasize the importance accorded to water and sewer infrastructure in implementing the goals and objectives of both the growth districts as well as the agricultural districts. As will be discussed in Section 4, the growth districts are well served with sewage treatment facilities. Both the Perryville and Seneca Point treatment plants currently have excess capacity. Elkton is in the process of preparing the planning and preliminary engineering to upgrade its sewage treatment plant. Furthermore, although the regulatory requirements are increasingly stringent for sewage discharge permits, opportunities do exist to increase the capacities of treatment plants through innovative technologies. In terms of infrastructure, the provision of a long-term water supply has been the primary obstacle to a more complete implementation of the Comprehensive Plan.

HISTORY

Previous attempts to provide a long-term water supply to the Route 40 corridor began in earnest in the 1960's with an offer from William DuPont to construct a reservoir and dedicate it for public use. This offer was rejected. This concept was resurrected in the 1980's by the State and the County, whereby it was proposed to build a reservoir on State lands at Fair Hill (previously owned by Mr. DuPont). This project also never came to fruition. As mentioned in the above passage from the Comprehensive Plan, in 1990 the County was again attempting to provide a water source to the Route 40 corridor through the evaluation of several alternatives. This study entitled, Susquehanna River Water Supply Study, prepared by Gannett Fleming, Inc., recommended an upgrade to the Perryville Water Treatment Plant and a 24 inch main from Perryville to Elkton. Due to the high capital costs and low existing customer base, this project was also not implemented.

SUSQUEHANNA PIPELINE

Prior to this study, the latest attempt to plan for a water supply in the Route 40 corridor began in 1994. This 1994 plan also proposed to use the Perryville Water Treatment Plant, but first proposed to use the existing Mill Creek Treatment Plant in the interim to build a customer base prior to improvements at the Perryville Water Treatment Plant. In January 1998, the County received authorization from the Susquehanna River Basin Commission (SRBC) to purchase 800,000 gallons per day from the Town of Perryville. (The authorization letter from SRBC can be found in Appendix A.) The authorization from the SRBC was conditioned upon, among other things, execution of an agreement with the Town of North East regarding service to North East, and was also conditioned upon the County Master Water and Sewer Plan receiving approval from the Maryland Department of the Environment (MDE). In January 1998, MDE requested that the Draft Master Water and Sewer Plan be revised to include an inter-jurisdictional agreement with the Town of North East regarding

water, and to organize a regional task force that would create a long-term strategy for the coordination of the County and Towns on water supply. (MDE's January 16, 1998 letter can be found as Appendix B.) These items could not be accomplished and the plan could not be implemented. The concerns from SRBC and MDE in 1998 can be generally be described as the following:

- General lack of coordination with the Towns;
- Duplication of infrastructure within the Towns;
- Possible competition for water customers with the Towns;
- Lack of an overall growth management policy that provided for staged growth, once the water infrastructure was in place.

**AGENCY COMMENTS
ADDRESSED**

As will be seen in this report, this Urban Growth Boundary Plan provides a mechanism for providing long-term water and sewer infrastructure in the Route 40 corridor and the TR Zones. This Plan includes the following:

- Direct input from the Towns on the contents of the Plan, and on the path forward.
- Use of the Towns' infrastructure to disperse water and/or sewer service to the UGB's.
- Recognition by the County of the future annexation plans of the Towns.
- Establishment of a policy that the UGB's represent staged growth areas to allow the County and Towns to keep pace with other infrastructure and service needs.

This Plan represents a foundation on which the County and Towns can cooperatively address their water and sewer infrastructure needs.

COUNTY COMPREHENSIVE
PLAN

The County Comprehensive Plan, which was adopted in 1990 and revised in 1997, provides for a Land Use Plan which establishes seven (7) land use districts within the unincorporated portions of the County. Within each of these land use districts, the Comprehensive Plan makes varying recommendations on open space and density/intensity for development and for the provision of infrastructure. A brief description of the land use districts is as follows:

- **Resource Protection District** – Located in the southern portion of the County, this district seeks to protect the integrity of the agricultural industry in the area by offering the lowest residential densities in the Comprehensive Plan. Public water and sewage should not be provided in this district unless it is to abate an existing public health problem.
- **Rural Conservation District** – This district is located in the northern portions of the County as well as on the Elk Neck Peninsula. The district seeks to protect the rural character of the area by offering densities slightly higher than those in the Resource Protection District. As with the Resource Protection District, public water and sewer should not be provided to this district unless such service addresses an existing problem area.
- **Suburban District** – The Suburban District acts as a transition zone between the higher densities/intensities in the Development District and those in the Rural Conservation District. Public water and sewer facilities should only be provided to that portion of the district contiguous to existing development.
- **Development District** – The Development District, which is located generally along the Route 40 and I-95 corridor, offers the highest densities of residential uses as well as offering a range of commercial and industrial uses. Those portions of the Development District not designated for service in the County Ten-Year Water and Sewer Plan should be provided with public water and sewer if feasible.
- **Town District** – The Town District is located around the Towns of Rising Sun, Chesapeake City, and Cecilton. This district seeks to foster County/Town cooperation by providing for dual review of certain subdivisions. The intent is to promote development within the County of the same character as the respective Town. Those portions of the Town District not designated for service in the County Ten-Year Water and Sewer Plan should be provided with public water and sewer if feasible.

- **Village District** – This district seeks to protect the character of several historic crossroad and waterfront villages in the County. The Comprehensive Plan and subsequent Zoning Ordinance gives the Planning Commission the authority to require lot dimensional standards and landscaping consistent with the surrounding village. Public water and sewer service to the Village District should only be provided to abate a public health problem or if service can readily be extended from adjacent areas.
- **Mineral Extraction District** – The Mineral Extraction District seeks to protect important mineral resources of the County from pre-emptive development that would render the resources economically unrecoverable. It should be noted that not all areas designated as Mineral Extraction District in the Comprehensive Plan were subsequently zoned as Mineral Extraction-A or Mineral Extraction-B (overlay zone) in the comprehensive rezoning of 1993. These parcels should not be precluded from consideration of public water and/or sewer service because of their Comprehensive Plan designation.

The Land Use District Map can be found in Map II-1.

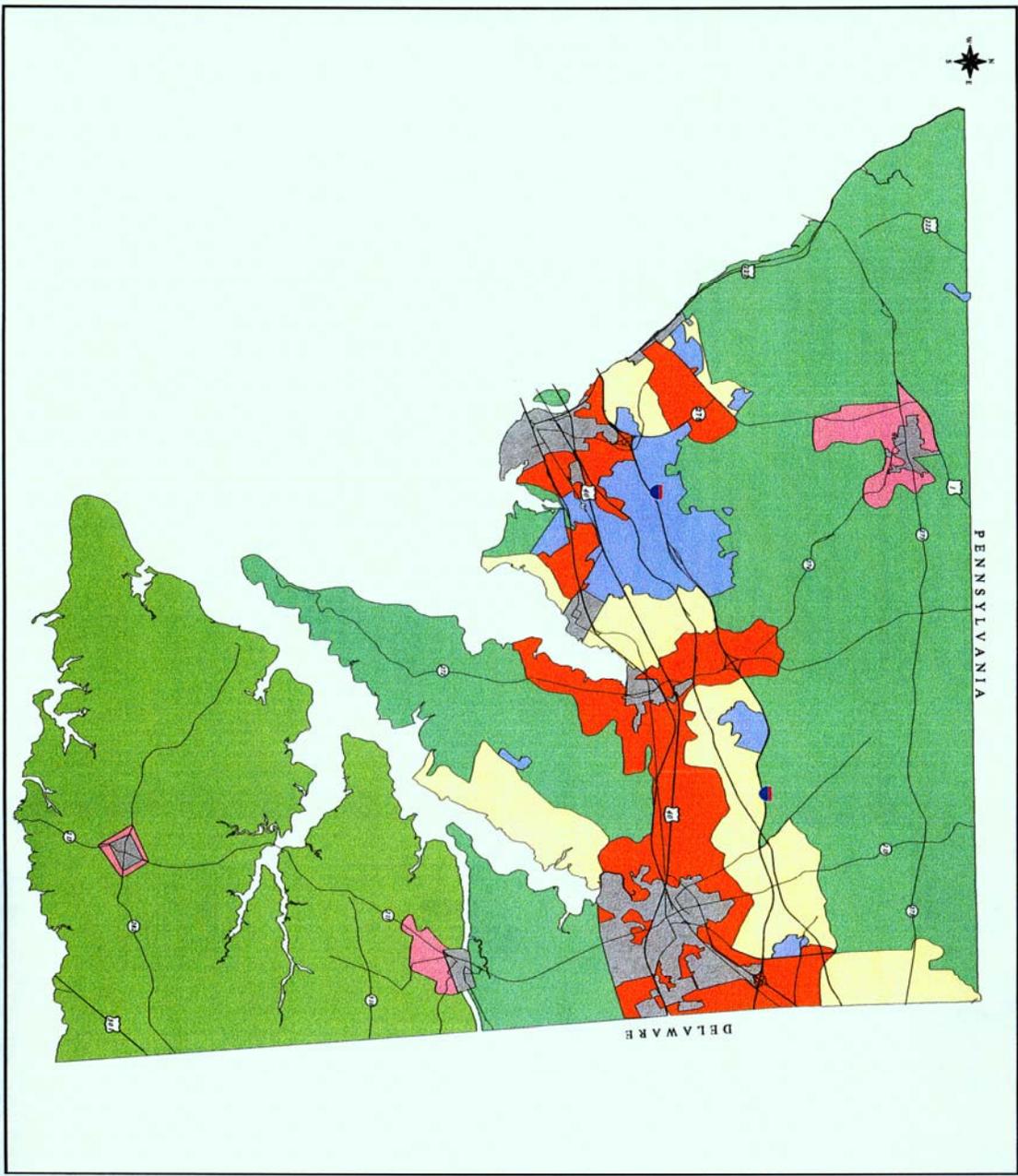
POLICY PLANS

Consistent with Article 66B of the Annotated Code of Maryland, the Comprehensive Plan also includes a Transportation Plan, Housing Plan, a Plan for Business and Industry and a Community Facilities and Public Services Plan. Within each one of these Comprehensive Plan components, goals and objectives are established as well as specific policy recommendations. The provision of water and sewer into appropriate areas is central to the implementation of the various policy recommendations. For example, a policy recommendation within the Housing Plan is for the County to:

“Work with the Towns to identify opportunities for affordable, high density housing in the Town Districts and Towns.”

A policy recommendation in the Plan for Business and Industry states:

“Provide public sanitary sewer, water supply, and transportation infrastructure in the corridor defined by Route 40, I-95, and the Northeast Rail corridor to accommodate new, more intense economic development.”



Cecil County
Urban Growth Boundary Plan



Tatman & Lee Associates
A Division of URS Corporation
1200 Philadelphia Pike
Wilmington, DE 19714
Tel: 302.791.0700
Fax: 302.791.9789

Map II-1

Land Use Districts

Although not specifically mentioned in the Transportation Plan, the provision of central water and sewer into appropriate areas is also a key component of successfully fulfilling one of the main goals of the Transportation Plan. One of the goals and objectives of the Transportation Plan is to:

“Focus transportation investments on defined growth areas. Limit investment outside these growth areas to those that address state-wide needs or health and safety considerations.”

Without central water and sewer in these “defined growth areas” that would allow developments to take advantage of the higher densities/intensities permitted in the Zoning Ordinance, major transportation investments in these areas would most likely not be cost-effective. Development would continue to occur at a higher pace outside these growth areas, leading to pressure to make transportation investments in areas not recommended by the Transportation Plan.

AGRICULTURAL PRESERVATION

Another central tenet of the County’s Comprehensive Plan is to maintain the County’s agricultural character as well as to maintain the farming infrastructure to support the continuance of agriculture as a viable industry. Again, without the provision of central water and sewer in defined growth areas, development pressure will continue on the agricultural areas of the County. In addition to providing another housing market within the County, central water and sewer could also assist in other agricultural preservation efforts. For example, transfer of development rights may be used to preserve agriculture while allowing property owners to realize land value equity of their farms. Currently, there is little opportunity for development within the defined growth areas to realize the maximum densities/intensities permitted under the current zoning. Even higher densities/intensities typically needed in the receiving areas of an incentive-based transfer of development rights ordinance, cannot be provided under the current infrastructure scenario.

POPULATION

As can be seen in Table III-1, Cecil County experienced a steady rate of growth between 1970 and 1990 with an increase of 18,056 persons over those two decades.

Table III-1
Population Change 1970 - 1990

1970	1980	1990	Increase	Annual Average Growth Rate	
			1970-1990	1970-1980	1980-1990
53,291	60,430	71,347	18,056	1.26%	1.67%

Source: U.S. Bureau of Census

This steady pace of growth has continued and even increased in the 1990's as evidenced in Table III-2. The County realized an increase of 11,175 persons within that eight (8) year period with an annual average growth rate of 1.84%.

Table III-2
Population Change 1990 – 1998

1990	1998	Increase	Annual Average Growth Rate
		1990-1998	1990-1998
71,347	82,522	11,175	1.84%

Source: Maryland Office of Planning

Compared to other Eastern Shore Counties, Cecil County experienced the largest absolute increase in population between 1990 and 1998, and the second highest annual average growth rate. Of the 24 counties in Maryland, Cecil County experienced the ninth highest growth rate during this period in the 1990's. Population changes from 1990 to 1998 for all the counties in Maryland can be found in Table III-3.

The Maryland Office of Planning (MOP) also estimates future population for Maryland counties in five (5) year increments to the year 2020. These estimates for Cecil County can be found in Table III-4.

Table III-3
Population Change 1990 - 1998
Maryland Counties

	Census									Absolute Change 1990-1998	Annual Average Growth Rate 90-98
	1990	1991	1992	1993	1994	1995	1996	1997	1998		
MARYLAND	4,780,753	4,855,948	4,902,664	4,943,092	4,985,453	5,023,442	5,057,839	5,094,924	5,134,808		
BALTIMORE REGION	2,348,219	2,376,192	2,392,437	2,405,056	2,416,858	2,425,675	2,430,878	2,436,973	2,444,280	96,061	0.50
Anne Arundel County	427,239	433,896	440,072	447,497	455,035	461,153	465,166	470,234	476,060	48,821	1.36
Baltimore County	692,134	699,332	703,322	706,260	709,066	712,855	717,099	720,520	721,874	29,740	0.53
Carroll County	123,372	127,262	130,092	132,618	136,066	139,926	143,449	146,834	149,697	26,325	2.45
Harford County	182,132	188,968	194,616	196,684	201,496	205,116	208,746	212,339	214,668	32,536	2.08
Howard County	187,328	194,622	199,669	207,375	213,826	219,372	224,509	229,501	236,388	49,060	2.95
Baltimore City	736,014	732,112	724,666	714,622	701,369	687,253	671,909	657,545	645,593	-90,421	-1.63
SUBURBAN WASHINGTON	1,635,788	1,665,735	1,684,854	1,703,952	1,724,716	1,743,626	1,763,017	1,782,352	1,805,467	169,679	1.24
Frederick County	150,208	156,149	160,762	166,614	172,110	176,050	179,256	183,099	186,777	36,569	2.76
Montgomery County	762,207	773,022	782,912	793,272	800,597	809,066	818,241	828,467	840,879	78,672	1.24
Prince George's County	723,373	736,564	741,180	744,066	752,009	758,510	765,520	770,786	777,811	54,438	0.91
SOUTHERN MARYLAND R	228,500	236,725	242,087	245,791	251,103	256,462	262,338	269,864	277,510	49,010	2.46
Calvert County	51,372	54,448	56,995	59,578	62,054	64,359	66,759	69,327	71,877	20,505	4.29
Charles County	101,154	103,969	105,619	107,266	109,042	111,320	113,037	115,233	117,963	16,809	1.94
St. Mary's County	75,974	78,308	79,473	78,947	80,007	80,783	82,542	85,304	87,670	11,696	1.81
WESTERN MARYLAND RE	224,477	227,213	228,864	229,001	229,181	229,796	229,451	229,469	227,923	3,446	0.19
Allegany County	74,946	74,871	74,599	74,141	73,687	73,564	72,946	72,101	71,333	-3,613	-0.62
Garrett County	28,138	28,687	28,995	29,176	29,351	29,399	29,356	29,435	29,238	1,100	0.48
Washington County	121,393	123,655	125,270	125,684	126,143	126,833	127,149	127,933	127,352	5,959	0.60
UPPER EASTERN SHORE	180,726	184,517	187,063	189,576	192,032	194,914	197,690	200,848	203,673	22,947	1.51
Caroline County	27,035	27,355	27,846	28,186	28,602	28,891	29,113	29,427	29,489	2,454	1.09
Cecil County	71,347	73,218	74,484	75,769	76,874	78,129	79,231	80,771	82,522	11,175	1.84
Kent County	17,842	18,105	18,412	18,448	18,603	18,708	18,848	18,927	18,925	1,083	0.74
Queen Anne's County	33,953	34,658	35,048	35,620	35,978	36,809	38,086	38,979	39,672	5,719	1.96
Talbot County	30,549	31,181	31,273	31,553	31,975	32,377	32,412	32,744	33,065	2,516	0.99
LOWER EASTERN SHORE	163,043	165,566	167,359	169,716	171,563	172,969	174,465	175,418	175,955	12,912	0.96
Dorchester County	30,236	30,129	30,226	30,280	30,159	29,861	29,933	29,847	29,503	-733	-0.31
Somerset County	23,440	23,249	23,428	23,721	24,233	24,217	24,466	24,388	24,296	856	0.45
Wicomico County	74,339	75,865	76,547	77,594	78,226	78,894	79,010	79,048	79,367	5,028	0.82
Worcester County	35,028	36,323	37,158	38,121	38,945	39,997	41,056	42,135	42,789	7,761	2.53

Table III-4
Population Projections 1990 – 2020

1990	2000	2005	2010	2015	2020
71,347	85,200	90,200	94,600	98,800	102,500

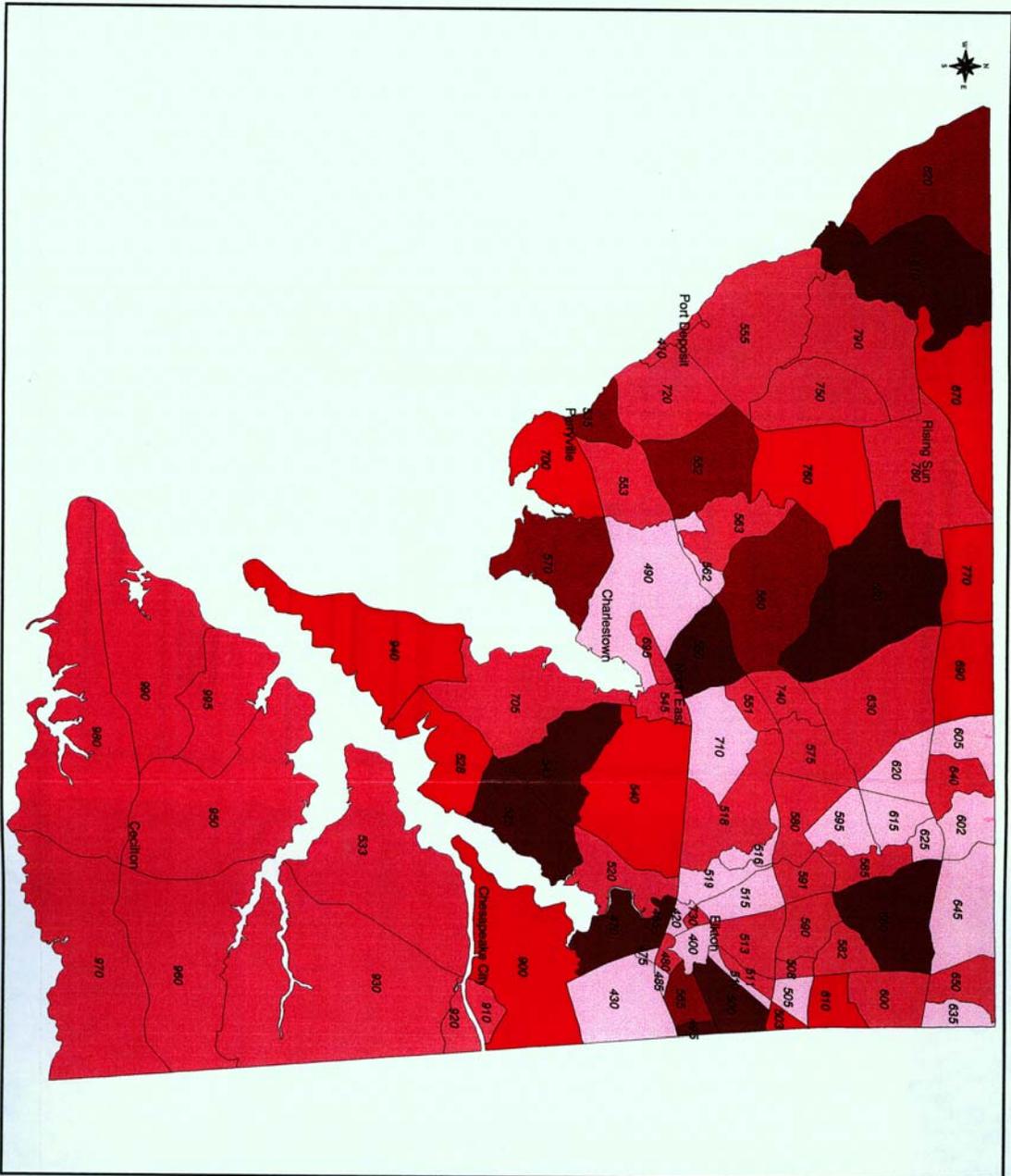
The MOP estimates that the rate of growth will decrease over the next twenty (20) years from that experienced in previous decades. Using information from above, the annual average growth rate for the past and future decades is as follows in Table III-5

Table III-5
Annual Average Growth Rate by Decade

1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
1.26%	1.67%	1.60%	1.07%	.67%

**POPULATION
DISTRIBUTION**

Although the rate of population growth is projected to decrease, the accommodation of the additional 17,300 people (21% of the 1998 population) over the next 20 years into appropriate areas as defined by the Comprehensive Plan, will be one of the major challenges faced by the County. Using the MOP projections, the Wilmington Area Planning Council (WILMAPCO) disaggregates the population projection totals down into transportation analysis zones (TAZ's). This "breakdown" of the population figures for the entire County into smaller geographic regions, allows one to better estimate the distribution of the new population per land use districts of the Comprehensive Plan. The WILMAPCO projections should be considered the "trend" growth pattern since they reflect past trends and projects that are currently in the County's development review process. The WILMAPCO projections do not assume any major policy changes or infrastructure projects that may cause a redistribution of these projections. Although there is no explicit quantitative benchmark, the County wishes to accommodate large portions of this new population into the growth districts of the Comprehensive Plan. Map III-1 shows the distribution of the increased population for the years 2000-2020 as the percentage of total change by TAZ using WILMAPCO figures. Map III-2 shows the absolute population change by TAZ for the years 2000–2020 using WILMAPCO figures. The Comprehensive Plan Land Use Districts can be found in Map II-1.



