

**Cecil County
Oversight Committee
Meeting Packet**

July 8, 2009



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Agenda and Meeting Information

**CECIL COUNTY COMPREHENSIVE PLAN
CITIZEN OVERSIGHT COMMITTEE**

**Meeting Agenda
Wednesday, July 8, 2009, 6 p.m.
Cecil College Technology Center Room 208
One Seahawk Drive
North East, MD 21921**

I. Call to Order	6:00
II. Approval of Minutes	6:05
III. Old Business <ul style="list-style-type: none">• Continue Discussion of Citizens Oversight Committee Concept Plan Guest: Craig Whiteford, Cecil County Budget Director	6:10
IV. New Business	
Adjourn	9:00



Oversight Committee Meeting Minutes

CECIL COUNTY COMPREHENSIVE PLAN CITIZEN OVERSIGHT COMMITTEE
MEETING MINUTES
1 July 2009

Present: Bennett, John; Broomell, Diana; Butler, Eileen; Cairns, Ed; Clewer, Jeff; Colenda, Sarah; Day, Shawn; Denver, John; Derr, Dan; Doordan, B. Patrick; Duckett, Vernon; Edwards, Sandra; Folk, Patricia; Gilley, Paula; Jackson, Ann; Kilby, Phyllis; Lane, Diane; Polite, Dan; Pugh, Mike; Rossetti, Rupert; Stewart, Gary; Strause, Vicky; Tapley, Donna; Thorne, Owen; Walbeck, Carl; Whitehurst, Dan; Whiteman, Will; Wiggins, Kennard; Bayer, Michael – ERM; Graham, Clive – ERM; Di Giacomo, Tony; Sennstrom, Eric

Absent: Buck, Walter; Bunnell, John; Deckard, Donna; Ellerton, Vaughan; Gell, Robert; Priapi, Vic; Shaffer, Henry; Smyser, Chuck; Snyder, Linda

Call to Order: Dr. Lane called the meeting to order at 6:14 p.m.

Approval of Minutes: Motion was made by Eileen Butler to approve the 24 June 2009 meeting minutes. Motion was seconded by John Bennett. Dan Derr noted that he did not recall making the statement at the top of pg. 7 that reads “Dan Derr agreed with Mr. Whiteman’s assertion it would be a nightmare.” Mr. Derr requested that sentence be deleted. Ms. Butler amended her motion to include Dan Derr’s request. All members present voted in favor of motion to approve as amended. Motion carried.

New Business: Dr. Lane asked if the COC had a preference regarding moving the meeting time for the 8 July meeting to 3:00 p.m. or 4:00 p.m. rather than the usual 6:00 p.m. start time. Dr. Lane said she was contemplating the time change to allow enough time to permit the COC to get through the rest of the concept plan. The duration of the meeting would be limited to 4 hours from 3 to 7 or from 4 to 8. Owen Thorne asked that why not meet at the regular time if we were only extending by 1 hour. Dr. Lane responded that she was trying to be reasonable and not to detain the COC too late into the night. The COC decided to meet at 6:00 p.m. on Wednesday, 8 July 2009.

Dr. Lane announced that the first item on this evening’s agenda was the water resources portion with the discussion of de-nitrifying septic systems leading the way. Discussion ensued on which page in the meeting packet was the appropriate place to start. Rupert Rossetti kicked the discussion off by distributing and explaining a handout he had prepared relative to the issue of setbacks from streams and the placement of septic systems (see Attachment 1 of minutes). Mr. Rossetti noted that requiring de-nitrifying septic systems within 1,000’ of streams is consistent with the State’s nutrient trading policy. He summarized the urgency in cleaning up the Chesapeake Bay and the looming threat from the EPA’s anticipated statewide TMDL. Mr. Rossetti noted that based on the State’s point-to-point trading policy, requiring de-nitrifying septic systems seemed to be the prudent thing to do. He said that the 300’ was suggested by Chuck Smyser in sub-committee and although it was not based on specific science, it was reasonable in Chuck’s estimate. Mr. Rossetti has asked David Black to prepare a map providing an analysis of how much land would be affected by a 300’ versus the 1,000’ setback for new development.