**Cecil County
Urban Growth Boundary Plan**



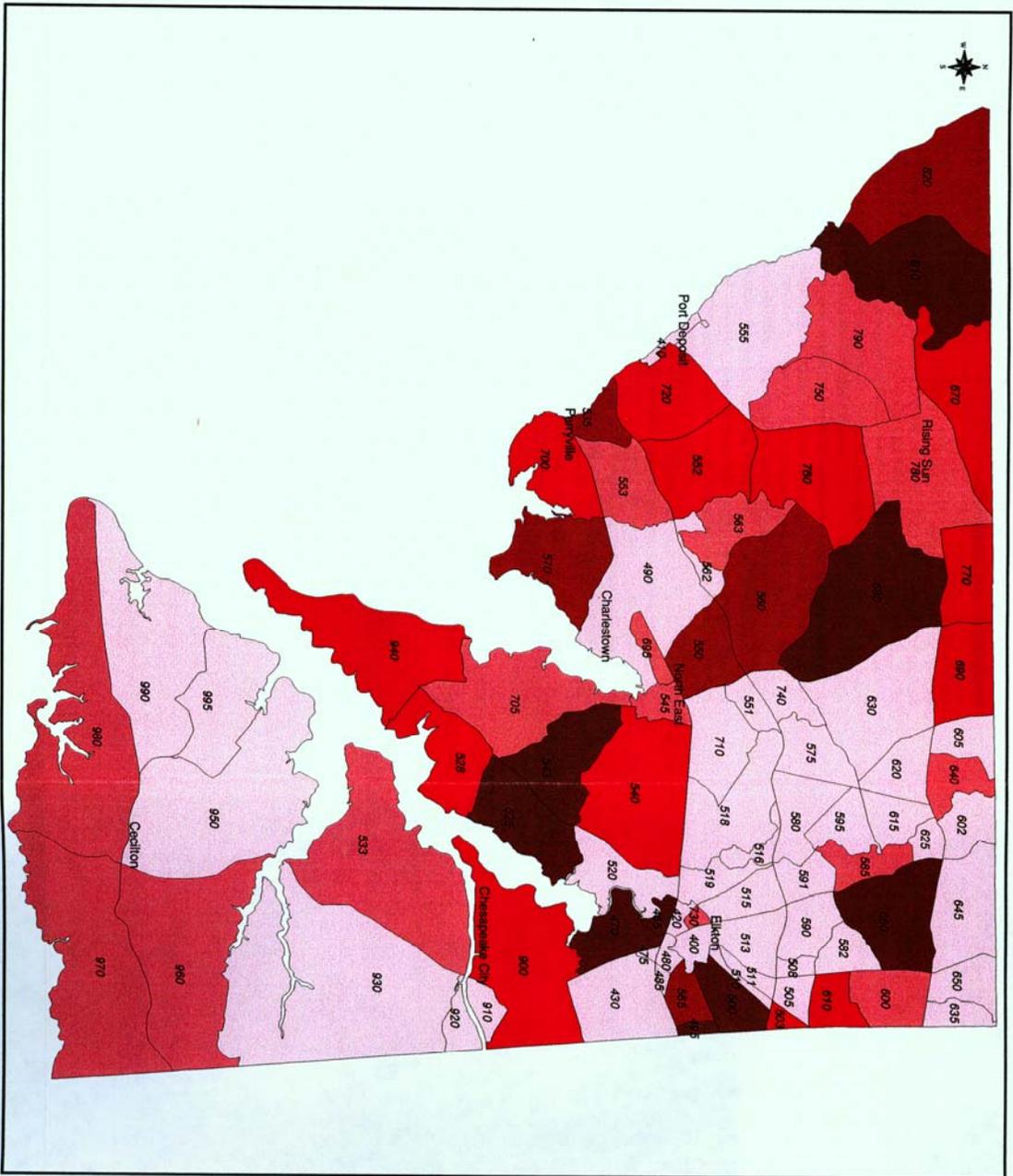
Note:
Numbers on map indicate TAZ number
Source: WILLMAPCO



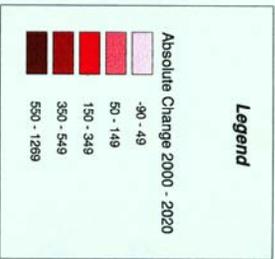
Tatman & Lee Associates
A Division of URS Corporation
1300 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map III-1

**Percent of Total Population Change
2000 - 2020**



**Cecil County
Urban Growth Boundary Plan**



Note:
Numbers on map indicate TAZ number
Source: WILLMAPCO



Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map III-2

**Absolute Total Population Change
2000 - 2020**

As one can see in Maps III-1 and III-2, large portions of the growth districts between Route 40 and I-95 will go under-utilized compared to the goals and objectives of those districts in the Comprehensive Plan. It should be noted that portions of the Route 40/I-95 corridor are zoned for commercial or industrial and would not reflect increased population even if developed fully. Clearly, however, ample opportunity exists for the growth districts to accommodate more of the future population of the County. Conversely, several TAZ's located predominantly in the Rural Conservation District show large increases relative to the total increase in population. TAZ's 660, 680 and 810 located in the Fair Hill, Calvert and Rising Sun areas respectively, show a disproportionate increase in population per the goals and objectives of the Rural Conservation District.

The WILMAPCO population estimates can be found in Table III-6. It should be noted that some discrepancy exists between the County totals of the WILMAPCO projections and the MOP projections for the County with the MOP projections being slightly higher. This discrepancy would most likely not impact the distribution by percent of the total population by TAZ.

Table III-6
Population Projection 2000-2020
Cecil County, Maryland

TAZ	199C	199E	200C	200E	201C	201E	202C	202E	2000-2020 Absolute Change	2000-2020 % Change
400	2629	2778	2771	2800	2795	2771	2682	2632	-89	-3.21
410	132	142	145	149	152	154	152	152	7	4.83
420	688	726	724	731	728	721	697	683	-27	-3.73
430	1570	1668	1673	1700	1707	1701	1656	1633	-17	-1.02
465	657	721	1000	1221	1474	1766	2066	2450	1066	106.6
470	576	717	1056	1272	1515	1791	2067	2419	1011	95.74
475	342	357	352	352	348	341	326	317	-26	-7.39
480	168	188	198	212	224	236	242	251	44	22.22
485	323	343	343	348	349	348	338	333	-5	-1.46
490	2645	2831	3655	3717	3735	3727	3632	3587	-23	-0.63
495	446	489	762	926	1112	1326	1544	1822	782	102.6
500	493	531	828	1064	1351	1703	2097	2616	1269	153.2
503	34	57	547	621	695	774	841	926	294	53.75
505	818	861	855	861	856	845	815	796	-40	-4.68
508	12	16	20	26	33	42	52	65	32	160
510	30	32	31	31	31	31	30	29	-1	-3.23
511	103	111	113	116	118	119	118	117	5	4.42
513	388	423	435	453	467	477	476	482	41	9.43
515	575	610	611	620	622	619	602	593	-9	-1.47
516	5	5	5	5	5	5	5	5	0	0
518	774	833	846	871	886	894	881	881	35	4.14
519	127	134	133	134	133	132	127	124	-6	-4.51
520	557	600	610	629	640	647	639	639	29	4.75
525	1762	2050	2250	2503	2750	3001	3197	3453	947	42.09
528	249	304	350	409	472	540	604	685	254	72.57
533	712	788	822	870	909	943	956	982	134	16.3
535	1407	1594	1704	1845	1974	2097	2176	2289	472	27.7
540	2252	2470	2558	2683	2780	2860	2874	2927	316	12.35
543	381	484	580	704	844	1004	1168	1376	588	101.3
545	2196	2355	2385	2446	2478	2493	2449	2439	64	2.68
550	1604	1811	1931	2085	2225	2357	2438	2556	507	26.26
551	72	77	78	79	80	80	79	78	1	1.28
552	1327	1482	1563	1670	1762	1847	1890	1961	327	20.92
553	247	283	306	336	363	391	410	436	104	33.99
555	386	413	416	426	430	431	422	419	6	1.44
560	1609	1790	1880	2000	2102	2194	2236	2310	356	18.94
562	0	0	0	0	0	0	0	0	0	0
563	210	244	268	297	326	355	378	408	110	41.04
565	971	1115	1209	1328	1441	1553	1635	1743	426	35.24
570	819	942	1023	1125	1222	1319	1389	1484	366	35.78
575	471	504	510	522	528	531	521	518	11	2.16
580	823	885	898	923	937	945	930	929	32	3.56
582	294	317	322	332	337	341	336	336	14	4.35
585	416	462	485	515	540	562	572	590	87	17.94
590	848	909	919	942	954	958	941	936	22	2.39
591	749	799	806	822	829	830	811	804	5	0.62
595	376	397	395	399	397	393	380	372	-15	-3.8
600	746	817	845	886	917	942	946	962	101	11.95
602	300	316	314	316	315	311	300	293	-14	-4.46
605	1191	1251	1240	1246	1237	1219	1173	1144	-67	-5.4
610	1169	1294	1352	1432	1497	1555	1577	1621	225	16.64
615	372	395	396	402	403	402	391	385	-5	-1.26
620	396	422	424	432	435	434	424	419	0	0
625	309	325	322	324	321	317	305	298	-17	-5.28
630	747	797	802	818	824	824	806	798	4	0.5
635	278	296	297	302	303	302	294	290	-3	-1.01
640	269	299	314	335	352	367	375	387	61	19.43
645	150	159	159	161	161	160	155	152	-4	-2.52
650	187	200	200	205	206	207	202	200	2	1
660	1447	1702	1888	2124	2359	2603	2804	3062	916	48.52
670	410	481	532	597	661	728	782	852	250	46.99

Table III-6
Population Projection 2000-2020
Cecil County, Maryland

TAZ	199C	199E	200C	200E	201C	201E	202C	202E	2000-2020 Absolute Change	2000-2020 % Change
680	1277	1520	1707	1944	2186	2441	2661	2942	954	55.89
690	438	519	581	658	737	820	890	979	309	53.18
695	677	741	765	800	826	848	850	863	85	11.11
700	2608	2833	2905	3017	3095	3152	3136	3162	231	7.95
705	825	907	941	989	1027	1059	1066	1088	125	13.28
710	1304	1389	1396	1422	1430	1429	1394	1379	-2	-0.14
720	1374	1500	1545	1613	1663	1703	1703	1727	158	10.23
730	685	745	765	795	817	833	830	838	65	8.5
740	2060	2207	2231	2285	2312	2324	2280	2268	49	2.2
750	1232	1334	1362	1410	1442	1464	1451	1459	89	6.53
760	1347	1472	1518	1586	1637	1678	1679	1704	161	10.61
770	2720	2967	3054	3185	3281	3357	3354	3397	300	9.82
780	783	859	888	932	965	993	998	1016	110	12.39
790	1090	1174	1193	1228	1249	1261	1244	1243	51	4.27
810	1589	1864	2064	2315	2565	2822	3033	3304	969	46.95
820	1264	1426	1519	1639	1747	1849	1911	2002	392	25.81
900	1485	1628	1684	1765	1828	1880	1887	1921	203	12.05
910	535	578	591	611	624	632	626	629	35	5.92
920	189	204	207	214	218	220	218	218	11	5.31
930	916	988	1005	1036	1055	1067	1054	1055	49	4.88
940	1319	1461	1527	1618	1693	1760	1786	1837	259	16.96
950	760	815	824	845	856	860	845	841	21	2.55
960	426	466	481	503	519	532	533	541	52	10.81
970	472	520	540	568	591	610	614	628	74	13.7
980	692	769	807	857	900	938	955	986	148	18.34
990	474	510	518	532	541	546	538	538	20	3.86
995	562	607	618	638	650	659	652	653	34	5.5
Total	71347	78402	83700	88700	93100	97300	99600	103668		
Source: WILMAPCO										

This chapter briefly describes the existing water and/or wastewater facilities for each of the Towns in Cecil County. In addition, any future plans for expansion or improvements are also noted. Most of the information contained in this report concerning the water and wastewater was received during a series of interviews and telephone conversations with Town representatives. The 1993 Cecil County Master Water and Sewer Plan and recent studies performed by Elkton, North East, Perryville, and Rising Sun also provided sources of information used in this report.

CECILTON

The Town of Cecilton currently provides both water and sewer service within the incorporated limits of the Town.

Water

The Town's water system draws from the Magothy aquifer through two wells approximately 300 feet deep. The wells are currently producing flows of 85 gallons per minute (gpm) and 200 gpm. The Town's Groundwater Appropriation Permit (GAP) currently permits withdraw of an average daily flow of .050 million gallons per day (mgd). Treatment of the groundwater is provided by softening and filtration to remove iron and manganese. Storage is provided via a 0.125 million gallon (mg) tank. Existing demand is approximately .045 mgd.

According to a 1998 report prepared for the Town, when the water demand reaches approximately 0.065 mgd, additional storage will be needed to provide adequate domestic and fire storage. This demand would be reached if a proposed 80 unit development on the north side of Town proceeds. The Town is undertaking planning considerations for additional storage capacity and a new water treatment facility to serve future Town needs.

Sewer

The Town operates a wastewater treatment and disposal system comprised of a lagoon system, sand filtration and ultra-violet disinfection which discharges into Duck Creek. The existing design capacity of the wastewater treatment and disposal system is 0.080 mgd and the permitted capacity of the system is 0.050 mgd. The Town has initiated planning to upgrade the capacity of the system to 0.100 mgd to accommodate future flows and increased flows due to infiltration and inflow (I/I).

CHARLESTOWN

The Town of Charlestown currently provides water service to Town residents with sewer being provided by the County's Seneca Point Wastewater Treatment Plant (WWTP).

Water

The Town's system is comprised of three wells, with only two of the wells being used regularly and the third used as a back-up. The currently permitted capacities of the system are 157,000 gpd average daily flow and 250,000 gpd maximum daily flow. Current demand on the system is approximately 71,000 gpd. The Town anticipates that, given recently proposed developments requesting service and existing developed areas that will request service (Charlestown Manor), the near-term (0-5 years) demands will be approximately 102,000 gpd. Treatment of water supply is provided for iron removal, pH adjustment and disinfection.

Storage is currently provided with a 500,000 gallon elevated storage tank.

According to the Town Manager, there are no immediate plans to upgrade the system.

Sewer

Sewer would be provided via the County's Seneca Point WWTP.

CHESAPEAKE CITY

As mentioned in the introduction of this report, the UGB for the Town of Chesapeake City corresponds to that area currently zoned Town Residential (TR). Since the only area zoned TR is located adjacent to South Chesapeake City, this report will focus on the water and wastewater facilities serving the south side of the Town.

Water

Chesapeake City, which is split by the Chesapeake and Delaware Canals, maintains two separate water systems overall. The Town is served by four wells which take water from the non-marine cretaceous deposits. The GAP allows for an overall withdraw of an average daily flow of .170 mgd and a maximum daily flow of .220 mgd. South Chesapeake City is served by two of the four wells with a capacity of .085 mgd and a .075 mg elevated storage tank. The Town must provide substantial treatment to remove iron from the groundwater.

Sewer

South Chesapeake City is served by an activated sludge package plant with a permitted capacity of .080 mgd. Current flow to the treatment plant is approximately .069 mgd.

ELKTON

The Town of Elkton currently provides both water and sewer service to the residents of the Town. Water service is also provided to the Triumph Industrial Park which is not within the Town limits. The information contained in this section regarding the water and sewer systems of Elkton, and current and future demands on said systems, was taken from a report prepared by McCrone Inc., dated May 18, 1999 entitled Comprehensive Water and Sewer Study, as well as information supplied by Town staff.

Water

The Town currently provides water to its customers from two sources – a surface water treatment plant located on the Big Elk Creek, and a well system that consists of two wells. The surface water treatment plant is permitted by MDE to withdraw 1.5 mgd average daily flow and 2.0 mgd maximum daily flow. The design capacity of the surface water treatment plant is 2.0 mgd. The Town's well system is currently permitted by MDE to withdraw 0.65 mgd on a yearly basis and for the month of maximum use an average daily flow of 1.2 mgd.

Storage is currently provided with the following facilities:

- Two 900,000 gallon reservoirs
- A 500,000 gallon elevated storage tank located on Blue Ball Road
- A 500,000 gallon elevated storage tank located on Dogwood Road
- A 400,000 gallon storage tank located on the southeast corner of the I-95/Route 279 interchange
- A 200,000 gallon standpipe in Thomson Estates

As stated in the McCrone study, this report will assume a total current capacity of the Town's water system of 2.15 mgd. Total current demand on the entire water system is 1.35 mgd. This current demand is the sum of the demands emanating from the five different pressure zones of the Town's water system.

In addition to estimating current water demands based on meter readings, previous reports and water and wastewater treatment plant records, the McCrone study also estimated future water demands for a 0-10 year period and a 10-20 year period. It is

important to note that the future demands used in the McCrone study for the 10-20 year period include areas that are currently unincorporated but are anticipated to be annexed in the future. Water demands for the 0-10 year period are based on pending subdivisions and the Town's knowledge of other potential developments within that time period. A summary of existing and future demands on the Town's total water system used in the McCrone study is shown in Table IV-1.

Table IV-1
Existing and Future Total Water Demand

Existing Demand	0-10 year Period	1-20 year Period
1.35 MGD	2.77 MGD	4.88 MGD

Given a linear projection of growth for the pressure zones served, the surface water treatment plant will reach its permitted capacity of 1.5 mgd by the year 2003. Considering the entire water system, the total capacity of 2.15 mgd will be reached by 2005.

The Town has initiated preliminary discussions with a consultant who is currently preparing a wellhead protection program for the Town. This program will also address the availability of additional groundwater to serve the future needs of the Town. To date, no formal investigation is underway.

In addition to making recommendations to find additional sources of water for the future demands, the McCrone study also makes numerous recommendations for other operational upgrades to the system.

Sewer

The Town currently provides sewer service to Town residents via a collection and conveyance system comprised of gravity lines, force mains and 10 pumping stations. Treatment is provided at the Elkton WWTP located on the south side of Route 40 adjacent to the County Detention Center. The Elkton WWTP has a design capacity of 2.6 mgd but only has a permit from MDE to discharge 1.6 mgd of effluent into the Big Elk Creek.

As with the current demands on the Town's water system, the existing flow to the WWTP is 1.35 mgd. The McCrone study indicated that the projected 0-10 year and the 10-20 year flows to the WWTP are within 1% of the projected water demands for the same time period. Therefore, the future water demands included in Table IV-1 above should also be considered as future wastewater flows. Assuming a linear projection of growth, the WWTP will

reach its permitted capacity of 1.6 mgd by the middle of the year 2000.

The Town is currently in the planning stages to upgrade the permitted capacity of the WWTP to its current design capacity of 2.6 mgd. The planning for said upgrade would also allow for modular upgrades to accommodate future flows of 5.0 mgd. In pursuit of these upgrades, the Town has requested from MDE the National Pollutant Discharge Elimination System (NPDES) permit limitations for a flow of 2.7 mgd, and more general planning effluent limits for the ultimate 5.0 mgd upgrade. The Town is currently in discussions with MDE regarding future effluent limitations.

The McCrone study also makes numerous recommendations concerning upgrades to the Town's wastewater collection and conveyance system.

NORTH EAST

The Town of North East currently provides water to its customers via two surface water treatment plants (WTP) located at Rolling Mill and Leslie. In addition to serving Town residents, the Town also provides water service to unincorporated areas of the County in accordance with two service area agreements executed between the Town and the County dated November 6, 1972 and June 7, 1983, respectively. Sewer is provided to Town residents by the County's Seneca Point WWTP.

Water

The Town is currently in the process of designing upgrades to the two water treatment plants to accommodate growth over the next 20 years within the Town and service area. Improvements to the Rolling Mill WTP include the addition of two 1.0 mgd maximum daily flow modules with room for a third. The Town has a permit pending with MDE to withdraw .956 mgd average daily flow and 1.84 mgd maximum daily flow. In order to meet minimum flow-by requirements in the North East Creek, the Town is currently evaluating the environmental impacts of pumping water from the tidally influenced portion of the North East Creek upstream, above the water treatment plant intake. This two year study is a requirement of MDE. It is unclear whether or not MDE will issue a permit to increase withdraws from the North East Creek prior to the conclusion of the study.

Upgrades to the Leslie WTP include the installation of three new filters (seven foot diameter each), capable of filtering approximately 830,000 gpd. The Town also has a permit pending with MDE for the Leslie WTP to withdraw .406 mgd average daily flow and .620 mgd average daily flow. Pumping of water upstream of the Leslie intake to meet low-flow requirements is not proposed. During periods of low-flow, the Leslie WTP will not operate. Improvements to the Rolling Mill WTP will allow transfer of water to the pressure zones served by the Leslie WTP during periods the plant is shut down.

The Town is also designing two new elevated storage tanks.

County/Town Service Area Agreement

As mentioned earlier, the County and Town entered into service area agreements in 1972 and 1983. The purpose of the agreements was for the County to utilize water from the Town to serve an area generally associated with the Route 272 corridor, extending from the Town to Bayview. The agreements benefited both jurisdictions in that they increased the Town's customer base and allowed the County to provide service to employment centers and to concentrate development in accordance with the 1974 and 1990 Comprehensive Plans. The 1983 agreement expanded the service area from that described in the 1972 agreement as a result of the Town accepting from the County, the Leslie WTP. Concomitant sewer service was provided by the County to the 1983 service area via the Stoney Run interceptor. Salient features of the 1983 agreement include the following:

- The Town shall serve the area described in the agreements ("areas to be served").
- Upon request for service by the County, outside the Town limits, within the "area to be served", the cost of extending facilities to provide said service shall be shared by the County and Town "...in a fashion to be negotiated at the time of such request."
- In addition to water service to the "areas to be served", the County retained the right to purchase an additional 300,000 gpd to serve other areas.
- The Town is not obligated to commit more than one-half of its reserve operational capacity to the County for new service at any time.

- The Town will provide water to areas outside the “area to be served” on a bulk rate basis with the rate not exceeding that charged to customers within the Town.
- The Town and the County will share the cost of extending facilities to the perimeter of the “area to be served”, with the County bearing the cost of constructing any facilities outside the “area to be served”.
- If the Town annexes an area outside the “area to be served”, the Town shall reimburse the County for the cost of any water facilities originally constructed in the area by the County.

The 1983 agreement was subsequently amended in 1986 and 1989. The 1986 amendment stipulated financial and administrative responsibilities of the Town and the County relative to upgrades to the Leslie WTP extension of service to the Community College and Bayview Elementary School. The 1989 amendment stipulated that the Town had the right to review construction drawings for water line extensions. The 1989 amendment also granted the Town the authority to require annexation or the payment of commensurate fees in return for water service. This annexation/payment clause applies to service anywhere outside Town limits. The County, in return, retained the right to review the Town’s water rate structure for customers outside Town limits. Finally, the 1989 amendment permits the Town to charge up to 100% more for connection fees and user fees to customers outside Town limits.

The 1972 and 1983 service area agreements and subsequent amendments can be found in Appendix C.

Sewer

Sewer would be provided by the County’s Seneca Point WWTP.

PERRYVILLE

The Town of Perryville currently provides both water and sewer service to residents of the Town.

Water

The Town owns two surface water treatment plants located on the Susquehanna River and Mill Creek, respectively. The Mill Creek WTP is no longer in operation. The Susquehanna River WTP, which is located on Frenchtown Road, is permitted by MDE to withdraw an average daily flow of 2.0 mgd and a maximum daily withdraw of 4.0 mgd. However, the Susquehanna WTP can produce only .80 mgd in a 24 hour period due to water quality

standards required by MDE and the operational constraints of the facility. Specifically, the pumping, sedimentation, filtration and storage facilities of the Susquehanna WTP do not allow it to accommodate the permitted amount without expansion of the facility. Under normal operating conditions (16 hours of operation at a normal pump rate), the plant produces approximately .40 mgd. At a maximum pump rate during a 16 hour period, the plant can produce approximately .50 mgd. Average daily demand is approximately .376 mgd.

The Town has been advised by MDE that the Susquehanna WTP can no longer discharge backwash from the filtration process directly into the river. The Town is currently evaluating it options regarding backwash, including an operational change or discharging backwash into the sanitary sewer system. The Town is also currently evaluating various treatment alternatives to meet new public drinking water standards.

Storage is currently provided via a .50 mg tank at I-95 and a .25 mg tank at Cedar Corner Road. Recent evaluations of existing and future water service needs of the Town indicate that there is presently inadequate storage to provide for the existing demand. At least one day of emergency storage should be available since no emergency power generators are available at the Cedar Corner Road Booster Station and emergency power is only available for one finish water pump at the water treatment plant.

Additional storage is also required for projects that currently have an executed Public Works Agreement (PWA), with even more storage needed for other known projects without an executed PWA. A summary of the additional storage requirements for the existing demand and those projects with an executed PWA is as follows:

<u>Project Status</u>	<u>Total Additional Storage Required</u>
Existing Demand	310,000 gallons
Executed PWA	450,000 gallons*

* Assumes that no system improvements are made to address the existing demand.

Sewer

The Town operates a WWTP which includes rotating biological contactor treatment and discharge into Mill Creek. The design and permitted capacity of the WWTP is 1.65 mgd with a current flow of approximately .85 mgd. The Town has recently completed an I/I report for the collection and conveyance system which serves downtown Perryville. The I/I report identifies various sources of inflow that, if corrected, would provide additional excess capacity at the WWTP.

PORT DEPOSIT

The Town of Port Deposit currently provides water and sewer service to Town residents.

Water

The Town operates a surface water treatment plant located on the Susquehanna River. The WTP is currently designed to accommodate a hydraulic capacity of approximately .86 mgd. Given permit limitations, the WTP can realistically accommodate approximately .40 mgd and still meet water quality standards. The existing WTP was constructed by the Navy and later dedicated to the Town. Prior to the existing WTP's construction, the Town received its water from the Bainbridge Naval Training Center.

Sewer

The Town operates an activated sludge wastewater treatment plant with stream discharge into the Susquehanna River. The capacity of the WWTP is .150 mgd.

The Town of Port Deposit has recently annexed the former Bainbridge Naval Training Center. The Town also recently initiated a study to determine the future needs of the recently annexed area, as well as to evaluate alternatives for the provision of water and sewer to the site. The provision of water and sewer to the Bainbridge site could possibly entail relocating the existing WTP and WWTP onto the Bainbridge site to accommodate future as well as existing needs.

RISING SUN

The Town of Rising Sun currently provides both water and sewer service within the incorporated limits of the Town.

Water

The Town currently utilizes four wells to provide water service to its customers. The 1998 demand for water was an average daily flow of .148 mgd and a maximum daily flow of .192 mgd. The Town is permitted by MDE to withdraw an average daily flow of .260 mgd and a maximum daily flow of .320 mgd. A 1.0 mg standpipe offers emergency protection for the concentrated commercial and residential areas.

The Town has recently purchased land with two existing wells to provide an additional 50 gallons per minute to meet current demands. In addition, recent studies have indicated that the Town needs new storage facilities to maintain adequate fire flows. The Town is considering a new .50 mg tank near the library.

Sewer

The Town owns and operates a 10 acre waste stabilization lagoon with a total of five cells, with aeration provided in two of the cells. The wastewater treatment system is currently designed and permitted by MDE to treat 275,000 gpd. The 1999 average daily flow to the wastewater system was 226,000. In 1995, the Town installed an ultra-violet disinfection system that is capable of accommodating 600,000 gpd. In addition, the Town will begin engineering design to upgrade the treatment plant headworks, lagoon and air diffusers in the summer of the year 2000. Along with these improvements the Town will slip-line one of the major interceptors to the treatment plant to reduce I/I. Existing I/I has been estimated at 50,000 gpd.

SENECA POINT WWTP

The County owns and operates the Seneca Point WWTP which provides sewer service to the Towns of North East and Charlestown and the surrounding unincorporated areas. The Seneca Point WWTP has a design capacity of 2.0 mgd and a permit capacity of 1.2 mgd. The County is currently in the process of designing upgrades to the treatment plant to provide Biological Nutrient Removal (BNR) for a flow of 2.0 mgd.

INTRODUCTION

As noted in the Executive Summary, the main purpose of this study is to delineate potential Urban Growth Boundaries (UGB's) around each of the municipalities and to investigate the implications of municipal water and/or sewer service to these areas. This section will describe potential UGB's around the Towns of Charlestown, Elkton, North East, Perryville and Port Deposit. In addition to delineating the potential UGB's around these Towns, this section will also estimate the future water and sewer needs of the UGB's. Since the Towns of Cecilton, Chesapeake City and Rising Sun are surrounded by rural and agricultural land use districts, the County's Town Residential (TR) zoning classification adjacent to these respective Towns essentially acts as an urban growth boundary. For this reason, this study will estimate the future water and sewer needs of those areas designated as TR zoning as described below.

In creating the UGB's around the Towns, the following factors were considered:

Comprehensive Plan Land Use Districts

Only those areas designated as Suburban, Development and Mineral Extraction District in the Land Use Plan of the County's Comprehensive Plan were considered for inclusion in the UGB's. Mineral Extraction District areas were considered due to the fact that some areas classified as such in the Comprehensive Plan, were subsequently zoned as other than mineral extraction during the County's comprehensive rezoning in 1993. In addition, some industrial uses are permitted in the Mineral Extraction-A (MEA) zone. No area classified as Rural Conservation District or Resource Protection District in the Comprehensive Land Use Plan were considered for inclusion in a UGB.

Future Annexation Areas of the Towns

As directed by the County, one of the primary considerations in the creation of UGB's around the Towns was the extent of future annexation by the respective Towns. That is, the County does not wish to hamper the ability of the Towns to annex additional area into the incorporated limits. For this reason, the UGB's begin at the outer perimeter of areas designated as future annexation. For the Town of Elkton, future annexation areas were derived from the previously mentioned McCrone Study. The future annexation areas as described in the McCrone Study and as used in this study, also generally correspond to the Future Annexation Areas map as prepared and adopted by the Town in 1988. For the Town of Perryville, future annexation areas were derived from the Town's Comprehensive Plan. Future annexation areas for the Town of

North East were derived from the Town's draft Comprehensive Plan currently being considered. The Town of Charlestown does not have a formal annexation plan, nor does the Town's Comprehensive Plan designate future growth areas. The future annexation areas depicted in this study for Charlestown were created by Tatman & Lee and were generally deemed acceptable by the Town. No future annexation areas were shown for the Town of Port Deposit, since the Town just recently annexed approximately 1,200 acres of the former Bainbridge Naval Training Center. As noted below, there is considerable overlap between areas zoned TR and future growth areas of the Towns of Cecilton, Chesapeake City and Rising Sun.

Land Necessary to Reasonably Accommodate Future Growth

In lieu of attempting to utilize the Town's water and/or sewer facilities to provide service to the entire growth corridor of the County between Route 40 and I-95, this plan evaluates service to smaller geographic areas. Not only will this facilitate the County's ability to provide other services such as roads and schools, it is also somewhat necessary given the Towns' limited ability to provide additional water and sewer capacity.

Natural and Manmade Features

Natural features such as streams, rivers and adjacent riparian habitats, and manmade features such as roads often provide for logical boundaries and breaks between varying intensities of development.

ESTIMATION OF FUTURE WATER AND SEWER NEEDS

In addition to establishing the geographic extent of the UGB's, this chapter also provides an estimation of the future water and sewer needs of new and existing development in the UGB's. Water and sewer needs were also estimated for those areas designated as TR zoning as mentioned above. Using a geographic information system (GIS) and data provided by the Maryland Office of Planning, the number of dwelling units that could be accommodated within each UGB was estimated. Densities for development utilizing public sewer from the Cecil County Zoning Ordinance were used to estimate the number of dwelling units that could be accommodated per acre. An environmental constraint factor of 25% was also applied to the maximum densities permitted in the Zoning Ordinance. The environmental constraint factor reduces the overall number of dwelling units that could be constructed due to features such as steep slopes, wetlands, riparian buffers, etc. Water and sewer needs for industrially zoned land were considered as 1,000 gpd/acre. Overall, in estimating future

water and sewer needs of the UGB's and the areas zoned TR, the following methodology was used:

- Acreage of each zoning district within each UGB was calculated from the acreage field of the parcel data contained in MdProperty View.
- Residential zoning acreage was reduced by 25% to account for environmental constraints which generally limit development at maximum densities.
- Residential development potential was calculated using the densities permitted in the Zoning Ordinance for development utilizing public sewer.
- Water and sewer needs for residential zones were based on 250 gpd/dwelling unit.
- Water and sewer needs for industrial zones were based on 1,000 gpd/acre.
- Water and sewer needs for existing dwellings within the UGB's were relatively minor, but were considered in the overall needs of the UGB.
- Except for UGB 3 around Elkton, the amount of land of the various UGB's zoned commercial was minor, and the water and sewer needs of these areas are assumed to be accommodated in the overall residential needs.
- Acreage associated with existing platted subdivisions was not used in calculating the overall development potential of a UGB.
- For parcels zoned Mobile Home (MH), a density of six units/acre was applied to parcels greater than ten acres due to the potential to develop a mobile home park. A density of four units per acre (DR zone density) was applied to MH zoned parcels less than ten acres.

URBAN GROWTH BOUNDARIES AND TR ZONING DESIGNATIONS

CECILTON

The TR zoning adjacent to the Town of Cecilton extends from both the north and south side of Town limits. It should be noted that the TR zoning overlaps areas designated as future growth areas as shown in the Town's Comprehensive Plan of 1998. Specifically, Map 3, entitled Growth Plan in the Town's Comprehensive Plan, designates a mixed use area adjacent to the northeast side of Town limits, an employment area on the southeast side and a planned development area on the southwest side. The northwest side is shown as agriculture.

The TR zoning adjacent to Cecilton comprises approximately 318 acres and is shown in Map V-1. The water and sewer needs of this area are approximately 239,000 gpd and were derived from the following:

318 acres zoned TR

318 acres - 25% (environmental constraints) = 238 acres

238 acres x 4 units/acre (TR density with public sewer) = 952 units

952 units x 250 gpd/unit = 238,500 gpd

CHARLESTOWN

The UGB for the Town of Charlestown extends westerly from the Town limits to include an area between Carpenter Point Road and the CSX Railroad as shown on Map V-2. As noted earlier, Charlestown has no formal annexation plans, and the future annexation area used for this report was created by Tatman & Lee. The future annexation area extends generally north from Town to include relatively large undeveloped residentially zoned parcels surrounding the recently annexed Trinity Wood development, as well as to include the Charlestown Manor area.

The UGB for Charlestown does not include areas directly to the north of Town since the vast majority of the area between the Town and Route 40 is zoned MEA. The area to the south of Town, on the southeast side of Carpenter Point Road, was not considered for inclusion in the UGB since several large lots have recently been created that are restricted from further subdivision. It should be noted that there is some residentially zoned acreage in the Charlestown UGB shown on Map V-2, however the acreage and subsequent water and sewer needs are negligible. As shown below, the water and sewer needs for the Charlestown UGB were generated solely from potential industrial users.

The water and sewer needs of the Charlestown UGB are approximately 0.36 mgd and were derived from the following:

364 acres zoned M2

364 acres x 1,000 gpd/acre = 364,000 gpd

CHESAPEAKE CITY

The TR zoning adjacent to South Chesapeake City generally extends south from Town along Routes 213 and 342 as shown on Map V-3. It should be noted that the TR zoning adjacent to South Chesapeake City overlaps areas shown as future growth areas on the Land Use Plan – Growth Plan of the Town’s Comprehensive Plan. The TR zone along Route 213 corresponds very closely with a mixed-use growth area, and the TR zone along Route 342 is encompassed by an area shown as a residential growth area.

The TR zone adjacent to South Chesapeake City comprises approximately 245 acres. The water and sewer needs of this area are approximately 184,000 gpd and were derived from the following:

245 acres zoned TR

245 acres – 25% (environmental constraints) = 184 acres

184 acres x 4 units/acre (TR density with public sewer) = 736 units

736 units x 250 gpd/unit = 184,000 gpd

ELKTON

Three potential UGB’s have been created around the Town of Elkton. At this time, these UGB’s can be considered alternative UGB’s or phased components of a larger UGB comprised of all three. The three UGB’s for the Town of Elkton can be found on Map V-4. None of the UGB’s overlap the areas shown as future annexation.

UGB 1

UGB 1 extends north and northwest from Town limits to I-95 between Routes 316 and 213. On the southerly end, UGB 1 terminates at Nottingham Road, and on the westerly end, UGB 1 terminates along the westerly property lines of several large parcels including the industrially zoned property of the Thiokal Corporation. UGB 1 also encompasses the Triumph Industrial Park as well as portions of the Little Elk Creek and Big Elk Creek.

The water and sewer needs of UGB 1 are approximately 1.17 mgd and were derived from the following:

DR Zone

217 acres zoned DR

217 acres – 25% (environmental constraints) = 163 acres

163 acres x 4 units/acre (DR density with public sewer) = 651 units

651 units x 250 gpd/unit = 163,000 gpd

SR Zone

1,065 acres zoned SR

1,065 acres – 25% (environmental constraints) = 800 acres

800 acres x 2 units/acre (SR density with public sewer) = 1,600 units

1,600 units x 250 gpd/unit = 400,000 gpd

M1, M2 and BI Zones

603 acres zoned M1, M2 or BI

603 acres x 1,000 gpd/acre = 603,000 gpd

Total of all zones in UGB 1 = 1,170,000 gpd

UGB 2

UGB 2 is not contiguous to the Town of Elkton and extends from UGB 1 westerly to Marley Road encompassing an area between Nottingham Road and I-95. UGB 2, which contains very little commercially or industrially zoned land, is also bisected by the CSX railroad. The water and sewer needs of UGB 2 are approximately .674 mgd and were derived from the following:

DR Zone

188 acres zoned DR

188 acres – 25% (environmental constraints) = 141 acres

141 acres x 4 units/acre (DR density with public sewer) = 564 units

564 units x 250 gpd/unit = 141,000

SR Zone

1,318 acres zoned SR

1,318 acres – 25% (environmental constraints) = 989 acres

989 acres x 2 units/acre (SR density with public sewer) = 1,978 units

1,978 units x 250 gpd/unit = 495,000 gpd

MH Zone

Assume 100 existing and proposed units at Forest Green Mobile Home Park

100 units x 250 gpd/unit = 25,000 gpd

M1 and M2 Zones

13 acres zoned M1 or M2

13 acres x 1000 gpd/acre = 13,000 gpd

Total of all zones in UGB 2 = 674,000 gpd

UGB 3

UGB 3 extends from the Town of Elkton starting at the Little Elk Creek and Route 40, westerly in a linear fashion along Route 40 and Route 7. UGB 3, which is generally bounded by Nottingham Road to the north, Marley Road to the west and the Amtrak rail line to the south, encompasses many small commercially zoned parcels along Route 40. The water and sewer needs of this commercially zoned land were accommodated as an overall “set-aside” flow of 50,000 gpd. At 10 gpd/employee, 50,000 gpd is capable of accommodating the needs of 5,000 retail employees. UGB 3 also includes the Mason Dixon Sand and Gravel site (zoned DR) which is a Superfund site that is currently undergoing groundwater remediation. The water and sewer needs of UGB 3 are 1.03 mgd and were derived from the following:

DR Zone

649 acres zoned DR

649 acres – 25% (environmental constraints) = 487 acres

487 acres x 4 units per acre (DR density with public sewer) = 1948 units

1948 units x 250 gpd/unit = 487,000 gpd

MH Zone

64 acres zoned MH on parcels greater than 10 acres in size

64 acres – 25% (environmental constraints) = 48 acres

48 acres x 6 units/acre (Mobile Home Park Density) = 288 units

288 units x 250 gpd/unit = 72,000 gpd

98 acres zoned MH on parcels less than 10 acres in size

98 acres – 25% (environmental constraints) = 74 acres

74 acres x 4 units/acre (MH density with public sewer) = 296 units

296 units x 250 gpd/unit = 74,000 gpd

Total MH zone = 146,000 gpd

BG Zone

179 acres zoned BG

Total BG zone = 50,000 gpd

M2 Zone

349 acres zoned M2

349 acres x 1000 gpd/acre = 349,000 gpd

Total of all zones in UGB 3 = 1,032,000 gpd

NORTH EAST

One area is proposed as a UGB's for the Town of North East (Map V-5).

UGB 1

UGB 1 is to the west to the Town limits but is not contiguous to the Town itself. The UGB extends the current water service area westward bounded by Red Toad Road. The CSX railroad creates the northern boundary and Razor Strap Road makes the southern.

The total water and sewer needs of UGB 1 are approximately 0.21 MGD.

SR Zone

249 acres zoned SR

249 acres – 25% (environmental constraints) = 187 acres

187 acres x 2 units/acre (SR density with public sewer) = 374 units

374 units x 250 gpd/unit = 93,375 gpd

RM Zone

101 acres zoned RM

101 acres - 25% (environmental constraints) = 78 acres

78 acres x 6 units per acre (RM density with public sewer) = 455 units

455 units x 250 gpd/unit = 113,225 gpd

Total of all zones in UGB 1 = 206,600 gpd

PERRYVILLE

The UGB for the Town of Perryville extends from the existing Town limits and future annexation areas northerly to I-95, and easterly from future annexation areas to the eastern property line of large industrially zoned parcels south of the CSX railroad. The portion of the UGB north of Town is bounded by Jackson Station Road to the east, I-95 to the north and the Susquehanna River to the west. The easterly portion of the Perryville UGB generally is bounded parcel lines to the east, the CSX railroad to the north, future annexation areas to the west and the Amtrak Railroad to the south. As shown on Map V-6, no portion of the UGB overlaps areas shown as future annexation. As shown below, the vast majority of the water and sewer needs for the Perryville UGB were generated from industrial needs.

The water and sewer needs of the Perryville UGB are approximately 2.04 MGD and were derived from the following:

DR Zone

306 acres zoned DR

306 acres – 25% (environmental constraints) = 230 acres

230 acres x 4 units/acre (DR density with public sewer) = 920 units

920 units x 250 gpd/unit = 230,000 gpd

SR Zone

241 acres zoned SR

241 acres – 25% (environmental constraints) = 181 acres

181 acres x 2 units/acre (SR density with public sewer) = 362 units

362 units x 250 gpd/unit = 91,000 gpd

MH Zone

22 acres Zoned MH

22 acres – 25% (environmental constraints) = 17 acres

17 acres x 6 units/acre (Mobile Home Park density) = 102 units

102 units x 250 gpd/unit = 23,000 gpd

M1/M2/MEA Zones

1,700 acres zoned M2 or MEA

1,700 acres x 1000 gpd/acre = 1,700,000 gpd

Total of all Zones = 2,044,000 gpd

PORT DEPOSIT

The UGB for the Town of Port Deposit extends from town limits in a northwesterly direction and is bounded by Route 276 to the southeast, Rock Run Road to the northwest and town limits to the southwest. As mentioned earlier, no areas are designated as future annexation areas due to the fact that the Town has just recently annexed the entire former Bainbridge Naval Training Center. The UGB for the Town is shown on Map V-7, and contains several large undeveloped parcels as well as an existing mobile home park.

The water and sewer needs of the Port Deposit UGB are approximately .300 mgd and were derived from the following:

SR Zone

683 acres zoned SR

683 acres – 25% (environmental constraints) = 512 acres

512 acres x 2 units/acre = 1024 units

1,024 units x 250 gpd/unit = 256,000 gpd

MH Zone

Approximately 200 existing units in Benjamin's Mobile Home Park

200 units x 250 gpd/unit = 50,000 gpd

Total of all Zones = 306,000 gpd

RISING SUN

The TR zone adjacent to the Town of Rising Sun is shown on Map V-8 and extends easterly from Town limits along Route 273 and south of Route 1 and Little New York Road, and northerly from the western portion of Town limits. It should be noted that the TR zoning, especially that portion that extends east from town limits, overlaps areas designated for phased annexation in the Town's Comprehensive Plan. Specifically, the area zoned TR west of Sylmar Road, south of Little New York Road, east of Stevens Road and north of Route 273 is designated as a Phase 3 Annexation area; the area zoned TR west of Stevens Road, south of Route 1 and east and north of Town limits is designated as a Phase 2 Annexation area; and the area zoned TR west of Red Pump Road south of Route 1 is also designated as Phase 3 Annexation area. The small portions of TR zone south of Route 273 is designated as a Phase 1 Annexation area.