Jeff Clewer asked what would happen if an existing system needs to be replaced. Mr. Rossetti replied that it would need to be replaced with a de-nitrifying system. Jeff Clewer responded that that would be an unfunded State mandate. Dan Derr asked if we would receive a 2 to 1 credit de-nitrifying septic systems. Mr. Rossetti replied in the negative.

Will Whiteman inquired as the level of pollutants entering the Bay that can be attributed to septic systems. Mr. Rossetti stated approximately 15% of the total. Discussion ensued on implementation and on the State's requirements. Donna Tapley noted that all non-growth areas should be required to have de-nitrifying systems since the growth area will have community water and sewer systems in place. Sarah Colenda noted that the low growth portion of the growth area was not the highest priority for water and sewer service. Paula Gilley inquired as to whether a cost benefit analysis has been done. Rupert Rossetti replied that he did not think one existed but at the same time it would be difficult to estimate a value of a clean bay. Paula Gilley inquired as to whether de-nitrifying systems bring the nitrogen pollutant loadings to zero. Mr. Rossetti replied that while it reduces the pollutant load, it would not eliminate it. Will Whiteman asked if 15% of the total pollutant loads comes from septic systems, where does the other 85% come from. Mr. Rossetti said he did not have that information available. Dan Derr read a summary of ERM's water resources report. Sarah Colenda asked if the State requires that all wastewater treatment plants be upgraded to ENR standards. Rupert Rossetti responded that only major sewage treatment plants need to be upgraded. Mike Pugh opined that the choice is whether we require what the State's policy requires or we accept what the sub-committee has recommended, why does a decision need to be deferred. Mr. Rossetti replied that a deferral is necessary to answer questions relative to the impact expanding from 300' to 1,000' would have on the County. Mr. Pugh posited the questions as to whether this would be 1,000' or broader. Discussion ensued on the impacts of the buffer expansion and the percentage of the overall impact that expansion would have on the County. Dr. Lane noted that it is important to realize that this would only effect new development. Sarah Colenda asked for clarification as to whether only new development would be affected or whether new systems would also be affected. Dr. Lane and Mr. Rossetti concurred that only new development would be affected.

Rupert Rossetti would like to bring more information to the 8 July meeting and stated that the nutrient credits only apply if you are connecting to a wastewater treatment plant. Vicky Strause said that this would be a prudent thing to do and that the COC is there to look forward. Will Whiteman said that he would like to hear from Chuck Smyser on why he feels 300' is adequate rather than 1,000'. Dr. Lane asked Rupert Rossetti if he desired to postpone this matter until the meeting on the 8th. Vernon Duckett interjected that the County needs to develop a drinking water supply from the Susquehanna River. Clive Graham noted that the ERM water resources report indicated that before 2030, the County would not need to tap the Susquehanna to meet drinking water demands. Dr. Lane asked the COC what their pleasure was for this item. Donna Tapley said that all new development outside the growth area should be subject to de-nitrifying septic systems. Sandra Edwards said this matter should be tabled until 8 July.

Sandra Edwards made a motion to table this until the 8 July 2009 meeting. Motion was seconded by Sarah Colenda. All members present voted in favor of motion to table. Motion carried.

Gary Stewart noted that the concept map and the Growth Corridor/Growth Area map had discrepancies. He was particularly concerned with the Mineral Extraction area between Perryville and North East surrounding the Principio Business Park. This area should be shown as part of the Growth Area as the Economic Development sub-committee had determined, it should not be included with the rural areas. Clive Graham indicated that ERM had struggled with the appropriate way to show the mineral extraction areas and that the map could be revised to include the mineral extraction as a part of the growth area. Discussion ensued on Growth Corridor/Growth Area map and issues as to whether the mineral extraction should be part of the growth area, the confusing graphics, consistency with the concept map, and future groups divining this group's intentions. Mr. Graham indicated that ERM will adjust the map to address the concerns expressed this evening.

Paula Gilley made a motion to not use the Growth Area/Growth Corridor map since it is too confusing and to only use the previously approved concept map. Motion was seconded by Patricia Folk. Discussion ensued on the motion with some members of the COC expressing confusion, some members praising the maps clarity, and with Carl Walbeck noting that it complements the concept map. 7 members voted in favor of the motion. 18 members voted against the motion. 3 members did not vote. Motion was defeated.

Dr. Lane announced that there will be more info presented on Section 6 (Environmentally Sensitive Areas) at next week's meeting and asked if there were any other comments or issues on water resources. Donna Tapley questioned as to whether storm water management should be grouped in with non-point loading sources such as agriculture and septic systems. Clive Graham responded that he will ask Ben Sussman to send her an e-mail in answer to her inquiry. Ms. Tapley noted that the phrase "requiring de-nitrifying septic systems in other areas" needs to be defined. Dr. Lane stated that #6 will be further defined to add clarity. Donna Tapley noted that reservoirs are referred to and inquired as to whether they have been investigated. Rupert Rossetti reported that a study by Arro Engineers looked at the feasibility of surface impoundments and made recommendations thereon. Clive Graham noted that the numbers show a need for reservoir water in the longer term (after 2030). Sarah Colenda reflected that relying on the Susquehanna River is risky due to potential spills and what lies up river. Therefore, she said reservoirs were important.

Donna Tapley wanted to know what the policy is for addressing nutrient loading from agricultural operations. Clive Graham said it could be added to the document. Phyllis Kilby said it is regulated at the State level through measures like cover crops. Clive Graham said ERM will develop language to bring back next week relative to this issue. Donna Tapley noted that the Water Resources section needs re-formatting to separate goals and objectives from policies and to add a glossary to define terms so the public can understand them better. Kennard Wiggins added that the general reader may need a glossary to understand the subject matter. Ann Jackson reflected that everything will be elaborated on in the next steps. Mr. Graham reminded the COC that the final plan will pick up details and be a much more lengthy document. Ann Jackson asked if the County had regulations requiring de-nitrifying septic

systems and if local funding assistance was available. Clive Graham noted that for reasons of simplicity, the last sentence in 2nd paragraph on page 14 would be removed.

Eileen Butler presented her proposal relative to the expansion of buffers around non-tidal wetlands (see Attachment 2 of minutes). Eileen stated her opinion that the present buffer of 25' needs to be expanded to better protect fresh water wetlands and to more effectively filter sediments and nutrients that would impair the wetland's quality. Buffers in the range of 30-100' are more effective at removing pollutants such as phosphorus and a minimum of 50' is necessary to remove nitrogen. She stated that 300' feet is necessary for wildlife habitat protection. Ms. Butler stated that the buffer should be increased from the present 25' to 75'. She is of the opinion that this would be consistent with goals 194, 67, 84, 97, 98, 99 and bullets 3 and 4 of the concept plan.