The TR zoning adjacent to the Town of Rising Sun comprises approximately 1,060 acres which includes some existing platted subdivisions whose acreage (40 acres) was not used to calculate overall development potential of the TR zone. The water and sewer needs of the TR zone are approximately .765 mgd and were derived from the following:

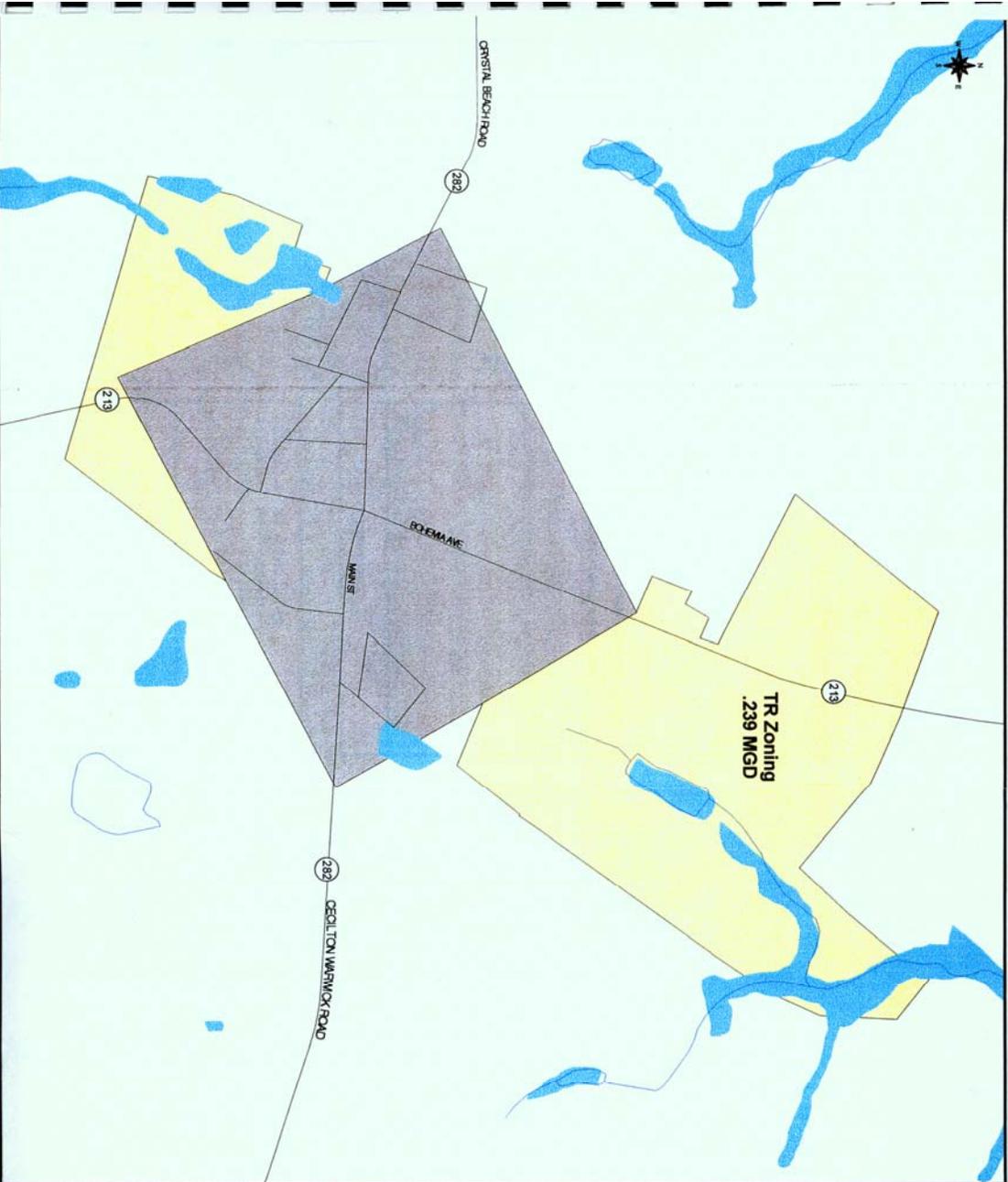
1,060 acres zoned TR

1,060 acres – 40 acres (area of platted subdivisions) = 1,020 acres

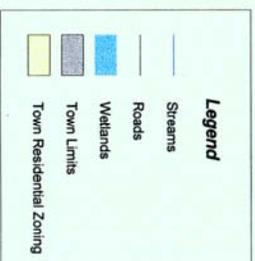
1,020 acres – 25% (environmental constraints) = 765 acres

765 acres x 4 units/acre (TR density with public sewer) = 3,060 units

3,060 units x 250 gpd/unit = 765,000 gpd



**Cecil County
Urban Growth Boundary Plan**



Note:
Road and Stream data from MdProperty View

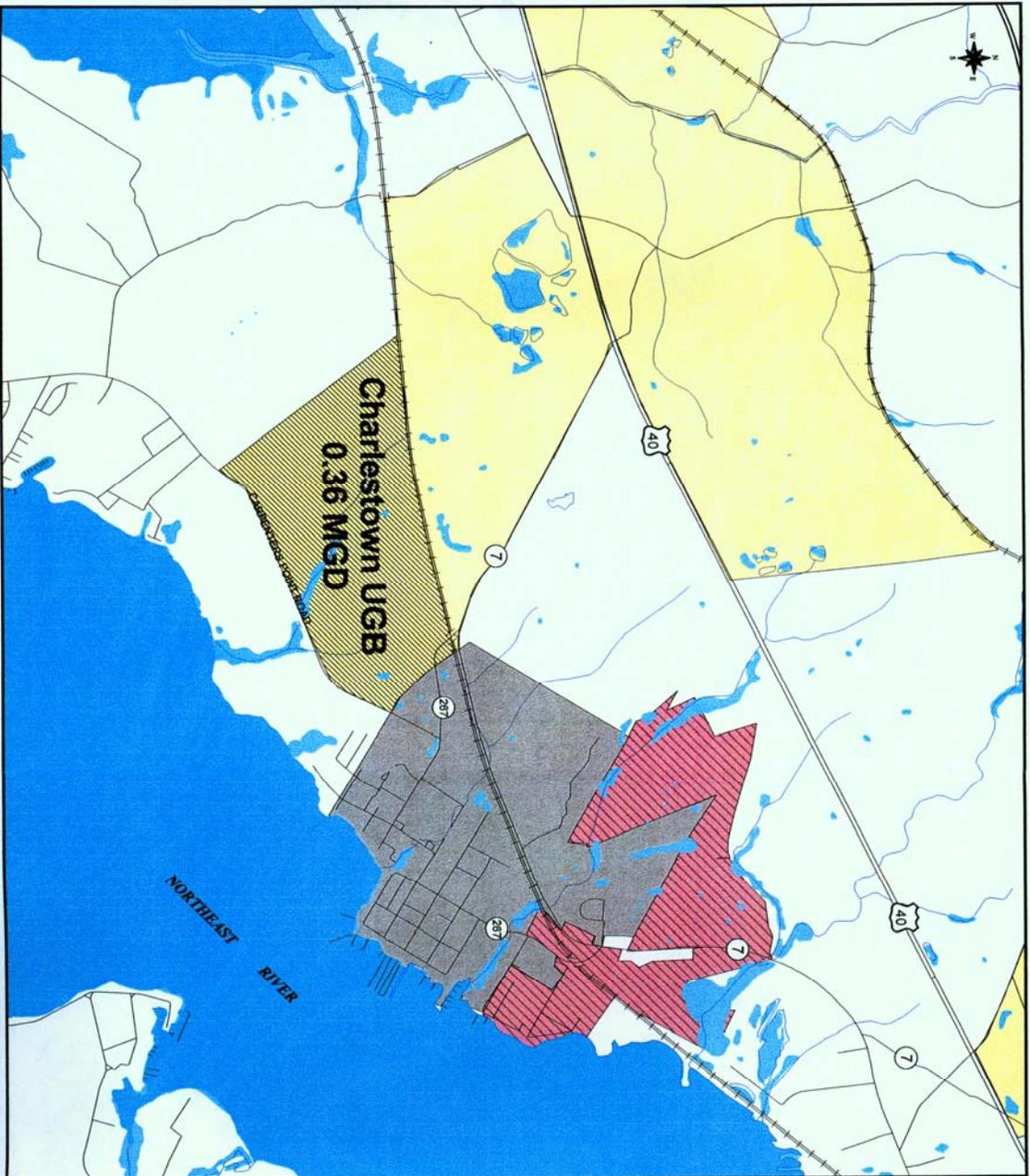


Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Cecil, MD 21024
Tel: 302.791.0711
Fax: 302.791.0708

Map V-1

Cecilton



**Cecil County
Urban Growth Boundary Plan**

Legend

- Streams
- Roads
- Wetlands
- Town Limits
- Future Annexation Area/Charleston
- Potential Urban Growth Boundary/Charleston
- Potential Urban Growth Boundary/Perryville

Note:
Road and Stream data from MDP Property View

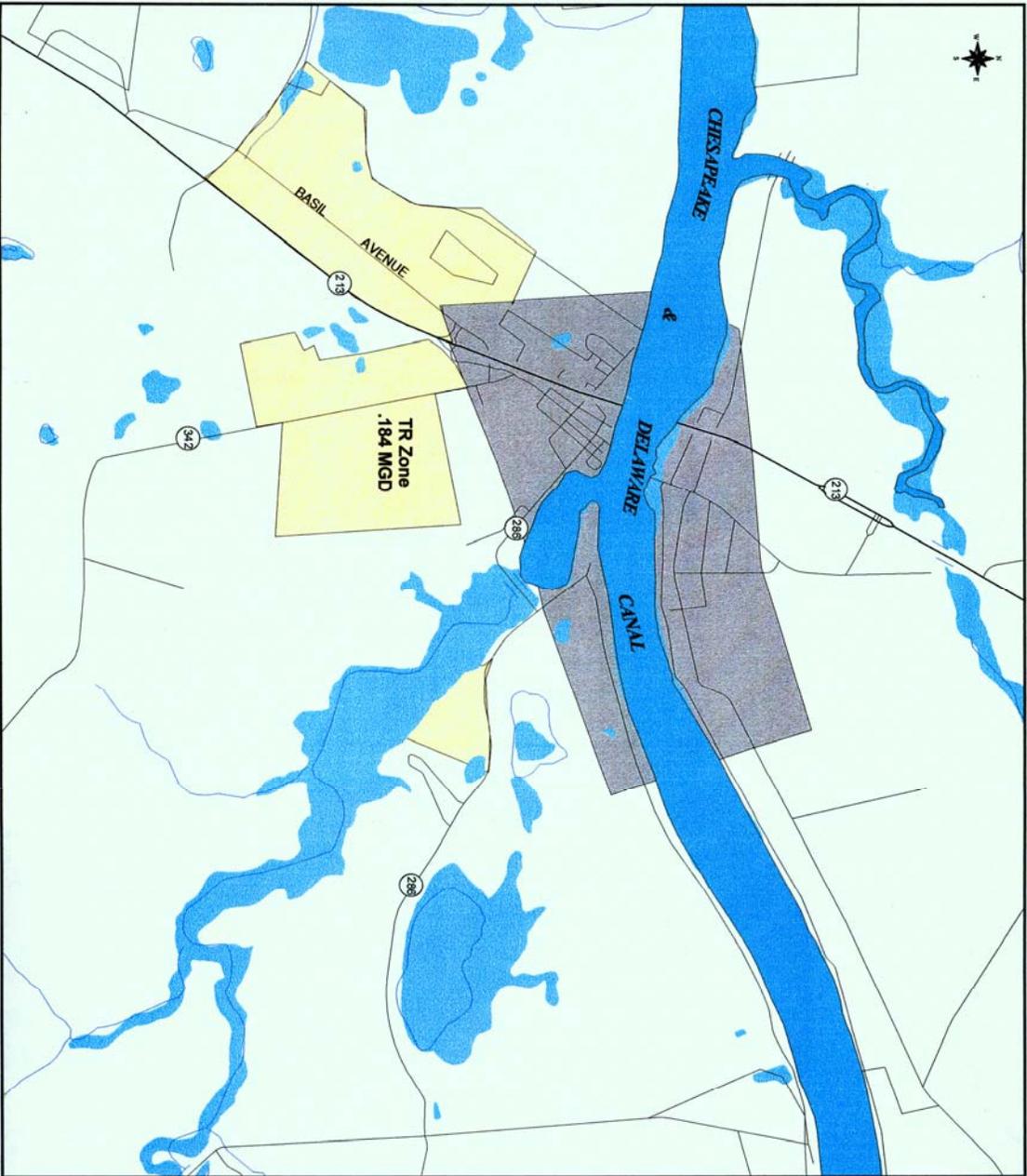


Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Perryville, MD 21551
Tel: 302.791.0700
Fax: 302.791.0708

Map V-2

Charleston



Cecil County
Urban Growth Boundary Plan

- Legend**
- Streams
 - Roads
 - Water
 - Wetlands
 - Town Limits
 - Town Residential Zoning

Note:
Road and Stream data from MdProperty View

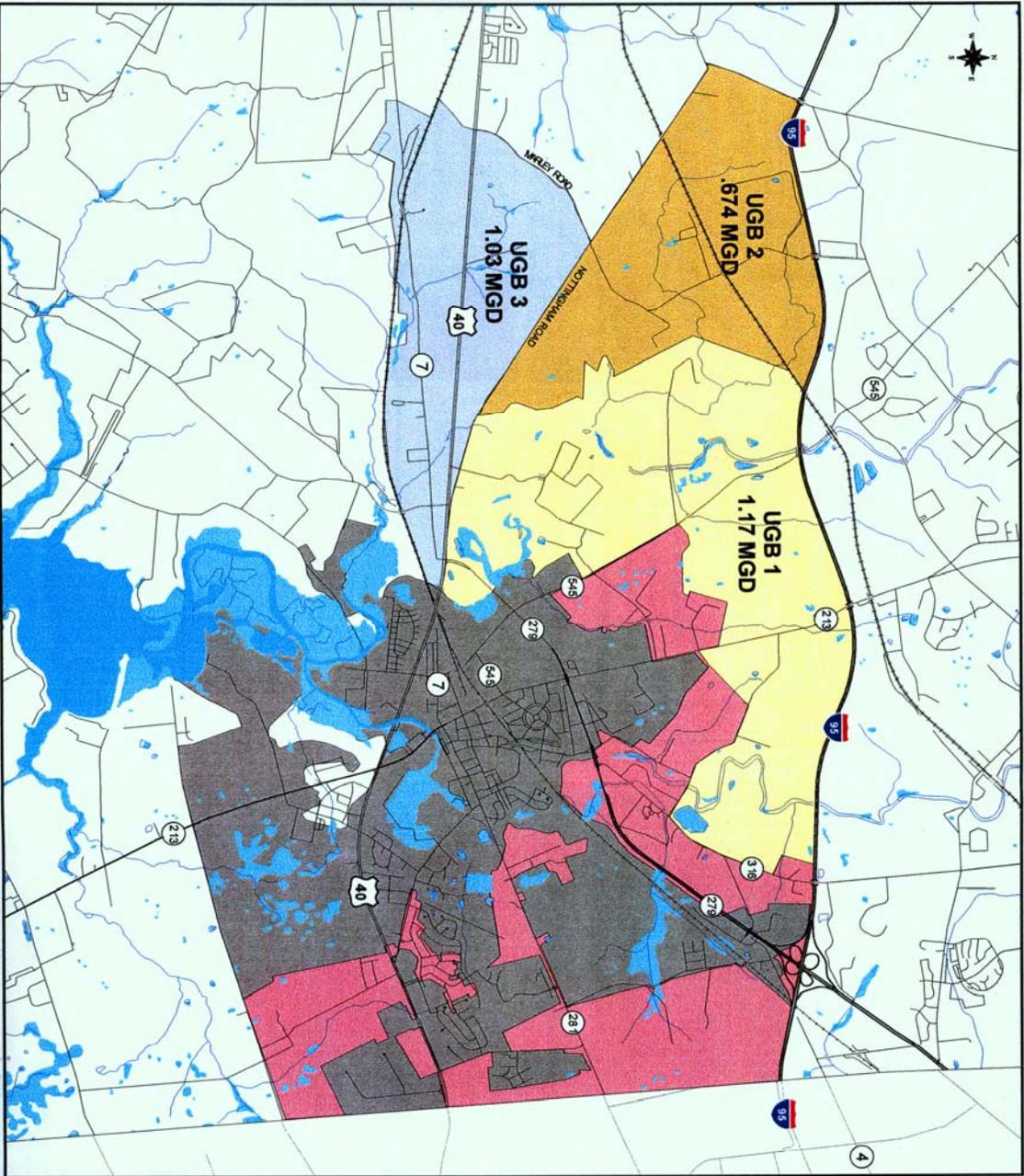
1000 0 1000 2000 Feet

Tatman & Lee Associates
A Division of URS Corporation

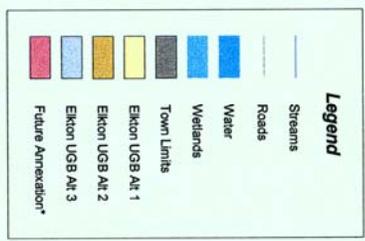
1300 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map V-3

Chesapeake City



**Cecil County
Urban Growth Boundary Plan**



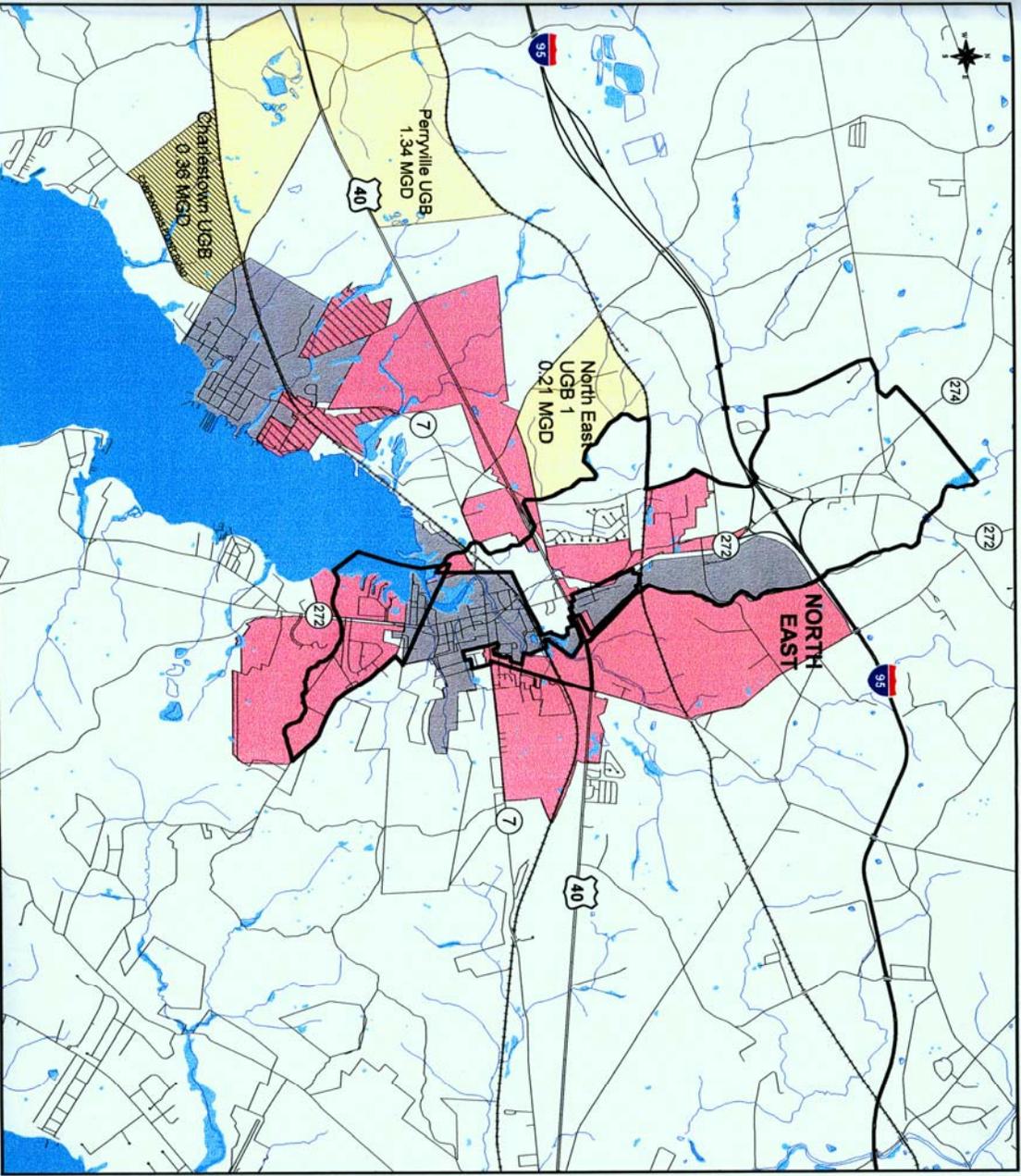
Note:
Road and Stream data from MidProperty View.
* Derived from report entitled "Comprehensive Water and Sewer Study," Prepared by McCrone for the Town of Ektion, dated May 18, 1999

Tatman & Lee Associates
A Division of URS Corporation

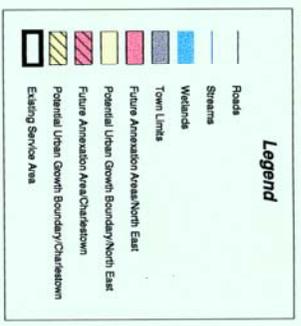
1200 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map V-4

Ektion



**Cecil County
Urban Growth Boundary Plan**

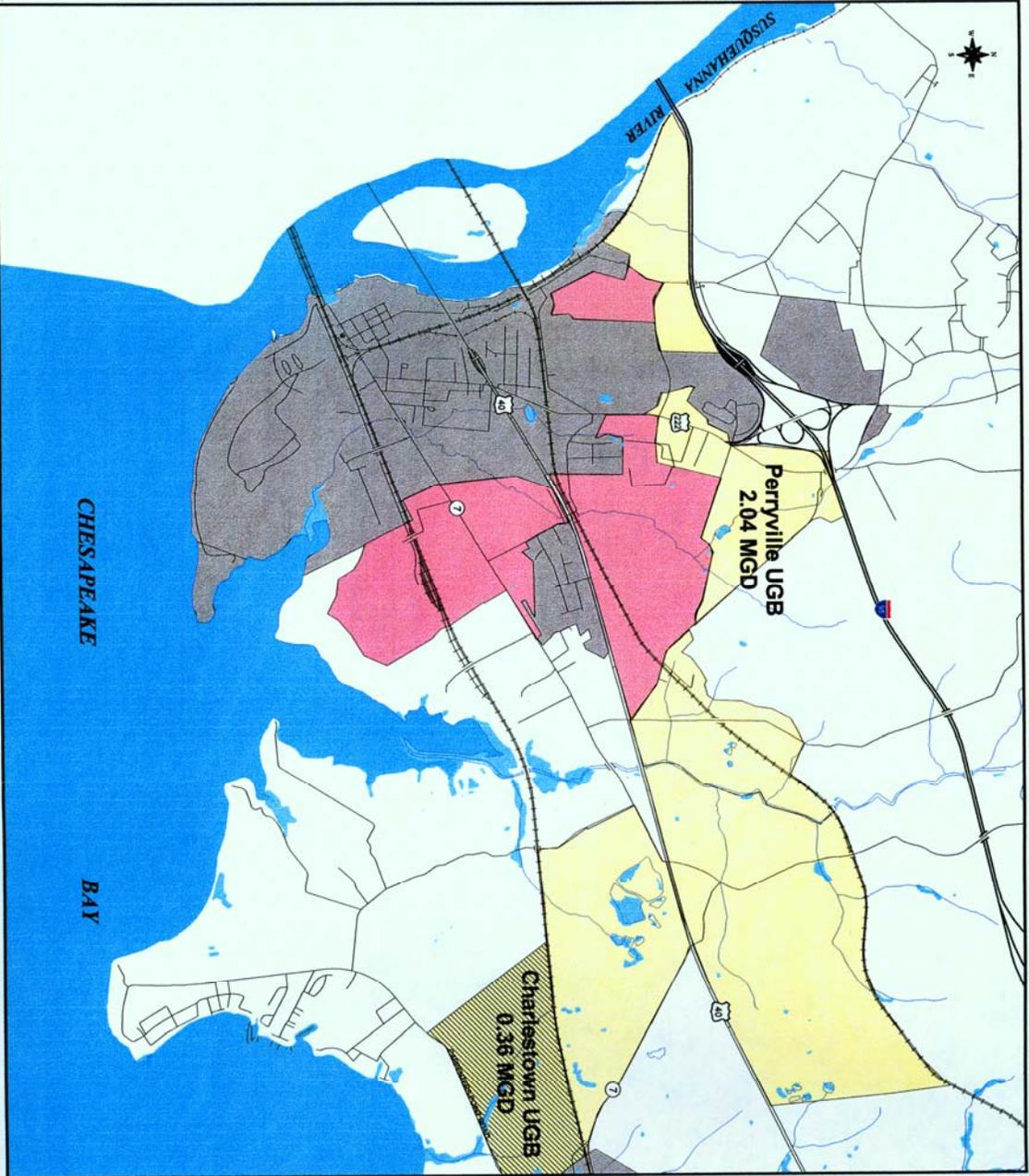


Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.731.0708
Fax: 302.731.0708

Map V-5

North East



**Cecil County
Urban Growth Boundary Plan**

Legend

- Streams
- Roads
- Water
- Wetlands
- Town Limits
- Potential Urban Growth Boundary/Charlestown
- Future Annexation Area/Perryville
- Potential Urban Growth Boundary/Perryville