Eileen Butler made a motion to increase the non-tidal wetland buffer from 25' to 75' and to include it in the concept plan. Motion was seconded by John Bennett. Will Whiteman asked if MDE is proposing changes to buffers. Clive Graham said he was not aware of any proposed changes from MDE. Mr. Graham has also checked with Harford County and Kent County. Kent's buffer is the State's 25' and Harford has a buffer of 75'. Discussion ensued on what is considered to be a wetland and what is required to make the determination that it is a wetland (vegetation, soils, ponding). Dan Polite provided edification on what it takes to delineate a wetland. Discussion continued on forested wetlands versus non forested wetlands, isolated wetlands and benefits of protecting various wetland types. Vicky Strause inquired as to why if existing buffers were adequate, do we need to expand them further. She feels prioritization needs to occur. John Bennett reflected on federal, State and County policy regarding wetlands and inquired of Will Whiteman as to the difficulty in dealing with the County on wetland issues. Will Whiteman described the wetland delineation process. John Bennett suggested that an increased buffer plan could be drafted to address the concerns of the development community. Kennard Wiggins asked about the width of the buffer and the size of the wetlands. B. Patrick Doordan inquired as to whether the COC would be voting without a base in study or fact. Eileen Butler countered that an analysis could be done to show the effects of an increased buffer. Dan Polite reflected that many agricultural wetlands are already impacted. Dan Whitehurst noted that this proposal could make it more difficult to develop in the growth area. Will Whiteman wanted to know why MDE isn't pushing for larger setbacks and Mike Pugh said increased buffers will make developing in the growth area more cumbersome. Eileen Butler tabled her motion until the 8 July meeting.

Dan Derr noted that water and sewer action items cited in the discussion section of Water Resources needed to move to major policies and actions section. Clive Graham said that comprehensive plan is a policy document and that these details should be included in the Master Water & Sewer Plan. Rupert Rossetti liked Dan Derr's suggestion. Clive Graham noted that #3 in Major Policies and Actions section addresses Mr. Derr's comments and that he will expand #3 to better prioritize.

Dr. Lane said that the COC needed to proceed to general discussion items. Clive Graham presented the flyer for the 7/29/09 public forum. Vicky Strause noted that CPC should change to COC. Clive Graham said that the plan should be available one week prior to the meeting and therefore, the COC needs to

finish up in the next two meetings. Clive Graham reminded the COC that the forum is their meeting and suggested different formats to use. Kennard Wiggins suggested the provision of a comment form. Paula Gilley asked about the duration of the meeting and the time of day. Dr. Lane said it would be 3 hours in length from 6-9 p.m. Dr. Lane said that the flyer would be made available in the libraries, County Administration Building, County Government website, Chamber of Commerce, given to the *Cecil Whig*, and potentially through public service announcement on the radio. Discussion ensued regarding the purpose of the meeting and its structure.

Adjournment: Dr. Lane adjourned the meeting at 9:03 p.m.

Next meeting will be at 6:00 p.m. on Wednesday, 7/8/09 at room 208 of the Cecil College Technology Center.

Respectfully Submitted:

Eric S. Sennstrom, AICP
Director – planning & zoning

WRE Subcommittee - Septics & Streams
Comments by Rupert Rossetti - 1 July 2009

6. Require all new development in wellhead protection areas, or within **300 / 1000** feet of streams to use septic denitrification systems. Elsewhere, consider requiring nutrient offsets for subdivisions built using septic systems.

- President Obama has recently declared the Bay a National Treasure
- The State has accelerated the Bay Restoration targets, as have the other Bay States, including PA & NY.
 - MD has accelerated rates of progress in attaining goals
 - Nitrogen: 138% increase in rate of progress (reducing an extra 2.2 million pounds of N by 2011)
- MDE has a Point to Point nutrient trading policy that discusses the impact of septic systems on nutrient loads, per Appendix B1 - attached.
 - MDE assumes an 80 percent delivery rate of nitrogen in critical areas (24.32 lbs/year); a 50 percent delivery rate within 1,000 feet from any perennial surface water (15.2 lbs/year); and a 30 percent delivery rate from distances greater than 1,000 feet from any perennial surface water (9.12 lbs/year).
- The Tributary Strategies will be prescribed at the county level in 2010.
- We need all the credits we can get, if we are to be able to grow as projected.
- Recent State Law already requires ALL new development in the Critical Area to use denitrification systems.
- Establishing a requirement for denitrifying septic systems around wellheads and streams, and considering requiring offsets in other areas, seemed prudent to the subcommittee, even before the recent pronouncements at the Federal & State levels - hence the proposed policy
 - Quoting Chuck Smyser: From my recollection of the subcommittee's discussion on the issue we felt 300' was a reasonable distance to require the nitrogen-reducing systems from streams. I think MDE has used the figure of 80% of nitrogen from septic systems in the critical area reach tidal waters and says that lesser amounts get there from systems elsewhere, but I don't think 300' had any particular scientific basis.
- We're assuming that the only places affected would be in the Rural areas (the green bits) and some of the yellow areas (the low density development not already on water & sewer), and have requested an impact analysis from David Black.
- **I'd like to defer action on this until next week, pending an analysis from David and a response from the WRE subcommittee re. the 1000 feet vs 300 feet.**

APPENDIX B: EXAMPLE CALCULATIONS OF CREDITS

B.1 The OSDS Hookup Credit Assumptions

For an ENR plant producing effluent nitrogen of 4 mg/l, the transfer of flow from a residential OSDS to the treatment plant would generate the following credits:

- A. In critical areas – 12.2 lbs/yr nitrogen;
- B. Within 1,000 feet of any perennial surface water - 7.5 lbs/yr nitrogen;
- C. All other – 4.6 lbs/yr nitrogen

Credits for connecting non-residential systems will be established on a case-by-case basis.

The OSDS hookup credit assumptions are based on the following:

The Chesapeake Bay Program assumes the average residential septic system delivers about 12 lbs of nitrogen per year to the Bay. This figure is compatible with MDE estimates and is based on 3.2 people per system, with each person generating 9.5 lbs of nitrogen per year. The 12 lbs reflects a 60 percent reduction in load from the edge of the drain field due to losses in transport. MDE recognizes that the actual delivery rate will vary with travel time and discharge location. For the purpose of providing offsets that favor retiring OSDS having the biggest impact on surface waters, MDE assumes an 80 percent delivery rate in critical areas; a 50 percent delivery rate within 1,000 feet from any perennial surface water; and a 30 percent delivery rate from distances greater than 1,000 feet from any perennial surface water (i.e., all other systems).

Based on these assumptions, nitrogen loading to surface water per OSDS would be 24.3 lbs/yr in the critical area, 15.2 lbs/yr 1,000 feet from any perennial surface water and 9.2 lbs/yr for all other systems. Maryland's Tributary Strategy calls for the average residential septic system to be upgraded to reduce the load of nitrogen from OSDSs by 50 percent. For nitrogen trading purposes, equivalent dwelling units (EDUs) served by OSDSs have the following load allocations: in critical areas, 12.2 lbs/yr; within 1,000 feet of any perennial surface water, 7.5 lbs/yr; and for all other OSDSs, 4.6 lbs/yr.

With regard to phosphorus, the Chesapeake Bay Program assumes the average residential septic system delivers *no total phosphorus*. Therefore, the allocation approval would require demonstration that the proposed ENR facility will meet its existing permit requirements for phosphorus after accounting for projected increased phosphorus loading of 0.23 lbs of total phosphorus per EDU connected. Offsets may also be considered on a case-by-case basis when OSDSs are connected to a decentralized system that is highly efficient at removing nitrogen.

Cecil Comprehensive Plan Citizens Oversight Committee July 1, 2009
Comments on Wetland Buffers by Eileen Butler

In the spirit of offering policies/actions to implement the plan as Dan Derr had done in the last meeting, and to further discuss options for nitrogen removal, I would like to discuss wetland buffers. Will and Vicky brought up the desire for a forward thinking plan, and my proposal offers such forward thinking:

In considering a mechanism to better protect freshwater wetlands, I would like to officially submit the Environmental Law Institute's Planner's Guide to Wetland Buffers for Local Governments into the record. The Guide provides guidance to local governments on drafting a wetland buffer ordinance. The Environmental Law Institute (ELI) makes law work for people, places, and the planet. The Institute has played a pivotal role in shaping the fields of environmental law, policy, and management, domestically and abroad. It is an internationally recognized, non-partisan research and education center working to strengthen environmental protection by improving law and governance worldwide. ELI delivers insightful and impartial analysis to opinion makers, including government officials, environmental and business leaders, academics, members of the environmental bar, and journalists.