Note:
Road and Stream data from MidProperty View

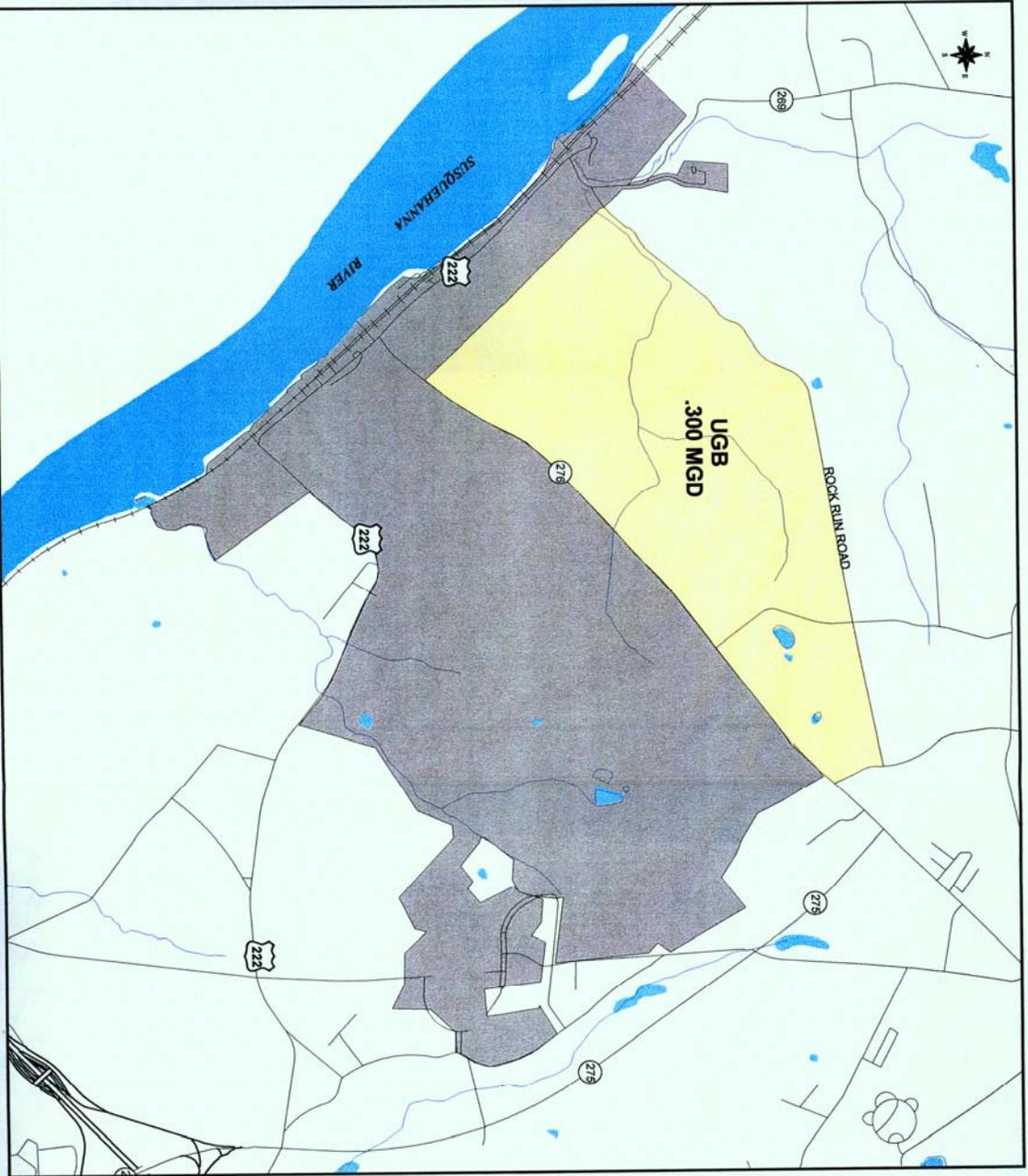


Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map V-6

Perryville



**Cecil County
Urban Growth Boundary Plan**

Legend

- Streams
- Roads
- Water
- Wetlands
- Town Limits
- Potential Urban Growth Boundary

Note:
Road and Stream data from MidProperty View

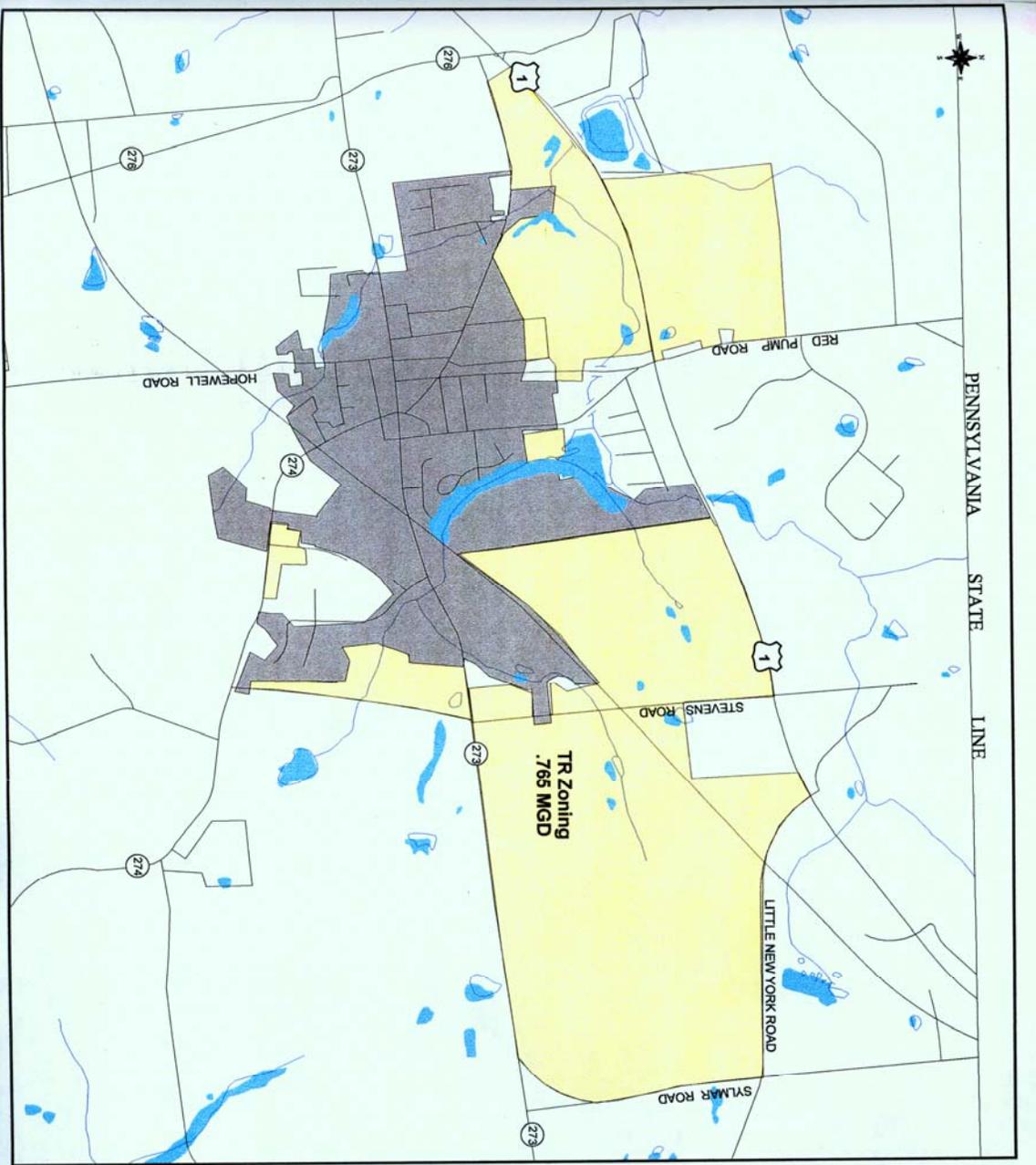


Tatman & Lee Associates
A Division of URS Corporation

1920 Philadelphia Pike
Wilmington, DE 19711
Tel: 302.791.0700
Fax: 302.791.0708

Map V-7

Port Deposit



Cecil County
Urban Growth Boundary Plan



Note:
Road and Stream data from MdrProperty View



Tatman & Lee Associates
A Division of URS Corporation

1200 Philadelphia Pike
Towson, MD 21286
Tel: 302.791.0700
Fax: 302.791.0706

Map V-8

Rising Sun

INTRODUCTION

This chapter will discuss the ability of the respective Towns to provide water and/or sewer service to the areas identified as UGB's and the areas zoned as Town Residential (TR). Where appropriate, recommendations have been made for physical improvements as well as for administrative activities to effectuate such service. Prior to the above discussions, it is first necessary to evaluate the implications of annexations relative to Town service to the UGB's or TR zones.

Annexation

The provision of water and/or sewer by the Towns to new developments, and the requirement that those new developments be annexed into the Town providing service, has long been a tool of the Towns to grow and increase revenue. In addition, property taxes paid to the Town on the land being annexed helps to defray the cost of providing such service. During the discussions with the Towns while preparing this study, the issue of annexation often arose. That is, could the Towns require annexation as a condition of providing service to areas identified as UGB's or TR zoning? For the purposes of this study, no overall policy has been established regarding this issue. The primary purpose of this study is to identify currently unincorporated areas for potential service with the respective Town's water and/or sewer facilities consistent with the County's Comprehensive Plan. Said service would only be provided in joint cooperation between the Towns and County. It is envisioned that, ultimately, service would be provided in accordance with service area agreements which would specify any conditions of providing such service. Annexation issues would be discussed in more detail during the negotiations between the County and Town(s) regarding the service area agreements.

It is important to note that, as mentioned earlier in this study, the UGB's do not overlap any areas designated for future annexation. It may be in the best interest of both the County and Towns to negotiate service area agreements to provide service to areas clearly designated for future annexation. Said service would implement Town land use policies while also potentially lessening the overall pressure to convert agricultural lands to residential development in the County's Rural Conservation District and Resource Protection District.

MUNICIPAL SERVICE

Using the information presented in the previous chapters, Tables VI-1 and VI-2 summarize the water and sewer capacities of the Towns relative to existing need, future Town needs, future UGB and TR zone needs. Except for the Towns of Elkton, North East and Rising Sun, no other Town has recently evaluated future water and/or sewer needs for its incorporated boundaries and future annexation areas. The water demand and wastewater flow

estimates for the year 2020 for the remaining Towns assumes that the Towns will utilize all remaining capacity of the water and sewer systems for their own use (Year 2020, Town Use). Given the limited remaining capacity of these systems, these Towns may need to make improvements to accommodate their own future needs.

Cecilton

Tables VI-1 and VI-2 indicate that the Town is currently incapable of providing water or sewer service to the areas designated as TR zone surrounding the Town. There is currently only 5,000 gpd available capacity in the water system and only 11,000 gpd available in the sewer system. At 250 gpd/dwelling unit, this remaining capacity in the water and sewer system would accommodate 20 and 40 dwelling units, respectively. This would allow for limited in-fill or new development but would not allow for any substantial new growth in or surrounding the Town.

As stated in Section 4, the Town is currently considering upgrades to the wastewater treatment plant as well as the water system. The Town has begun the planning to upgrade the wastewater treatment plant to .100 mgd, but has not quantified a future demand for water system improvements. The Town does anticipate having to provide additional storage once water demand reaches .065 mgd. Assuming water system improvements that provide a corresponding capacity to the wastewater treatment plant planned improvements (.100 mgd), there will be limited potential to accommodate new growth.

Charlestown

With an existing water supply capacity of .157 mgd and an existing demand of .071 mgd, the Town currently has an excess water supply of .086 mgd. The Town Manager estimates that recently proposed developments would require an additional water supply of .031 mgd, leaving approximately .055 mgd of unallocated excess capacity. This excess capacity would supply approximately 220 dwelling units and would be needed to supply the area designated for future annexation. In order to provide service to the UGB the Town would need to develop an additional supply of water. In order to accomplish this, the following should be investigated:

- Developing additional groundwater supplies.
- Connecting to any water supply that is provided to the eastern portion of the Perryville UGB. This will be discussed in more detail below.

TABLE VI-1
WATER NEEDS
CECIL COUNTY URBAN GROWTH BOUNDARY PLAN

TOWN	Water Supply Capacity*	Existing Demand	Water Supply Year 2020 Programmed Capacity	Water Supply Demand Year 2020, Town Limits	Year 2020 Deficit, Town Needs**	UGB Buildout Water Demands	Total Deficit***
Charlestown	0.157	0.071	0.157	0.157	0.000	1.030	1.030
Cecilton	0.050	0.045	0.050	0.050	0.000	0.239	0.239
Chesapeake City South	0.085	0.069	0.080	0.080	0.000	0.184	0.184
Elkton	2.150	1.350	2.150	4.800	2.650		
UGB 1	NA	NA	NA	NA	NA	1.170	3.820
UGB 2	NA	NA	NA	NA	NA	0.674	3.324
UGB 3	NA	NA	NA	NA	NA	1.030	3.680
North East	0.870	(information from Town is pending)					
Perryville	0.400	0.376	0.400	0.400	0.000	1.340	1.340
Port Deposit	0.400	0.114	0.400	0.400	0.000	0.300	0.300
Rising Sun	0.260	0.148	0.260	0.449	0.189	0.765	0.954

* Considers both permit and treatment capacity. Does not consider storage requirements.

** For Cecilton, Chesapeake City, Perryville and Port Deposit, assumes that Town will utilize any remaining capacity.

***Does not include storage requirements.

TABLE VI-2
WASTEWATER NEEDS
CECIL COUNTY URBAN GROWTH BOUNDARY PLAN

TOWN	WWTP Existing Permitted Capacity	Existing Flows	WWTP Year 2020 Programmed Capacity	Year 2020 Wastewater Flow, Town Limits	Year 2020 Deficit, Town Needs*	UGB Buildout Wastewater Flows	Total Deficit**
Cecilton	0.080	0.045	0.080	0.080	0.000	0.239	0.239
Chesapeake City South	0.080	0.069	0.080	0.080	0.000	0.184	0.184
Elkton	1.600	1.350	1.600	4.800	3.200		
UGB 1	NA	NA	NA	NA	NA	1.170	4.370
UGB 2	NA	NA	NA	NA	NA	0.674	3.874
UGB 3	NA	NA	NA	NA	NA	1.030	4.230
Perryville	1.650	0.850	1.650	1.650	0.000	1.340	1.340
Port Deposit	0.150	0.114	0.150	0.150	0.000	0.300	0.300
Rising Sun	0.275	0.226	0.275	0.449	0.174	0.765	0.939

* For Cecilton, Chesapeake City, Perryville and Port Deposit, assumes that Town will utilize any remaining capacity.

** Does not include storage requirements.

Chesapeake City

Similar to Cecilton, Chesapeake City also does not currently have the ability to provide water or sewer service to areas designated as TR zoning. A remaining capacity of 16,000 gpd (64 dwelling units) and 11,000 gpd (44 dwelling units) in the Town's water and sewer systems respectively, will allow for infill and limited new development. A new development consisting of 41 units has recently received concept approval from the Town's Planning Commission which would generate approximately 10,000 gpd of water and sewer needs. In addition, the Mayor of Chesapeake City stated during the interviews, that the Town wishes to accommodate new growth mostly on the north side of Town to better preserve the historic character of the south side and the accompanying tourism business. According to the Mayor, the extension of water and/or sewer outside of existing Town limits on the south side, would only occur to address serving existing dwellings.

Elkton

As reported in the McCrone study, the Town of Elkton is facing considerable deficits in water and sewer capacity for the expected growth over the next 20 years. As can be seen in Table VI-1 and VI-2, the Town can expect a water supply deficit of 2.65 mgd, and a sewer capacity deficit of 3.2 mgd over the next 20 years if no improvements are made. The Town is in the planning stages of upgrading the wastewater treatment plant to allow for a staged accommodation of flows over the next 20 years. More significantly perhaps, is the estimation in the McCrone study that the surface water treatment plant permitted capacity and the overall water system permitted capacity will be reached in the years 2003 and 2005, respectively. This deficit, of course, does not include the needs of the potential UGB's provided in this study. Given this near term water supply deficit, the following alternatives were discussed with the Town that could address future Town needs as described in the McCrone study as well as the needs of the UGB:

- Development of additional groundwater supplies by the Town. A study conducted in 1987 by the Maryland Department of Natural Resources, entitled Northern Cecil County Water Supply Resources Development and Management Plan, states that an additional 1.5 mgd of water is potentially available from the coastal plain aquifers south of Route 40 near the Town. Given the long-term water supply needs of the Town and the County's UGB, this scenario would only provide short-term relief.

- Interconnection with the Artesian Water Company supply in Delaware. Artesian currently owns and operates wells and a treatment plant on Old County Road (Williams Road in Cecil County) on the Maryland/Delaware border. According to telephone interviews conducted as part of this study, Artesian officials stated that there is available capacity to provide service to Elkton. Interconnection could potentially occur at the State border on Williams Road. Depending on the amount of water available from Artesian, the Town could purchase water directly from Artesian and, in turn, sell to the County for service to the UGB's.
- County purchase of water from Artesian with use of the Town's distribution system to provide water to the UGB's.
- Interconnection with the County's Meadowview water system which obtains most of its water supply from the United Water Company in Delaware. Given recent water supply problems in Delaware, this scenario would most likely not provide a long-term solution, but could provide alternatives in times of drought.

Along with recommendations to increase the water supply and upgrade the wastewater treatment plant, the McCrone study also made numerous recommendations to upgrade the Town's water distribution system and wastewater collection and conveyance system. In order to determine where future improvements were needed, McCrone developed a model of the wastewater collection system using a spreadsheet framework created in Quattro Pro, and a model of the water system using Cybernet, by Haestad Methods. These models could be used to test system impacts of service to the UGB of any of the above alternatives.

North East

As noted in Section 4, the County and Town have previously entered into service area agreements whereby the Town provided water service to areas outside of Town limits. The County and Town should begin discussions on revising these agreements to provide coordinated water service to the future annexation areas of the Town and the surrounding UGB. In light of the potential municipal interconnection discussed below, the Town should decide to what extent it wishes to pursue its currently anticipated upgrades. Even with the possible interconnection, increased capacity within the Town's existing system would provide additional flexibility during times of drought or other emergencies.

Perryville

Under current operating conditions, the Town of Perryville has only .024 mgd of additional capacity at the WTP. Although the surface water withdraw permit allows for an average daily withdraw of 2.0 mgd, the normal operating conditions of 16 hours of operation at normal pumping rates produces only .40 mgd. In addition, there is inadequate storage to meet current demands. The Town is also currently considering alternatives to improve the treatment plant or treatment operations to meet State water quality requirements. Under the current situation, the Town is incapable of providing water service to the UGB.

The Town does have approximately .80 mgd of available capacity at the wastewater treatment plant. Given the fact that the eastern portion of the Town's UGB could easily be served by the County's Seneca Point WWTP, the total sewer needs of the UGB to be potentially served by the Town is .34 mgd. Again, the Town will need to evaluate its own long-term needs relative to service to existing and future annexation areas prior to determining if there is excess capacity to serve the UGB.

Port Deposit

Although there appears to be excess capacity available at the Town's water treatment plant, and to a lesser extent at the wastewater treatment plant, the future water needs of the recently annexed Bainbridge site will require additional capacity. The Town is currently in the process of evaluating the future water and sewer needs of the Bainbridge site as well as evaluating alternatives to provide service. Due to the proximity of the potential UGB to the Bainbridge site and given the similar topographical characteristics of the two areas, water and sewer service to the Bainbridge site would greatly facilitate potential service to the UGB. During the interviews conducted as part of this study, the Town Manager did agree to have the Town's consultant consider the additional needs of the UGB (.30 mgd) when evaluating service alternatives to the Bainbridge site.

Rising Sun

Tables VI-1 and VI-1 indicate that there is currently .112 mgd of excess capacity in the Town's water system and .049 mgd of excess capacity at the Town's wastewater treatment plant. In a study prepared by Whitman, Requardt and Associates, LLP for the Town entitled, Water/Wastewater Preliminary Engineering Report, dated July 29, 1998, improvements to the water system are proposed to meet a 20-year demand of .449 mgd. This 20-year demand is based on the needs of the existing Town as well as the

needs of the Phase I Annexation Area as shown in the Town's Comprehensive Plan. Improvements to the water system include the development of several wells, upgrades to the distribution piping and the addition of a .250 mg storage tank.

Improvements to the wastewater system are proposed in the above-mentioned study that would allow for a limited increase in treatment capacity from .275 mgd to .375 mgd. An evaluation of improvements that would permit a larger increase in capacity is deferred pending a more detailed analysis of the lagoons. Improvements to the North Branch Interceptor are recommended to reduce I/I and increase available capacity in the lagoon treatment system.

RECOMMENDATIONS

Memorandums of Understanding

As can be seen throughout the previous chapters, none of the Towns currently have the excess capacity to accommodate the total needs of the UGB's or TR zones. Much additional work needs to be performed prior to providing service, such as feasibility evaluations and preliminary engineering, cost estimating, final engineering, permitting, etc. To begin implementation of service to any UGB, the County and Towns should enter into Memorandums of Understanding (MOU's). The MOU should establish the potential area to be served as well as the roles of the County and Town relative to future engineering costs. Items such as County/Town contribution to capital costs, user fees, annexation policies need not be included in the initial MOU's until such time as the cost of providing service is established in the more detailed engineering studies.

County Actions

- The County should seek comments from each Town relative to this study and the Towns' willingness to proceed with further investigations into service to the UGB's or TR zones. The County should assure the Towns that such a willingness in no way obligates the Towns to provide future service to these areas, but only establishes the impetus to move forward with more detailed investigations.
- The County should seek to update the Master Water and Sewer Plan to include the UGB's and TR zones of the willing Towns as potential service areas. Again, the Water and Sewer Plan should be written in such a way so as to assuage any fear the Towns may have that such a designation obligates service to the areas.

- The County should seek to enter into MOU's with the willing Towns. The MOU's would further refine the path forward such as establishing the roles and financial commitments of the parties relative to more detailed preliminary engineering reports.

Town Actions

- Each Town should carefully review this study and determine if it is in their best interest to enter into a MOU with the County as described above. Such a consideration should be made in light of the Town's ability to meet the long-term needs of its customers and the potential for improved service or increased capacity by cooperating with the County.
- Each Town should evaluate, and attempt to quantify, their future water and sewer needs. This has recently been accomplished in the Towns of Elkton, North East and Rising Sun. Such evaluations will assure that the County will not be requesting allocations that are needed to serve areas within the existing limits of the Towns or future annexation areas of the Towns.

FACILITY RECOMMENDATIONS

The following recommendations assume that the Towns have decided to pursue potential service to the UGB's or TR zones.

Cecilton

The area within and immediately surrounding the Town of Cecilton has been the subject of recent development proposals. In light of the extreme growth occurring in Southern New Castle County, Delaware, the Town expects this growth pressure to continue. The Town is in the process of preparing a water and wastewater facilities plan. The Town and County should begin discussions on cooperatively planning for, and ultimately providing for, the long-term water and wastewater needs of the area. These future needs should be based on in-fill potential in the Town, the Town Growth Areas as defined in the Town Comprehensive Plan and the County's TR zoning.

Charlestown

Based on the Town's comments on the Draft Plan, included in Appendix C, there is no need to pursue discussions with the Town at this time.

Chesapeake City

Since the Town only wishes to expand on the north side, it does not appear appropriate for the County to pursue possible upgrade to the south side's water and sewer system to provide service to the TR zones.

Elkton

The County and Town should jointly pursue the investigation of additional water supplies to address the future needs of the Town as well as the UGB's. A phased approach to providing service to the UGB's should be undertaken based on the availability of additional water and the timing of future upgrades to the wastewater treatment plant. A summary of the potential options to increase water supply is as follows:

- Development of additional wells on the south side of Town.
- Execution of a service agreement between the Artesian Water Company and the Town with the Town providing service to the UGB's via a service area agreement between the Town and County.
- Execution of a service agreement between the Artesian Water Company and the County, with the County using the Town's distribution system to provide water to the UGB's.

The Town should continue to pursue upgrades to the wastewater treatment plant.

North East

The Town should decide to what extent it wishes to pursue its currently contemplated upgrades. The Town could continue to pursue upgrades to its existing system, or pool its resources with the County and other Towns to implement the interconnection discussed below.

Perryville

The County and Town should jointly pursue upgrades to the Susquehanna River WTP to provide additional water to the Town, the UGB and other areas as will be discussed below. In addition to increasing the water supply, the County and Town should jointly pursue upgrades to the water system to address existing storage deficiencies and future storage needs.

Depending on the future sewage needs of the Town, the Town and the County should jointly pursue upgrades to the Town's wastewater treatment plant to accommodate the western portion of the UGB.

Port Deposit

The Town should continue its evaluation of alternatives to provide water and wastewater service to Bainbridge and the UGB. Once this study is completed, the County and Town can begin discussions on how to provide such service.

Rising Sun

The County and Town should jointly seek to revise the 1998 Preliminary Engineering Report to determine what improvements are necessary to the Town's water and sewer systems to accommodate the TR zones.

MUNICIPAL INTERCONNECTIONS

Given the limited resources and recent droughts, clearly the most challenging issue facing the County and the Towns is the provision of a long-term water supply. All the recommendations above have attempted to address the future needs of the Towns and County UGB's in isolation. Numerous previous studies have proposed to utilize the Susquehanna River to provide a long-term water supply to the Route 40/I-95 corridor. Major obstacles that prevented the implementation of these plans included concerns over the extent of potential service, lack of coordination with Towns, and the lack of an existing customer base relative to the up-front capital costs. The Susquehanna River still provides the most sustainable water supply to the County. The County should begin discussions with the Towns, State agencies and the Susquehanna River Basin Commission (SRBC) regarding the use of the Susquehanna River to meet the long-term needs of the County and Towns under the following parameters:

- Intake will occur at the Perryville Water Treatment Plant.
- Service will be provided only to the Towns of Perryville, North East and Elkton, those Towns' future annexation areas, and the surrounding UGB's as defined in this study and ultimately in the Master Water and Sewer Plan.
- The Towns will act as nodes of distribution.
- To the extent that service can reasonably be provided to the County UGB's, the Towns will administer service to the UGB's in accordance with service area agreements to be negotiated in the future.

- Service will be denied to areas not designated as the above, unless such service will abate an existing health hazard.

Service to the Towns and the County UGB's in accordance with the above parameters offers the following advantages over the County attempting to provide a water source to its growth areas independent of the Towns:

- The County will not be perceived as competing with the Towns for customers and potentially hindering the Towns' ability to use the provision of water as a means to annex.
- Phased service to the UGB's, which are smaller subareas of the County's growth areas, allows the County to better keep pace with the provisions of other public facilities such as schools and roads.
- Utilization of the Town's distribution system to the maximum extent feasible to provide water to the UGB's.
- Consistency with the Maryland Smart Growth and Neighborhood Conservation Program which calls for state resources (funding) to be applied to areas where infrastructure is already in place or planned to be in place.

MUNICIPAL INPUT

As stated in the introduction to Section 4, information on the condition and future plans for the Town's facilities was received from the Towns during a series of interviews and telephone conversations. Prior to the initiation of the study, the overall scope and concept of the project were presented to Town representatives on October 27, 1999. In addition, an Informational Meeting on the completed Draft Plan was held at the Cecil Community College on Saturday, March 18, 2000. Written invitations to attend were extended to all Town Planning Commission members, as well as Town elected officials. All of the Towns were represented. At this Informational Meeting, copies of the Draft Plan were distributed and written comments on the Draft Plan were requested by the County. Copies of the written correspondence from the Towns can be found in Appendix D. No written comments were received from the Towns of Port Deposit or Rising Sun.

APPENDIX A

SUSQUEHANNA RIVER BASIN COMMISSION CORRESPONDENCE

1/15/58



SUSQUEHANNA RIVER BASIN COMMISSION

1721 North Front Street • Harrisburg, Pennsylvania 17102-2391

Phone (717) 238-0423 • Fax (717) 238-2436

Web <http://www.srbc.net>

Application 19980108

CECIL COUNTY BOARD OF COMMISSIONERS CECIL COUNTY, MARYLAND

Purchase of up to 0.80 MGD from the Town of Perryville, Cecil County, Maryland

Review Authority

Pursuant to Article 3, Section 3.10 of the Susquehanna River Basin Compact, P.L. 91-575, and Sections 803.4 and 803.44 of the Commission's regulations, the Susquehanna River Basin Commission requested that the above referenced application be submitted to the Commission for review. The application has been reviewed by Commission staff for possible approval in accordance with the previously referenced sections of the Compact and regulations, and pending policy of the Commission regarding out-of-basin diversions.

Description

Purpose. The purpose of the application is to request approval for the purchase of water for distribution in a proposed transmission main and associated appurtenances to provide an additional source of water along the Route 40 Development Corridor in Cecil County, Maryland.

Background. The applicant has requested the right to purchase up to 0.80 million gallons of water per day (MGD) from the Town of Perryville through a proposed interconnection. The water will be available for distribution to existing municipalities, existing industrial, commercial, and residential users, and new users along the Development Corridor, generally defined as U.S. Route 40 from Perryville to the Town of Elkton, Cecil County, Maryland. The initial construction plans would develop the pipeline to the Town of North East, Cecil County, Maryland.

Location. The water would be withdrawn through an existing intake pipe located at the Town of Perryville's Susquehanna Water Treatment Plant. The interconnection between the Town of Perryville and the proposed transmission main would be in the vicinity of the Town's Cedar Corner storage tank. The proposed transmission main will be located along the south shoulder of U.S. Route 40.

Project Features. The area proposed to be served by the applicant currently obtains the majority of its water from ground-water sources, the Big Elk Creek, the Little Elk Creek, and Northeast Creek. Water is treated as needed and stored in numerous storage facilities having a combined capacity of approximately 9.4 million gallons. The water purchased from Perryville will flow directly into the proposed transmission main. The Susquehanna and Mill Creek Water Treatment Plants will undergo the upgrades necessary to support the proposed project. All other sources and interconnections that currently exist in the area will be maintained.

Currently, Elkton and North East rely on sources of water that are not reliable during low flow periods, and the local streams are severely stressed because of their withdrawals. This project would not only make available a dependable supply, but would also provide local environmental benefits to streams currently being impaired frequently.

The project is very proximate to the Susquehanna River Basin and the return water enters the upper portion of the Bay upstream of the Susquehanna River inflow. This project has been developed through the Cecil County Planning Office and is the result of planning studies evolving over a period of some 30 years. It is consistent with state land use planning and will provide a dependable water supply to many communities that need it for public health and safety.

Consultant studies show the project to be the most cost effective and the least environmentally intrusive of the various alternatives available. The project is being coordinated with other infrastructure such as wastewater and energy facilities.

Findings

The project is subject to Commission review and approval requirements as per Commission Regulation 803.4, 803.44 and Article 3, Section 3.10 of the Compact. The project is also subject to water conservation requirements as per Commission Regulation 804.20(a). The water transmission from the Town of Perryville constitutes a diversion of Susquehanna basin waters under Section 3.10(5) of the Compact and is being reviewed by the Commission under a separate docket for the Town of Perryville. Because of the integral connection between this docket and the docket for Perryville, this application is also being reviewed with respect to the Commission's pending out-of-basin diversion policy.

An application fee has been paid in accordance with Commission Resolution 97-01, and the applicant has met the Commission's municipal notification requirements.

OUT-OF-BASIN DIVERSION CONSIDERATIONS

1. *Will the project have any adverse effects on the ability of the Susquehanna River Basin to meet its own water needs?*

The project's increased taking from the Susquehanna River will have very little net effect on the basin's ability to meet its own water needs. Although the proposed transfer will cause an

increased diversion of water from the basin, the Town of Perryville will be in compliance with the Commission's consumptive use regulation, which assures that in periods of low flow any water transferred outside the original service area will be made up by releases from upstream storage reservoirs. The Town of Perryville will be responsible for paying a rate of 20 percent of the \$0.14/1,000 gallons for all water transferred outside its original service area. This money is in turn being used to purchase reservoir storage so that releases can be made to offset the incremental effects of this proposed transfer.

2. How will the project affect the instream flow requirements of the river and the freshwater requirements of the Chesapeake Bay?

Assuming all of the proposed purchase of water from Perryville (0.80 MGD) comes from the Susquehanna River, it is difficult to envision any effect on either the river or the Chesapeake Bay, especially since a majority of the water will eventually be returned to the Northeast Creek which empties into the Upper Chesapeake Bay. The 0.80 MGD purchase (1.24 cfs) represents just 0.003 percent of the long-term annual mean flow of the Susquehanna River at Marietta, Pa. Focusing on just low flow periods, the proposed taking is 0.01 percent of the mean flow for August, which is the lowest monthly average value for the year. At the most extreme case, the taking would be 0.06 percent of the lowest daily flow ever measured at Marietta. Keeping in mind that during low flow periods, the withdrawal of water would be offset by upstream releases, there would be no measurable impact on the flow regimes of either the Susquehanna River or the Chesapeake Bay. Also, during low flow events, the releases from upstream reservoirs would improve river habitat for some 250 miles.

3. Has the applicant demonstrated a reasonably foreseeable need for the quantity of water requested?

Yes. Average and maximum daily demands for the Project Study Area (northeastern and central Cecil County) water systems currently are 5.09 MGD and 7.66 MGD, respectively. Projections by the applicant for the year 2020 indicate an average and maximum daily need of 9.72 MGD and 14.58 MGD, respectively. The applicant estimates that by the year 2020, a total new source capacity of 7.71 MGD will be needed for all public and private water systems in the study area to meet maximum daily demands. Commission staff has reviewed these projections and has found them to be reasonable in light of the one percent annual growth occurring in the Project Study Area.

4. Has the applicant demonstrated that reasonable efforts have been made to develop sources within the basin of need?

Yes. Most of the Project Study Area is served by ground-water sources. Based on the "Northeastern Cecil County Water Supply Resources Development and Management Plan" conducted by the Maryland Department of Natural Resources in 1988, and the "Susquehanna River Water Supply Study" conducted by Gannett Fleming, Inc. in 1990, the present ground-

water and surface-water source capacities are insufficient to meet present and future water demands. The majority of the ground-water supply is from the Piedmont Formation, which is hard igneous rock yielding insufficient water to meet the projected needs. Alternative supply sources such as the construction of a reservoir on the Big Elk River, drilling more wells, an interconnection with the Chester Water Authority, and others have been investigated. However, both studies found that the construction of a transmission main along U.S. Route 40, otherwise known as the Development Corridor, from Perryville to Elkton, Maryland is the most viable solution.

5. Does the proposed project have the potential to adversely impact the economic development within the Susquehanna basin?

The proposed project has the potential to positively impact that portion of the basin immediately adjacent to the basin boundary and outside of the basin. The 1990 Cecil County Comprehensive Plan established a Land Use Plan identifying the U.S. Route 40/I-95 corridor as comprised of Suburban and Development Districts. The purpose of the Development District "...is to encourage intense residential, commercial, and industrial development in and around the Towns of Elkton, North East, Perryville, and Port Deposit. Development is encouraged because it can be most effectively served by public investments in roads, water supply, and sewers." (pg. 6) "The Suburban District was created to provide development opportunities in appropriate areas outside of the Development District and thereby reduce development pressures on the rural areas of the county" (pg. 16). By providing the water and sewer infrastructure needed to sustain the current rate of growth in the U.S. Route 40/I-95 corridor, the project will have a positive economic "spin-off" effect in those areas both within and outside of the basin in the vicinity of the project.

During the processing of this application, Commission staff learned that this proposed transmission main is not included in the current (1990) Water and Sewer Plan for Cecil County. In discussions with both Cecil County and the State of Maryland, it was learned that an updated plan including the proposed pipeline to serve as a new regional water supply source has been prepared. The updated plan is currently being reviewed and final adoption is scheduled for early 1998. Commission staff recommends that this updated plan be officially adopted by Cecil County, the municipalities of the county, and the State of Maryland prior to the start of construction of the proposed pipeline.

Following a thorough review of the material submitted by the applicant, Commission staff has determined that the proposed purchase of water meets the requirements of the Commission's proposed out-of-basin diversion policy, will not conflict with nor adversely affect the SRBC Comprehensive Plan, is physically feasible, and will not adversely influence the present or future use and development of the water resources of the basin.

Decision

The purchase of up to 0.80 MGD from the Town of Perryville, Cecil County, Maryland, is approved pursuant to Article 3, Section 3.10 of the Compact and Sections 803.4 and 803.44 of the regulations subject to the following conditions:

- a. The applicant shall comply with Commission Regulation 804.20(a) regarding water conservation. This regulation calls for metering of all users, reduction of unaccounted-for water to 20 percent or less, and the adoption of a pricing structure which encourages water conservation.
- b. The applicant shall, in times of drought conditions, concurrently institute upon its customers' restrictions concerning conservation and water use similar to those imposed by the Town of Perryville on its own system customers. Also, the applicant shall impose water use restrictions consistent with any drought emergencies declared by the Susquehanna River Basin Commission.
- c. This action does not obviate the need for the applicant to obtain any other federal, state, or local approvals required for the project.
- d. The applicant shall finalize the adoption of the revised Cecil County Water and Sewer Plan recognizing the proposed pipeline as an integral, countywide water supply project. This approval shall not become effective until all approvals that are needed from the State of Maryland for the amended County Water and Sewer Plan and the Route 40 water transmission line are obtained.
- e. Prior to construction of the project, the County shall execute and submit to the Commission for approval, a written agreement with municipal water suppliers adjacent to the pipeline service area, including the Town of North East, to make available water from the pipeline in such quantities and at such times as may be needed by the Town to ensure a safe and adequate supply. Prior to subsequent approvals for later phases of the project, the County shall execute similar agreements with other municipal water suppliers and other existing significant water users that are adjacent to any proposed pipeline service area, such as the Town of Elkton. This approval does not constitute approval for any future phases of the project which may fall within the review authority of the Commission.
- f. The Commission reserves the right, based upon new findings, to reopen any project docket and make additional orders that may be necessary to mitigate or avoid adverse impacts or otherwise to protect the public health, safety, welfare or the environment. Commission approval confers no property rights upon project sponsors.
- g. This approval is effective until January 15, 2023, in accordance with the terms of MDE Permit CE69S041(03) or its successors. Should the MDE Permit CE69S041(03) be revoked for any reason, this Commission docket shall also be terminated concurrently. In order

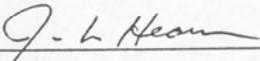
to continue operation beyond this time, the applicant shall submit a renewal application by April 1, 2022. Any increased allocations will require a new application and approval by the Commission.

h. The applicant has a period of three years from the date of this approval to initiate the project or such approval will automatically expire, unless an extension is requested by the applicant and approved by the Commission. Likewise, if the project is discontinued for such a time and under such circumstances that an abandonment of the project may be reasonably inferred, the Commission may rescind the approval of the project unless a renewal is requested by the applicant and approved by the Commission.

By the Commission:

:

Dated: January 15, 1998



Chairman

K:\DATA\PADAM\WORD\DOCKETS\CECILCOUNTYB

APPENDIX B

MARYLAND DEPARTMENT OF THE ENVIRONMENT CORRESPONDENCE



MARYLAND DEPARTMENT OF THE ENVIRONMENT

2500 Broening Highway • Baltimore Maryland 21224
(410) 631-3000 • 1-800-633-6101 • <http://www.mde.state.md.us>

Parris N. Glendening
Governor

Jane T. Nishida
Secretary

JAN 16 1998

The Honorable Oakley Sumpter, President
Board of County Commissioners
129 E. Main Street, Room 101
Elkton MD 21921

Dear Mr. Sumpter:

Representatives of the Maryland Department of the Environment met on Friday, January 9, 1998, with Mr. Al Wein, Director of Planning, Mr. Robert Campbell, Director of Public Works, and Mr. Charles Bao and Mr. Samuel Jenkins of Transviron, Inc., the County's design engineer, in regard to the proposed Mill Creek water treatment plant and transmission line to serve the I-95/Route 40 Corridor between the Towns of Perryville and North East. This is the first phase of a larger plan to provide water, sewer and gas service for the central growth corridor of the County.

The issues discussed at this meeting included the status of the County's engineering plans, the consistency of the project with the existing 1993 and draft 1997 update of the County Water and Sewerage Plan, and the positions of the potentially affected towns of Perryville, North East and Elkton regarding the planned development of central corridor infrastructure. At the meeting, the County indicated that, upon approval of the MDE construction permit, they are ready to advertise for the replacement of the Mill Creek water treatment plant and construction of the transmission line from the Mill Creek plant to near the Town of North East.

→ With regard to the Water and Sewerage Plan, the 1993 Plan included the County's intent to build a proposed transmission line, and conceptually described the infrastructure plan. However, the Plan as written does not adequately describe the intended service area, the phased and ultimate Susquehanna River water withdrawals, how the Mill Creek plant fits in with the plan, and the larger impacts of the overall proposed infrastructure plan on the municipal governments in the County.

The proposed Plan update more clearly articulates the plans of the County with respect to the central corridor infrastructure plan. MDE is in support of the county's plan to abandon the Cherry Hill, Highlands and Meadowview wastewater treatment plants within a five year time frame. MDE is also in support of eliminating the failing septic systems in the Carpenter's Point community and other areas identified in the draft Plan. The inclusion of "denied access" as a tool to serve such areas while maintaining control of development is also a good feature of the draft Plan update.

As mentioned in comments prepared by the Maryland Office of Planning on the draft 1997 Plan, the County may wish to re-evaluate the residential zoning densities in light of the Priority Funding Areas criteria. Please be aware that in order to receive water and/or wastewater funds from MDE, proposed capital projects must in designated areas which meet the criteria of the Smart Growth legislation. Please contact the Maryland Office of Planning with any questions regarding this designation process.

The County representatives assured MDE staff that the Towns of Perryville, North East and Elkton are not opposed to the planned infrastructure. Clearly, the County has reached an agreement with the Town of Perryville with regard to the provision of water from the Susquehanna and County-funded replacement of the Mill Creek water treatment plant. However, as articulated in earlier correspondence to you from this office, MDE is concerned that the central corridor development will negatively impact the economic stability of the municipalities and result in sprawl development with significant environmental consequences.

MDE would therefore like to see in the Plan the following additional language:

1. An explicit statement that the County central corridor water and sewerage infrastructure plan will play a role in helping the incorporated towns within the County to address existing and future water and wastewater needs as needed, and that the County will enter into water and sewerage service agreements with the towns to formalize such a regional approach. Specifically, prior to the construction of the Mill Creek plant and the transmission main to the Town of North East, an inter-jurisdictional agreement between the County and the Town of North East must be in place. Such service agreements would include: opportunities for the interconnection of water and sewerage systems; the negotiation of service area boundaries to best accommodate needs and availability of water and sewerage capacity among the County and the incorporated towns; and a commitment to the upgrade, development and consolidation of water and sewerage facilities in concert with "Smart Growth" to encourage development and redevelopment in areas with existing infrastructure and avoid sprawl development.
2. A commitment that the county will initiate a regional task force, consisting of appropriate State, County and municipal representatives, citizens and the business community, and the Susquehanna River Basin Commission, to develop a strategy for the regionalization of the water and sewerage services in the Planned Service Areas as shown in the Water and Sewerage Plan and to form the foundation for future inter-jurisdictional service agreements. Such a strategy must be adopted by the county and the municipalities, and approved by MDE prior to the construction of later phases of the water and sewerage infrastructure plan.

The Honorable Oakley Sumpter, President
Page 3

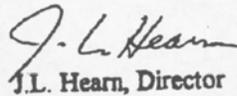
Please consider this letter as the Department's comments on the draft update to the Water and Sewerage Plan. MDE will formally review the Plan once it has been adopted by the Board of County Commissioners.

The construction permit for the first phase (Mill Creek and the transmission line to North East) will be approved by separate letter when all technical issues have been resolved, an inter-jurisdictional agreement has been signed between the County and the Town of North East, and the Water and Sewerage Plan update has been adopted by the Board of County Commissioners and approved by MDE. In addition, all conditions in the SRBC approval for the out of basin diversion must be met.

Approval of the construction permit for the first phase of the infrastructure plan does not insure or imply approval for future phases which may require separate permits or approvals by MDE.

If you have any questions, or would like to discuss this further, please contact me at (410) 631-3567, or have a member of your staff contact Ms. Virginia Kearney, Manager, Water Quality Infrastructure Program, at (410) 631-3574.

Sincerely,



J.L. Hearn, Director
Water Management Administration

JLH/dp

- cc: Jane T. Nishida, Secretary
- The Honorable Ronald A. Guns
- The Honorable David D. Rudolph
- Mr. Ronald Kreitner
- Mr. Alfred Wein
- Mr. Robert Campbell

APPENDIX C

NORTH EAST SERVICE AREA AGREEMENTS

THIS AGREEMENT, made this 6th day of November, 1972, by and between THE COUNTY COMMISSIONERS OF CECIL COUNTY, hereinafter referred to as "County", and THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST, hereinafter referred to as "Town",

WHEREAS, the County lawfully exists as a body corporate and politic in the State of Maryland, and the Town lawfully exist as a body corporate and politic in said County;

WHEREAS, Section 19-17 of House Bill No. 1486, Chapter 739 of the Laws of Maryland as passed by the 1972 Session of the General Assembly, prohibits, among other things, the construction of any water system within the Cecil County Sanitary District without prior approval of the County;

WHEREAS, the municipal water system of the Town present has a daily capacity of approximately 500,000 gallons of water, and the present daily consumption of users connected thereto is approximately 150,000 gallons per day;

WHEREAS, after contemplated improvements are made to said system by or through funds provided by the State Highway Administration in conjunction with water to be supplied to a new service center on the John F. Kennedy Highway (I-95) in Cecil County Maryland, the daily capacity of said system will increase to approximately 1,000,000 gallons per day;

WHEREAS, the John F. Kennedy Highway Service Center will use an estimated 30,000 gallons of water per day upon hookup and an estimated 75,000 gallons per day by the year 1985, and the Town of Charlestown, when hooked into the municipal system, will consume an estimated 125,000 gallons per day, making an immediate estimated total consumption of 350,000 gallons of water per day by present users, John F. Kennedy Highway and the Town of Charlestown, thereby leaving a total estimated unused daily capacity of approximately 650,000 gallons of water available from the municipal town water system;

- 2 -

WHEREAS, the Town and County desire to contract and agree on a bulk rate sale of water by the Town to the County including the method by which said water will be supplied and the rates at which it will be sold, and to define the areas outside the Town Limits that the Town will have the exclusive right to supply with water.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH, that in and for the consideration of the covenants and agreements herein contained, the County and Town, their successors and assigns, do hereby contract and agree as follows:

1. AREA TO BE SERVED - The Town shall be allowed to serve the area (which description includes the Town Limits as they existed at the date of this Agreement), beginning at the mouth of Stoney Run and the North East River and thence proceeding Northward along the center line of Stoney Run, under U.S. Route No. 40, and continuing on with the center line of said Run to its intersection with the center line of the B & O Railroad tracks; thence in an Easterly direction and with the center line of the B & O Railroad tracks to a point where said tracks intersect with the center of the Big North East Creek; thence Southerly with the center of said Big North East Creek to the point where it intersects with the South side of U.S. Route No. 40; thence Easterly with the South side of U.S. Route No. 40 to the point where it intersects with the center of Mechanics Valley Road; thence Southerly along the center line of Mechanics Valley Road to and across Maryland Route No. 7; thence Southerly along the center line of Cemetery Road to the Tome School property; thence Southerly along the East property line of said School property to Irishtown Road; thence in a South easterly direction along the center line of said road to an unnamed Run beyond the North East-High School; thence Westerly along the center line of said Run to the North East River; thence by a straight line to the mouth of Stoney Run where it meets the North

- 3 -

East River and the point and place of beginning.