In the Planner's Guide, ELI has included the science of water quality buffers on such things as sediments, phosphorus, nitrogen, fecal coliform, pesticides, hydrocarbons and metals.

Wetland buffers protect the water quality of wetlands by preventing buffer area itself from serving as a source of pollution, as well as by processing pollutants that flow from upland areas. Vegetation and deep permeable soils in the buffer slow down surface flow, allow for infiltration before runoff reaches valuable wetlands, and inhibit the formation of channelized flow, improving removal of sediments and nutrients.

Depending on site conditions, much of the sediment and nutrient removal may occur within the first 15 - 30 feet of the buffer, but buffers of 30-100 feet or more will remove pollutants more consistently. Buffer distances should be greater in areas of steep sloped and high intensity land use. Larger buffers will be more effective over the long run because buffers can become saturated with sediments and nutrients, gradually reducing their effectiveness, and because it is much harder to maintain the long term integrity of small buffers. In an assessment of 21 established buffers in two Washington counties, the study found that 76% of the buffers were negatively altered over time. Buffers of less than 50 feet were more susceptible to degradation by human disturbance. In fact, no buffers of 25 feet or less were functioning to reduce disturbance to the adjacent wetland. The buffers greater than 50 feet showed fewer signs of human disturbance.

A considerable amount of research addresses the size of buffers needed to remove sediments, phosphorus, nitrogen, and other pollutants.

Sediments - A number of studies suggest that coarse sediments are likely removed efficiently in the first 16-66 feet of a buffer and removal of finer particles may require buffers of at least 66 feet. Wider buffers also may be necessary to maintain sediment removal efficiencies over time as buffers become saturated with sediments.

Phosphorus - Much of the phosphorus entering a buffer is attached to sediments. Much of the phosphorus may be removed within 15-30 feet, but phosphorus may be more consistently removed by buffers of 30-100 feet. Buffers can become saturated with phosphorus and generally cannot provide long term storage of phosphorus.

Nitrogen - studies suggest that a minimum of 50 feet is necessary for effective nitrogen removal, and depending on the soils, 100 feet or more would include more areas of denitrification activity and provide more nitrogen removal.

In summary of the studies that have been done to date- the distance of a buffer functioning for sediment and phosphorus control is out to 100 feet, for nitrogen, the distance is out to 160 feet, and for wildlife habitat - out to 300 feet and more.

I won't discuss the benefits of wetland buffers as they relate to habitat protection, but most people do care about clean water, so as buffers relate to water quality, I would respectfully request and make a motion that the county consider increasing the buffers to non-tidal wetlands from 25 feet to 75 feet.

The goals that support this motion include:

Main goal/policy is #194,

goals/policies #191, 200, 204, and 229 focus on water quality and support this proposal.

goals/policies #84, 98, and 99 are habitat related that support increased buffer size.

Bullets 2 and 4 of the white paper- sustain and protect existing water supplies and enhance stormwater management programs to reduce non-point source loading of nutrients and sediment into the Chesapeake Bay, and to increase infiltration and aquifer recharge also support this proposal.

5. Water Resources

Goals and objectives

- ~~Increase the capacity and extent of water resources infrastructure—water supply and wastewater collection, treatment, and discharge capacity—in Growth Areas.~~
- Enhance stormwater management programs, to reduce non-point source loading of nutrients and sediment into the Chesapeake Bay, and to increase infiltration and aquifer recharge.

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<#>Sustain and optimize wastewater treatment capacity.¶

Discussion

As a result of Maryland House Bill 1141 (2006), Comprehensive Plans in Maryland must now contain a Water Resources Element (WRE). The Cecil County WRE will address the adequacy of drinking water resources throughout the County (particularly in public water systems), and the capacity of public sewer systems and wastewater treatment plants (WWTPs) to support projected growth. The WRE will also evaluate the impacts of nitrogen and phosphorus (collectively referred to as “nutrients”) discharges from point sources (WWTPs) and nonpoint sources (agricultural runoff, urban stormwater, and septic systems) on the bodies of water that eventually receive those nutrient loads.