2. In addition to the above, the Town is hereby authorized to extend water service to the John F. Kennedy Service Center (I-95) and to the Town of Charlestown.

3. The Town shall retain and continue to service and serve any properties existing outside the Town Limits and to which service is presently being provided by the Town even if said properties are not within the area to be served.

4. That as to any water lines constructed by the Town outside the area to be served, as permitted under this Agreement the Town may permit individual lot owners who abut on said water lines to hook into said system if they so desire, but any subdivisions subsequently developed outside the area to be served shall be within the jurisdiction of the County for water service and the Town shall permit the County to hook into said lines of the Town outside the area to be served for the purpose of obtaining water for service to its customers.

5. Any and all construction of water facilities by the Town outside the Town Limits shall be subject to and in accordance with all State and Local Laws governing said construction, including the approval of plans and specifications by the Director of Public Works for Cecil County as called for in Section 19-17 of the aforesaid House Bill No. 1486.

6. If the Town annexes an area to its Town Limits outside of the area to be served and in which the County has constructed water lines and is serving said area with water purchased from the Town, then the County shall permit the Town to purchase said lines from the County at the cost which the County has involved in said lines at the date of purchase.

(a) In connection therewith, if a meter or meters are located within the annexed area by which the sale

- 4 -

of water by the Town to the County is measured, then the Town shall bear the expense of relocating said meter or meters and meter vaults and appurtenances to the end of the newly annexed area so as to meter the water sold to the County from that point.

7. That the Town shall provide and sell water to the County on a bulk rate basis of 40 cents per 1,000 gallons.

(a) This price shall exist for one year after the date of the first sale of water by the Town to the County and either party to this Agreement may request a review and renegotiation of said rate upon at least 60 days' notice to the other party prior to the expiration of said one year period.

(b) If a renegotiation is called for, each party shall name an individual to negotiate on its behalf and said negotiators shall use the guidelines as laid down by the Public Service Commission of the State of Maryland for other utilities or water systems in arriving at a fair and equitable price for the water per 1,000 gallons.

(c) If the negotiators are unable to agree to a figure to be charged per 1,000 gallons, then the two negotiators shall name an individual as the final arbitrator on the price to be charged and the decision of the final arbitrator shall be binding upon the parties to this Agreement.

(d) Once a final price per 1,000 gallons has been arrived at by which the parties are bound, that price shall exist for a period of two years from the expiration of the original one year period and shall continue to automatically renew itself for additional two-year periods unless either party requests a review or re-

- 6 -

described in item (b) of this Paragraph 9 of this Agreement, then the County shall pay for the cost of said construction, and the Town shall reimburse the County for said cost plus interest at the rate at which the County funds used for construction were invested when withdrawn to pay for the construction, not to exceed, in any event, a rate of six per cent (6%) interest.

(d) The method of reimbursement shall be by the Town paying over to the County the difference between actual cost of production and transmission of 1,000 gallons of water to the Town and the rate the County paying the Town per 1,000 gallons. In addition, the Town shall pay over to the County any monies received by the Town for hookup fees to the lines within the "area to be served" and which lines were constructed for the benefit of the County; provided, however, that no hookups will be permitted to said lines within the "area to be served" if it will adversely affect the actual pressure, flow or supply of water needed by the County.

(e) A resolution passed by the Town shall be a that is necessary to evidence the financial inability of the Town to construct the mains or lines as called for in item (c) of this Paragraph 9 of this Agreement and a certificate from the County Treasurer as to the interest rate being earned by the County on the funds used for construction as described in item (c) of Paragraph 9 of this Agreement shall be all that is necessary to evidence the interest being earned on funds.

NDS 270/245

WATER LINE EXTENSION AGREEMENT

This Agreement, made this 24th day of November, 1986, by and between THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST, (hereinafter referred to as "Town"), and THE BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY, MARYLAND, (hereinafter referred to as "County").

WHEREAS, the parties hereto have previously entered into a Water Service Agreement, the date of the last one being June 7, 1983 (the "Water Agreement") which Agreement is attached hereto as an exhibit; and

WHEREAS, the Town and County have entered into subsequent negotiations regarding improvement and extensions of the Town's water service culminating in action taken in public meetings by the Town on November 5, 1986 and by the County on November 3, 1986; and

WHEREAS, at said meetings, motions were made and unanimously carried that of the projected costs of \$40,000.00 for upgrading the Town's water plant and extension of lines to areas requested by the County, including the educational complex at Bayview, the Town was to bear \$75,000.00 of the cost and the County \$365,000.00.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises and the covenants and agreements herein contained, the County and Town, their successors and assigns, do hereby contract and agree as follows:

1. The Town agrees to rehabilitate and bring up to current standards the water treatment plant previously given to it by Peninsula Industrial Park and to pay up to \$75,000.00 in costs for same.

Page 2

2. County agrees to bear the cost of putting a water storage tank on the property belonging to Town or on other appropriate property of sufficient size and volume to give adequate pressure for industrial, commercial and residential use contemplated.

3. County agrees to undertake the extension of water mains and necessary lines from the water plant belonging to the Town to the Bayview educational complex including Cecil Community College, Cecil Vocational-Technical Center and Bayview Elementary School.

4. The County agrees to commit up to \$365,000.00 of its funds toward the completion of Nos. 2 and 3.

5. Inasmuch as the Water Service Area Agreement dated June 7, 1983 (attached hereto as an Exhibit) may provide for a different allocation of costs for the extension of said water lines, said 1983 Agreement is hereby amended in accordance with the terms hereof.

AS WITNESS the hand of Clifton L. Buckworth, President of the Board of County Commissioners of Cecil County, duly attested by the Administrative Assistant, and the hand of C. Ray Armour, President of the President and Commissioners of the Town of North East, duly attested by the Secretary, the day and year first above written.

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY

Christine A. Stonecker

BY: Clifton L. Buckworth (SEAL)
Clifton L. Buckworth
President

ATTEST:

THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST

Dorcas M. Rielle

BY: C. Ray Armour (SEAL)
C. Ray Armour
President

Page 3

STATE OF MARYLAND,
COUNTY OF CECIL, ss.:

I HEREBY CERTIFY that on this *24th* day of *Nov.*, 1986, before me, the subscriber, a Notary Public of the State and County aforesaid, personally appeared CLIFTON L. BUCKWORTH, President of the Board of County Commissioners of Cecil County, a body politic and corporate and political subdivision of the State of Maryland, and being authorized so to do did acknowledge the foregoing instrument of writing to be the act and deed of said political subdivision.

WITNESS my hand and Notarial Seal.

Deborah H. Toller
NOTARY PUBLIC
My Commission Expires: 7/1/90

STATE OF MARYLAND,
COUNTY OF CECIL, ss.:

I HEREBY CERTIFY that on this *24th* day of *Nov.*, 1986, before me, the subscriber, a Notary Public of the State and County aforesaid, personally appeared C. RAY ARMOUR, President of The President and Commissioners of the Town of North East, a municipal corporation of the State of Maryland, and being authorized so to do did acknowledge the foregoing instrument of writing to be the act and deed of said political subdivision.

WITNESS my hand and Notarial Seal.

Nancy Jane Lewis
NOTARY PUBLIC
My Commission Expires: 7/1/90

APPROVED AS TO FORM
AND SUFFICIENCY:

Dennis S. Clower
Dennis S. Clower
Attorney for Town of North East

Robert Valliant Jones
Attorney for County Commissioners
of Cecil County

270 237

AGREEMENT

THIS AGREEMENT, made this 7th day of JUNE, 1983,

by and between THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST, hereinafter referred to as "Town", and THE BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY, MARYLAND, hereinafter referred to as "County."

WHEREAS, section 19-17 of the Cecil County Code (Chapter 739, section 2, Acts of 1972) requires the approval of the Director of Sanitary Facilities before any sewerage, water, or drainage system or extension thereof may be constructed; and

WHEREAS, County and Town entered into an Agreement dated November 6, 1972 outlining the scope of the Town's responsibility for its "area to be served"; and

WHEREAS, the Town proposes to accept as a gift, a water treatment facility on property which lies outside its present Area To Be Served as defined by said Agreement of November 6, 1972; and

WHEREAS, County is willing for Town to assume ownership, maintenance and operation of said water facility provided certain additional areas are added to the current "area to be served" by the North East Town Water System; and

WHEREAS, Town is willing to increase the "area to be served" outside its present incorporated bounds and outside its present water service area.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises and the covenants and agreements herein contained, the County and Town, their successors and assigns, do hereby contract and agree as follows:

1. AREA TO BE SERVED. The Town shall serve the area (which description includes the Town Limits and existing water service area as they exist at the date of this Agreement), beginning at the point at which Stoney Run joins with the North East River and thence proceeding Northerly along the center line of Stoney Run, under U.S. Route No. 40, and continuing with the center line of said Run to its intersection with the center line of the B & O Railroad tracks; thence

270 238

-2-

in an Easterly direction with the center line of the B & O Railroad tracks to a point where said tracks intersect with the center line of Baron Road; thence Northerly with the center line of Baron Road until it intersects with John F. Kennedy Memorial Highway; thence in a Westerly direction across the John F. Kennedy Memorial Highway joining on its Northwest side with the center line of Bailey Road and running thence with the center line of Bailey Road in a Westerly, then Northerly direction until it intersects with the center line of Theodore Road; thence in an Easterly direction with the center line of Theodore Road until departing therefrom in a Northerly, then Easterly direction to include Parcel No. 401 on Tax Map No. 19, currently owned by Curtis Parsons; thence following the division lines between Parcel No. 137 and Parcel No. 40 currently owned by George G. Gray, Jr. and Charity B. Bryant, respectively, and following said division line in a Northeasterly, then Northwesterly direction past the division line of said Gray and running along the division line between Bryant and Harry H. Marr, Parcel No. 41, Tax Map No. 19, to the Westernmost corner of the land of Marr; thence running Northeasterly with the Marr boundary across Route 274 and continuing in a Northeasterly direction along the boundary of Parcel No. 469, land of Gary D. Corron, and Parcel No. 13, land of Robert V. Weaver until it intersects with the center line of the North East Creek; thence following the center of the North East Creek in a Southerly direction until it reaches the center line of Maryland Route 272; thence in a Northeasterly direction with the center line of Maryland Route 272 so as to include Gilpin Bridge, Gilpin Falls and lands of Paul O. Shirk, et ux (Parcel No. 58), following the boundaries of said Shirk's land Northeasterly, then Southerly until they rejoin the North East Creek; thence in a Southerly direction with the center line of North East Creek until it intersects with the center line of the John F. Kennedy Memorial Highway; thence in an Easterly direction with the center line of the John F. Kennedy

270 239

-3-

Memorial Highway until it intersects with the center line of Bouchelle Road; thence in a Southerly direction with the center line of Bouchelle Road and along the Eastern boundary lines of the lands of James D. Weaver (Parcel No. 19, Tax Map No. 25) and following the boundary lines of said lands of Weaver, West, South, West, South, Southwest and West so as to include in the "area to be served" the said Parcel No. 19 and Parcel No. 468 as owned at the present time by James D. Weaver and James D. Weaver, Jr.; from the point at which the boundary line of said Parcel No. 468 joins the North East Creek, and running therefrom in a Southerly direction with the center line of the North East Creek, crossing the B & O Railroad tracks and thence to the point where the Creek intersects with the South side of U.S. Route No. 40; thence Easterly with the South side of U.S. Route No. 40 to the point where it intersects with the center of Mechanics Valley Road; thence Southerly along the center line of Mechanics Valley Road to and across Maryland Route No. 7; thence Southerly along the center line of Cemetery Road to the Tome School property; thence Southerly along the East property line of said School property to Irishtown Road; thence in a Southeasterly direction along the center line of said road to an unnamed Run beyond the North East High School; thence Westerly along the center line of said Run to the North East River; thence by a straight line to the mouth of Stoney Run where it meets the North East River and the point and place of beginning.

2. The Town shall retain and continue to service and serve any properties existing outside the Town Limits to which service is presently being provided by the Town even if said properties are not within the "area to be served".

3. As to any water lines constructed by the Town outside the "area to be served" as permitted under this Agreement, the Town may permit individual lot owners who abut on said water lines to

270 250

-4-

hook into said system if they so desire, but any subdivisions subsequently developed outside the "area to be served" shall be within the jurisdiction of the County for water service, provided however that should the Town decide to connect any such individuals, it shall not be counted against the reserve allocation to the County hereinafter set forth unless such connection is at County's request.

4. Any and all construction of water facilities by the Town outside the Town Corporate Limits shall be subject to and in accordance with all State and Local Laws governing said construction, including the approval of plans and specifications by the Director of Public Works for Cecil County as called for in Section 19-17 of the Cecil County Code.

5. If the Town annexes an area to its Town Limits outside of the "area to be served" and in which the County has constructed water lines and is serving said area with water purchased from the Town, then the County shall permit the Town to purchase said lines from the County at the cost which the County has involved in said lines at the date of purchase including any bonded indebtedness existing on said date. Upon the incorporation of any such areas, said areas shall be automatically added to the "area to be served" by Town.

In connection therewith, if a meter or meters are located within the annexed area by which the sale of water by the Town to the County is measured, then the Town shall bear the expense of relocating said meter or meters and meter vaults and appurtenances to the end of the newly annexed area so as to meter the water sold to the County from that point.

6. Service to County.

(a) The Town will reserve for the County a maximum of 300,000 gallons of its operational water capacity for sale to the County or to other parties at the request of County. However, the Town shall not be required to commit more than one-half of its reserve operational capacity to County for new services at any time. County may make

demand for said commitment for new services at such time as a Public Works Agreement for the project in need of such service shall be or has been executed by the County and the developer. Said water shall be provided and sold to the County on a bulk rate basis, the price for any such sale to be negotiated at the time but in any case it shall not exceed the rate charged by Town to its customers within the corporate limits of the Town. It is understood that the 300,000 gallon allocation is a cumulative total amount to be called for by the County so long as this Agreement is in effect.

(b) Upon request by the County for service outside the "area to be served" as defined and described herein, the Town and County shall share equally the expense for construction of any mains or lines necessary for said service from the closest existing main or line which is of sufficient size and construction to the end of the "area to be served", at which point a meter shall be installed, and the responsibility for and the cost of construction from that point on from the meter or meters shall be that of the County.

(c) Upon request by the County for service outside the Town Corporate Limits but within the "area to be served", the cost of construction from the closest existing main or line which is of sufficient size and construction shall be shared by Town and County in a fashion to be negotiated at the time of such request.

(d) At such time as a water main shall reach the area of Lums Road, upon the request of County, water service shall be extended to Cecil Community College, the cost of said extension to be borne equally by Town and County.

(e) If, at the time of the request by the County, the Town is not able to afford its cost of construction of mains or lines as required by this Agreement, then the County shall pay for the cost of said construction and the Town shall reimburse the County for said cost with interest at the rate at which the County funds used for construction were invested when withdrawn to pay for the construction, provided said interest rate shall not exceed in any event, a rate of 8% per annum.

270 202

-6-

TECH
EM
COLLEGE

ED - LINES
TANK

W "LETTAR

(f) The method of reimbursement shall be by the Town paying over to the County the difference between actual cost of production and transmission of 1,000 gallons of water to the Town and the rate the County is paying the Town per 1,000 gallons. In addition, the Town shall pay over to the County any monies received by the Town for hookup fees to the lines within the "area to be served" and which lines were constructed for the benefit of the County; provided, however, that no hookups will be permitted to said lines within the "area to be served" if it will adversely affect the actual pressure, flow or supply of water needed by the County.

(g) A resolution passed by the Town shall be all that is necessary to evidence the financial inability of the Town to pay its share for the mains or lines as called for in this Agreement, and a certificate from the County Treasurer as to the interest rate being earned by the County on the funds used for construction as described in item (e) of this Paragraph 6 of this Agreement shall be all that is necessary to evidence the interest being earned on said funds.

(h) The cost and expense of maintaining the referred to mains or water lines as constructed by the Town or shared equally by Town and County, shall be the Town's responsibility, and the cost and expense of maintaining mains or water lines as constructed by the County, shall be the County's responsibility.

(i) The County hereby agrees to pay the cost of supplying the meters and meter vaults and necessary appurtenances thereto, including the complete initial cost of construction of said items and after construction is completed, the cost of maintaining said meters, meter vaults and appurtenances thereto shall be the responsibility of the Town and said described items shall remain the property of the County.

(j) The Town hereby agrees that the County shall have the right to run water mains through the Town Limits or the "area to be served" for the purpose of transmission of water to other areas

270 243

-7-

outside the Town Limits or the "area to be served" by the County but not for the purpose of service within the Town Limits or "area to be served".

(k) The service to be provided by the Town within the "area to be served" must be sufficient for delivery of minimum fire flows for residential areas as designated by the National Fire Protection Association, Inc.

7. It is understood that it is in the interests of both parties that this proposed extension of public water take place expeditiously. Accordingly, Town agrees to make arrangements for running water mains from its existing plant under the B & O Railroad at approximately the same time the County shall run its sewer lines under said railroad. The parties agree to cooperate with each other in this respect so as to reduce the costs of water line extension as contemplated herein. County agrees to encourage the use of Town's water for major new developments within the "area to be served" as set forth herein.

AS WITNESS the hand of Frank D. Ragan, President of the Board of County Commissioners of Cecil County, duly attested by the Administrative Assistant, and the hand of William C. Ball, President of the President and Commissioners of the Town of North East, duly attested by the Secretary, the day and year first above written.

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY

David F. Pinder
David F. Pinder
Administrative Assistant

By Frank D. Ragan (SEAL)
Frank D. Ragan, President

ATTEST:

THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST

Nelda B. Wright

By William C. Ball (SEAL)
William C. Ball, President

270 244

-8-

STATE OF MARYLAND,
COUNTY OF CECIL, ss.:

I HEREBY CERTIFY that on this 2nd day of June 1983,
before me, the subscriber, a Notary Public of the State and County
aforesaid, personally appeared FRANK D. RAGAN, President of the Board
of County Commissioners of Cecil County, a body politic and corporate
and political subdivision of the State of Maryland, and being
authorized so to do did acknowledge the foregoing instrument of writing
to be the act and deed of said political subdivision.

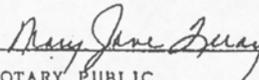
WITNESS my hand and Notarial Seal.


NOTARY PUBLIC
My Commission Expires: 7/1/86

STATE OF MARYLAND,
COUNTY OF CECIL, ss.:

I HEREBY CERTIFY that on this 6th day of June, 1983,
before me, the subscriber, a Notary Public of the State and County
aforesaid, personally appeared WILLIAM C. BALL, President of The
President and Commissioners of the Town of North East, a municipal
corporation of the State of Maryland, and being authorized so to do,
did acknowledge the foregoing instrument of writing to be the act
and deed of said municipal corporation.

WITNESS my hand and Notarial Seal.


NOTARY PUBLIC
My Commission Expires: 7/1/86

Land Records at Liber N.D.S. 270
folio 233.

AMENDMENT TO WATER AGREEMENT

THIS AMENDMENT, made this 28th day of February , 1989, by and between THE PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST (hereinafter referred to as "Town") and THE BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY, MARYLAND (hereinafter referred to as "County").

WHEREAS, the parties hereto have previously entered into a Water Service Agreement dated June 7, 1983 and amended by a Water Line Extension Agreement dated November 24, 1986 (hereinafter referred to collectively as the "Water Agreement"), attached hereto and incorporated by reference herein; and

WHEREAS, the Town and the County have entered into subsequent negotiations regarding the Town's involvement in review and approval of plans and specifications for extensions of water service; and

WHEREAS, the Town has enacted an Ordinance under which it will extend water service outside its incorporated boundaries, only when the property owner to whom water service is being extended consents to annexation or on a contractual basis under which the land owner would pay the equivalent of Town taxes; and

WHEREAS, the County has agreed that the Town has the right to attach these conditions to the extension of its water service outside its corporate boundaries, whether such service falls within the area to be served or outside said area; and

WHEREAS, the County has no wish to interfere with the Town's rights to recover costs and expenses associated with extension and expansion of its water treatment facilities as well as the water service; provided that the County maintains the right to review and approve Town's rate structure for customers outside of the incorporated town limits.

NOW THEREFORE THIS AMENDMENT WITNESSETH, that in consideration of the premises and the covenants and agreements herein

LAW OFFICES
CLOWER
&
PARRACK
226 EAST MAIN STREET
ELKTON, MD 21921

-3-

AS WITNESS the hand of Clifton L. Buckworth, President of the Board of County Commissioners of Cecil County, duly attested by the Administrative Assistant, and the hand of Chris Meekins, President of the President and Commissioners of the Town of North East, duly attested by the Secretary, the day and year first above written.

ATTEST: BOARD OF COUNTY COMMISSIONERS OF CECIL COUNTY

BY: Clifton L. Buckworth, President

ATTEST: PRESIDENT AND COMMISSIONERS OF THE TOWN OF NORTH EAST

BY: Chris Meekins, President

STATE OF MARYLAND, COUNTY OF CECIL, ss:

I HEREBY CERTIFY that on this day of 1989, before the subscriber, a Notary Public of the State and County aforesaid, personally appeared Clifton L. Buckworth, President of the Board of County Commissioners of Cecil County, and he, as such President and authorized so to do, acknowledged the foregoing Amendment to Water Agreement to be the act and deed of said Board of County Commissioners of Cecil County.

WITNESS my hand and Notarial Seal.

NOTARY PUBLIC My Commission Expires: 7/1/90

APPENDIX D

TOWN COMMENTS

Mayor and Council
 Town of Chesapeake City
 P.O. Box 205
 109 Bohemia Avenue
 Chesapeake City, Maryland 21915-0205
 (410) 885-5298
 Fax (410) 885-2515
 e-mail: chesapeakecitymail@comcast.net



21 April 2000

Eric S. Sennstrom, Director
 Cecil County Planning & Zoning
 129 E. Main St.,
 Elkton, MD 21921

Dear Eric,

Vice President of the Chesapeake City Council and acting Mayor, John A. Ritter has requested that I submit to you the comments of the Town of Chesapeake City pertaining to the current edition of the Cecil County Urban Growth Boundary Plan.

We concur with the direction and scope of the plan as presented. Our comments contained herein are specific to its relationship to Chesapeake City.

1. As the county continues to grow we urge the continuance of dual review of the various applications pertaining to planning and zoning for projects within the Town District as stipulated in the County Comprehensive Plan. We believe this will serve understanding and cooperation between the government agencies.
2. That the only TR Zone identified in the plan is located such a distance to the south of Chesapeake City and cannot be served presently by our public utilities is correct. It does however appear in our Comprehensive Plan Growth area as part of our projected residential annexation. It is important to note that the current policy of Chesapeake City in these utilities is that they are not supplied to any properties outside of the town limits.
3. We are not sure how the inquiry of the mayor was framed concerning proposed town growth. We do agree with the comments attributed to the mayor Section Six of the plan. This discussion however must be expanded to include the Growth Plan as put forth in our Comprehensive Plan. This plan does indicate our projection for growth consideration along the Rt 213/Basil Avenue section as mixed use. As of this month requests to annex some of these properties has been received by the town. This plan also projects growth into the St Augustine Road area including the project TR Zone as a residential growth area as presented previously in this reply.

We request that our current Comprehensive Plan be given appropriate consideration as the Urban Growth Boundary Plan development is continued.

4. We desire to be a part of the continuing development of the Urban Growth Plan in cooperation with your office and the other municipalities in the county. We are prepared to establish the appropriate body representing Chesapeake City in order to accomplish this.

The Town of Chesapeake City appreciates the effort conducted by your office in this matter. As we review the various impacting components including the rapid growth of the county we realize the inevitable growth of our area will be affected. Close cooperation in matters such as this that will shape Cecil County into a more desirable place to live, work and recreate.

Sincerely,



R. O. Mathews, Chairman
Chesapeake City Planning & Zoning Commission



TOWN OF CECILTON

John J. Bunnell, Mayor
Walter J. Foraker, Council Member
Theresa M. Rhoades, Council Member
Reba H. Green, Council Member
Paul W. Obenshain, Council Member
Sarah E. Keifer, Administrator

117 West Main Street
Post Office Box 317
Cecilton, Maryland 21913

Phone: 410-275-2692
Fax: 410-275-2898
E-mail: Cecilton@dolnet

APR 24 2000

April 20, 2000

Mr. Eric Sennstrom, Director
Cecil County Office of Planning and Zoning
129 East Main Street
Elkton, MD 21921

Dear Mr. Sennstrom:

The Town of Cecilton strongly supports the County's efforts to create an Urban Growth Boundary Plan and is pleased to participate in the review process. The following are the Town's comments regarding the first draft of the Plan:

1. Section 4— Municipal Facilities
 - a. The 85 gpm well is no longer functioning and the 200 gpm well pump has been replaced with a 100 gpm pump.
 - b. The Town is in the process of applying for an increased water appropriation permit. The Town has requested an increase from an annual average of 40,000 gpd and an average of 50,000 gpd during the month of highest use to an annual average of 75,000 gpd and an average of 125,000 gpd during the month of highest use.
2. Section 6 – Municipal Service to Urban Growth Boundary
 - a. This section states that there is little to no development pressure in the Cecilton area. While that was correct when I first met with Chris Rogers, it is not the case at present. There are several tracts of land north of Cecilton open for development. Most notably, a subdivision is being pursued on the west side of MD Rt. 213.

Should you have any questions regarding the Town's comments, please feel free to contact me at 410-275-2692.

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah E. Keifer".

Sarah E. Keifer
Administrator
Town of Cecilton



Town Commissioners of Charlestown
Post Office Box 154
Charlestown, Cecil County, Maryland 21914
Phone 410-287-6173

April 20, 2000

The Honorable Nelson K. Bolender
President
Cecil County Commissioners
County Office Building
129 East Main Street
Elkton, Maryland 21921

Re: Urban Growth Boundary Plan
Cecil County, Maryland

Dear President Bolender:

The Town of Charlestown does not wish the areas on Carpenters Point Road or on Maryland Route 7 adjacent to Charlestown designated as growth areas on the Urban Growth Boundary Plan. At the present time it is the consensus of the board that we do not wish to provide water and sewer services to areas outside Town unless those areas agree to annexation. We further prefer to treat such requests on a case-by-case basis as they arise. We believe the designation of a particular area as one we are willing to annex and serve will only encourage growth to occur more quickly than it would otherwise. We already have areas inside the Town limits we must serve and growth is occurring there. We do not feel that growth along Carpenters Point Road or Maryland Route 7 is in the best interest of Charlestown and do not want to do anything that would encourage growth in those areas.

Respectfully,

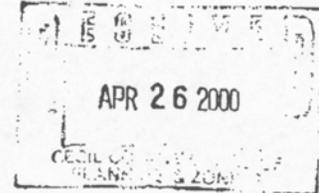
Steven William Vandervort
President

SWV/lcm



Town Commissioners of Charlestown
Post Office Box 154
Charlestown, Cecil County, Maryland 21914

Phone 410-287-5173



April 20, 2000

The Honorable Nelson K. Bolender
President
Cecil County Commissioners
County Office Building
129 East Main Street
Elkton, Maryland 21921

Re: Urban Growth Boundary Plan
Cecil County, Maryland

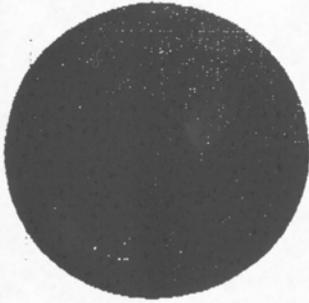
Dear President Bolender:

The Town of Charlestown does not wish the areas on Carpenters Point Road or on Maryland Route 7 adjacent to Charlestown designated as growth areas on the Urban Growth Boundary Plan. At the present time it is the consensus of the board that we do not wish to provide water and sewer services to areas outside Town unless those areas agree to annexation. We further prefer to treat such requests on a case-by-case basis as they arise. We believe the designation of a particular area as one we are willing to annex and serve will only encourage growth to occur more quickly than it would otherwise. We already have areas inside the Town limits we must serve and growth is occurring there. We do not feel that growth along Carpenters Point Road or Maryland Route 7 is in the best interest of Charlestown and do not want to do anything that would encourage growth in those areas.

Respectfully,

Steven William Vandervort
President

SWV/lcm



The Mayor and Commissioners of the Town of Elkton

Robert J. Alt, Mayor
 Jean A. Broomell, Commissioner
 Joseph L. Fisona, Commissioner
 Charles H. Givons, Commissioner
 Edward M. McKeown, Commissioner

Lewis H. George, Jr.,
 Town Administrator

April 20, 2000

Cecil County Office of Planning
 Attn: Mr. Eric Sennstrom
 129 East Main Street
 Elkton, MD 21921

Dear Mr. Sennstrom:

I have reviewed the draft Urban Growth Boundary Plan for Cecil County, Maryland developed by Tatman & Lee Associates. My comments are as follows:

1. I recommend using contrasting hatch patterns to illustrate the different zoning classifications. The use of patterns will make it easier to read when making black and white copies.
2. The population projections provided by WILMAPCO for the following traffic analysis zones (TAZ) appear to be incorrect:

513 – This TAZ includes the Walnut Hill project, a 390-unit residential development that is in various stages of approvals, portions of which are currently under construction.

510 – This TAZ is zoned Highway Interchange (C-3) district, with a 75-room hotel and restaurant planned for the area. Although this is a transient population, it will impact on Elkton's water and sewer service.

500 – This TAZ includes the Meadows II, Meadows III, Patriots Glen and Liberty Hill subdivisions. Meadows III is under construction, while the others are in various stages of approval. A total of 832 residential units are proposed for this TAZ.

495 – This TAZ includes the 312-unit Pine Valley Apartments that are currently under construction. The Reilly Farms subdivision is also included in this TAZ. Reilly Farms consists of 153 residential units and has received final subdivision approval. The total number of new residential units planned for this TAZ is 465.

565 – This TAZ includes Graymount Commons, a 194-unit townhouse development that has received final subdivision approval.

Town of Elkton
 P. O. Box 157, Elkton, Maryland 21922-0157
 Area Code 410

Administration Office 398-0970 Fax: 392-6633 Finance Office 398-4170 Fax: 392-6633
 Building & Planning Offices 398-4999 Fax: 398-0128 Parks & Recreation 398-8144 Fax: 398-0128
 Department of Public Works 392-6636 Fax: 392-6634 Elkton Police Department 398-4200 Fax: 392-5294

Mr. Eric Sennstrom
Page Two

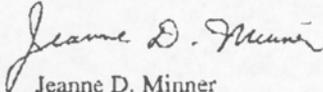
430 - This TAZ includes Village of Foxwood Chase, a 600 + unit residential subdivision, that has received conceptual approval by the Elkton Planning Commission.

3. Page IV-4, paragraph 3 should read, "The Town has engaged the services of their consulting engineer, KCI Technologies, to prepare a proposal addressing the availability of additional groundwater to serve the future needs of the Town."

In serving the urban growth boundaries, the Town will want to outline administrative and financial responsibilities and fees charged to customers outside of the town limits. Further agreements should include the possibility of annexation by the Town of areas located within the Cecil County urban growth boundary. The alternatives proposed for additional water sources appear reasonable; however, financial assistance by the State and County is crucial to achieving these goals.

The above comments are preliminary in nature, based on the draft plan. Should you have any questions, please call me at 398-4999.

Sincerely,



Jeanne D. Minner
Director of Planning



The Mayor and Commissioners of the Town of Elkton

Robert J. Alt, Mayor
Jean A. Broomell, Commissioner
Joseph L. Fisona, Commissioner
Charles H. Givens, Commissioner
Edward M. McKeown, Commissioner

Lewis H. George, Jr.,
Town Administrator

May 8, 2000

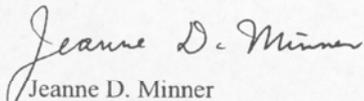
Cecil County Office of Planning
Attn: Mr. Eric Sennstrom
129 East Main Street
Elkton, MD 21921

Dear Mr. Sennstrom:

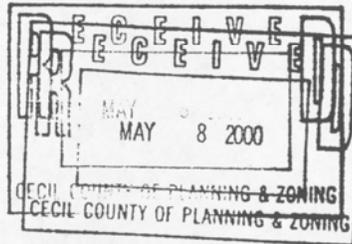
Enclosed please find review comments by Elkton's consulting engineers, KCI Technologies, Inc., on the draft Urban Growth Boundary Plan for Cecil County, Maryland developed by Tatman & Lee Associates.

Should you have any questions, please call me at 398-4999.

Sincerely,


Jeanne D. Minner
Director of Planning

Enclosure



Town of Elkton
P. O. Box 157, Elkton, Maryland 21922-0157
Area Code 410

Administration Office 398-0970 Fax: 392-6633 Finance Office 398-4170 Fax: 392-6633
Building & Planning Offices 398-4999 Fax: 398-0128 Parks & Recreation 398-8144 Fax: 398-0128
Department of Public Works 392-6636 Fax: 392-6634 Elkton Police Department 398-4200 Fax: 392-5294

Memorandum RE: Cecil County *Urban Growth Boundary Plan*
4/20/00
Page 2

- how does the mapping of Elkton's Comprehensive W&S plan look compared to these maps?
6. The reference to Figure I-1, on p. II-1, should probably be to Map II-1. No Figure I-1 was provided.
 7. It is not entirely clear whether the "recommendations" associated with each of the District descriptions on pp. II-1 and II-2 are from the Comprehensive Plans or from this study.

Section 3

8. No comment regarding the demographic projections of the Cecil County *Urban Growth Boundary Plan*. KCI did note that there is really no way to cross-reference to the assumptions used in the Town of Elkton's Comprehensive Water and Sewer Plan, since the methodology in developing future flow projections in that plan did not relate directly to population. Perhaps McCrone did document demographic/ population information, and if so, it would probably be useful to have.

Section 4

9. Apparently, Tatman & Lee Associates did not use the latest revision of McCrone's report (May 18, 1999 vs. October 20, 1999). I'm not sure what the differences were, but in any case the latest version should be used, (and referenced).
10. The October 1999 McCrone report (ref. p. 2) states that the current water use has increased to 1.5 MGD.
11. On p. IV-4, the Wellhead Protection Program was recently completed. Assuming that it will be initiated soon, the status of Elkton's water supply study could probably be referenced as "underway", by the time the next draft of the Cecil County *Urban Growth Boundary Plan* is prepared.
12. The nominal design capacity of the Elkton WWTP is 2.7 MGD according to the design criteria shown on the 1981 Drawings. The NPDES Permit wasteload allocations were determined using 1.6 MGD.
13. It may be worth noting that MDE's TMDL study for Big Elk Creek will begin soon.

Section 5

14. The Plan needs more discussion of how Urban Growth Boundaries (UGBs) were determined. Perhaps additional map features would be helpful.
15. Is the "environmental constraints factor" of 25% conservative enough?
16. Without a color copy Map V-4 is difficult to follow, particularly with respect to differentiating Town Limits from Future Annexation areas.
17. How was UGB 2 chosen? It is not contiguous to the Town Limits.





Town of North East

P.O. Box 528 - 300 Cherry Street • North East, MD 21901-0528
Phone: 410-287-5801 • Fax 410-287-8267

Mayor
Robert F. McKnight

Commissioners
Gabriel M. Garzia
Charles L. Gilbert
Charles R. Palmer, II
Rick A. Wyre

Administrator
Melissa B. Cook-MacKenzie

Clerk/Treasurer
Anne F. Barker

MAY 2, 2000

ERIC SENNSTROM
PLANNING AND ZONING DIRECTOR
129 EAST MAIN STREET
ROOM 300
ELKTON, MARYLAND 21921

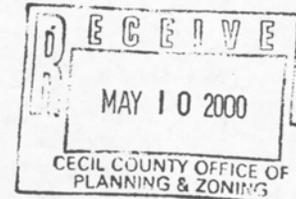
RE: CECIL COUNTY URBAN GROWTH BOUNDARY PLAN

DEAR ERIC:

PLEASE ALLOW THIS LETTER TO CONFIRM THAT THE MAYOR AND COMMISSIONERS OF THE TOWN OF NORTH EAST AGREE WITH THE CONCEPT AND INTENT OF THE URBAN GROWTH BOUNDARY PLAN. UPON COMPLETION OF MAPPING AND SPECIFIC LANGUAGE REGARDING NORTH EAST WE WILL PROVIDE FURTHER COMMENT. SHOULD YOU HAVE ANY QUESTIONS AT THIS TIME PLEASE DO NOT HESITATE TO CONTACT ME.

SINCERELY,

MELISSA B. COOK-MACKENZIE
TOWN ADMINISTRATOR





Town Commissioners of Perryville
515 Broad Street, P.O. Box 773
Perryville, Maryland 21903-0773
(410) 642-6066
(410) 642-6391 (Fax)

Mayor
Steven F. Pearson

Commissioners
Austin D. Amos
Wilma L. Denton
Timothy A. Tolbert
Doris M. Ward

Town Administrator
Sharon Weygand

April 26, 2000

Post-it® Fax Note	7671	Date	4/26/00	# of pages	1
To	CHRIS ROGERS	From	ERIC SENNSTROM		
Co./Dept		C. O.			
Phone #	302 791 0700	Phone #	410 996 5220		
Fax #	302 791 0708	Fax #	410 996 5305		

Cecil County Government
Planning & Zoning
Attn: Mr. Eric Sennstrom
129 E. Main Street
Elkton, MD 21921

Re: Urban Growth Area

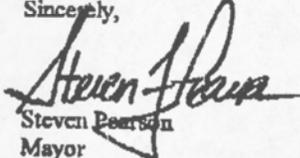
Dear Mr. Sennstrom:

The Town of Perryville realizes that in Cecil County there is a need to provide water and sewer service for potential customers in unincorporated areas. As always, the Town is willing to work cooperatively with the County Commissioners to address these issues.

However, before the Town can address servicing unincorporated areas in the proposed Urban Growth Areas, improvements to our water treatment facility need to be addressed first. Currently, the Town is faced with distribution demands for not only the existing system, but also anticipated future project demands. Until these issues are resolved, the Town will not be able to give their approval for the Urban Growth Areas.

If at any time, you would like to discuss this further, please call me.

Sincerely,


Steven Pearson
Mayor



Town Commissioners of Perryville
515 Broad Street, P.O. Box 773
Perryville, Maryland 21903-0773
(410) 642-6066
(410) 642-6391 (Fax)

Mayor
Steven F. Pearson

Commissioners
Austin D. Amos
Wilma L. Denton
Timothy A. Tolbert
Donna M. Ward

Town Administrator
Sharon Weygand

June 9, 2000

Cecil County Board of Commissioners
Attn: Nelson K. Bolender
129 E. Main Street
Elkton, MD 21921

Dear Nelson:

Thank you for your recent letter relative to my comments on the Urban Growth Boundaries Plan that that is currently underway.

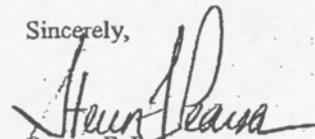
As you are aware, the Town is currently analyzing its existing Water and Sewer treatment, collection and distribution facilities within the Town limits. It is apparent from this ongoing investigation that capital improvements will have to be made to our water facilities to enable the Town to adequately service infill areas within the existing Town limits.

As I stated in my previous correspondence, the Town supports the Urban Growth Boundaries Concept but as a result of our existing water facility's needs we cannot commit to provide these services outside of the Town limits at this time.

It is my understanding that the County intends to continue a dialogue with the Towns relative to this planning issue. The Town would be agreeable to meet with the County Commissioners and staff to discuss our needs in more detail. It is envisioned that funding mechanisms and innovative alternatives would be key topics during these discussions.

The Town did not intend to close the door for future discussion with the County with respect to this important issue. Please let us know when you would like to meet with us.

Sincerely,


Steven F. Pearson
Mayor

**AMENDMENT TO THE CECIL COUNTY URBAN GROWTH
BOUNDARY PLAN**

WHEREAS, the Cecil County Comprehensive Plan calls for the provision of a long-term waste water system and water supply and distribution system in the I-95/Route 40 corridor; and

WHEREAS, the Urban Growth Boundary Plan for Cecil County created areas around each of the Towns whereby the provision of water and sewer infrastructure would be closely coordinated between the County and respective Towns, and

WHEREAS, the Cecil County Planning Commission reviewed and recommended approval of the Urban Growth Boundary Plan for Cecil County, and

WHEREAS, the Board of County Commissioners adopted the Urban Growth Boundary Plan for Cecil County in June 2000, and

WHEREAS, it has become necessary to amend certain portions of the text and maps contained in the Urban Growth Boundary Plan for Cecil County, and

WHEREAS, said amendment was approved by the Board of County Commissioners on Tuesday, 11 June 2002;

NOW, THEREFORE BE IT ENACTED, by the Board of County Commissioners of Cecil County, State of Maryland, that the following amendment be and is hereby enacted:

SECTION FOUR

Municipal Facilities

[Addition]

{Deletion}

{As mentioned earlier, the county and Town entered into service area agreements .
The 1972 and 1983 service area agreements and subsequent amendments can be found in Appendix C.}

[The County and Town entered in to a new water service agreement in 2002 that nullified and superceded the above agreements. The salient features of the agreement include:

- The Town shall serve the area described in the agreement.
- The Town shall retain and continue to service and serve any properties existing outside the Town limits to which service is presently being provided by the Town even if said properties are not within the “area to be served”.
- Any water lines constructed and owned by the Town outside the “area to be served”, the Town may permit individual lot owners which abut on said water lines to hook into said system if the individual lot owners so desire provided that said individual lot owners pay the prevailing costs of extension, connection, and any other costs associated with said hookup as permitted by ordinance or regulation of the Town, and/or the Charter of the Town, and other governmental regulation when applicable.
- The County approves of the Town’s extension of water service outside the Town’s corporate limits as indicated in the agreement. The Town agrees to extend service outside of the Town corporate limits but within the area to be served. It is intended that the costs associated with said extension will be borne by developers benefiting from water service. If at any time, the County becomes a funding participant for a water service extension in the area to be served, the Town shall pay to the County one-half (1/2) of all connection fees collected from parties who own property in the area served by said improvements which connect to said improvements up to the full recovery of original costs associated with said water service extension. The County maintains the right to review and approve the Town’s rate structure for customers outside the incorporated Town limits.
- The Town may attach conditions to the extension of said water outside its corporate boundaries.
- The County shall reserve the right to review and approve rate structure for service outside of Town.
- The Town agrees that the County has the right to run water mains through the Town limits or the area to be served for transmission of water to other areas outside the Town limits or outside the “area to be served”.
- The County has conveyed to the Town a water storage tank, property, water mains, and water distribution system depicted on the BAYVIEW WATER EXTENSION plats.

- The County has agreed to make certain improvements prior to said conveyance to the Town.

This Water Service Agreement can be found in Appendix C.]

{Deletion}
[Addition]

NORTH EAST One area is proposed as a UGB{'s} for the Town of North East (Map V-5).

UGB 1

{UGB 1 is to the west to the Town limits but is not contiguous to the Town itself. The UGB extends the current water service area westward bounded by Red Toad Road. The CSX railroad creates the northern boundary and Razor Strap Road makes the Southern.

The total water and sewer needs of UGB 1 are approximately 0.21 MGD.

SR Zone

249 acres zoned SR

249 acres-25% (environmental constraints) = 187 acres

187 acres x 2 units/acre (SR density with public sewer) = 374 units

374 units x 250 gpd/unit = 93,375 gpd

RM Zone

101 acres zoned RM

101 acres – 25% (environmental constraints) = 78 acres

78 acres x 6 units/acre (RM density with public sewer) = 455 units

455 units x 250 gpd/unit = 113,225 gpd

Total of all zones in UGB 1 = 206,600 gpd

[UGB 1 is to the west of the Town limits but not contiguous to the Town itself. The UGB extends the current water service area westward to Belvidere Road. The CSX railroad creates a northern boundary with U.S. Route 40, MD Route 7 and the corporate limits of Charlestown forming the southerly boundary.

The total water and sewer needs of UGB 1 are approximately 1.7 MGD.

M1/M2/MEA Zones

1,700 acres zoned M2 or MEA

1,700 acres x 1,000 gpd/acre = 1,700,000 gpd

SECTION FIVE

URBAN GROWTH BOUNDARY

Total of all zones in UGB 1 = 1,700,000 gpd.

PERRYVILLE

The UGB for the Town of Perryville extends from the existing Town limits and future annexation areas to {the eastern property line of large industrially zoned parcels south of the CSX railroad}[the west side of Belvidere Road]. The portion of the UGB north of Town is bounded by Jackson Station Road to the east, I-95 to the north and Susquehanna River to the west. The easterly portion of the Perryville UGB generally is bounded [by] parcel lines to the east, the CSX railroad to the north, future annexation areas to the west and the Amtrak railroad to the south. As shown on Map v-6, no portion of the UGB overlaps areas shown as future annexation. {As shown below, the vast majority of the water and sewer needs for the Perryville UGB were generated from industrial needs.}

{M1/M2/MEA Zones

1,700 acres zoned M2 or MEA

1,700 acres x 1000gpd/acre = 1,700,000 gpd

Total of all Zones = 2,044,000 gpd}

[Total of all Zones = 344,000 gpd]

DATE:

6/11/02

Nelson K. Bolender
Nelson K. Bolender, President

Harry A. Hopbron
Harry A. Hopbron, Commissioner

ATTEST:

Alfred C. Wein, Jr.
Alfred C. Wein, Jr. County
Administrtor

Phyllis Kilby
Phyllis Kilby, Commissioner