The emphasis of this Concept Plan’s Water Resources policies is supporting growth in Growth Areas, while reducing development pressure in rural areas.

Drinking Water

The average daily water demand in the County’s public water systems (including systems operated by municipalities and private utilities) is approximately 4.8 million gallons per day (MGD). These systems have capacity to accommodate approximately 4 MGD of additional capacity before additional water supplies will be required. In 2030, demand for water in the County’s public systems (including existing demand) would be approximately 10.5 MGD, leaving a need for an additional 1.5 to 2.0 MGD. Planned or potential system improvements, including Artesian Water Maryland’s Elkton West service, and expansions of the Mountain Hill Water Company and the municipal systems of the Towns of Perryville and Port Deposit, will be sufficient to provide this additional water.

To meet drinking water needs in rural areas of the County (areas outside of public systems), another 2.5 MGD of groundwater (to be drawn from individual wells) will be needed. The vast majority of this rural demand will occur in the northern part of the County (north of the Designated Growth Area) and on the Elk Neck Peninsula. Water supply for individual wells in the southern rural portion of Cecil County should be sufficient to support rural demand. Water supplies in the northern portion of the County are adequate, but the fractured hydrogeology of the Piedmont area makes water more difficult to access. This could hamper development in areas north of the DGA.

Beyond 2030, the County, municipalities, and private wastewater service providers will need to invest in new water infrastructure. Particularly important will be identifying and securing new groundwater sources, as well as land to be used for new water impoundments.

Sewer Systems

The current average daily wastewater flow to the County’s public sewer systems (including systems operated by municipalities and private utilities) is approximately 5.4 MGD. These systems have capacity to accommodate approximately 3.1 MGD of additional flow before additional wastewater system capacity will be required. In 2030, wastewater flows to the County’s public systems (including existing demand) would be approximately 10.5 MGD, leaving a need for an additional 2.0 MGD of capacity. Planned or potential system improvements, including upgrades and expansions of the Seneca Point, Meadowview, Port Deposit,

and Chesapeake City Wastewater Treatment Plants (WWTP) will be sufficient provide this additional capacity.

Beyond 2030, the County, municipalities, and private wastewater service providers will need to invest in new wastewater infrastructure, ranging from expanded WWTPs to new collection infrastructure. The County will also need to identify and secure land to be used for alternative wastewater disposal systems, such as land application or tertiary treatment wetlands.

Nonpoint Source Pollution

Nonpoint source pollution generally comes from three sources: agricultural runoff, stormwater runoff, and septic systems. State law now requires all new septic systems installed in the Chesapeake Bay Critical Area to include denitrifying units. The Concept Plan recommends requiring denitrification systems in other areas other than the Chesapeake Bay Critical Area.

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Concentrating growth in the DGA as recommended in the land use plan allows for more efficient urban stormwater management, supporting nonpoint source pollution reduction.

Major Policies and Actions

1. Aggressively pursue development of water resources infrastructure in growth areas. While Low Growth areas are eligible for sewer service, providing service to these areas is a lower priority compared to other growth areas. High priority actions include:
 - Artesian Water Maryland's Elkton West water distribution system.
 - Artesian Wastewater Maryland's Elkton West wastewater collection and treatment system.
 - Upgrade and expansion of the Seneca Point WWTP and collection system.
2. Secure new surface water sources within the county, providing the necessary reservoirs for storage.
3. Secure new groundwater sources within the county and protect recharge areas from pollution through land preservation, wetland and stream buffers, and wellhead protection regulations.
4. Expand Countywide wastewater system capacity to accommodate projected growth, while complying with nutrient discharge limitations.
5. Establish and require wellhead protection around all public and community water supply wells. Adopt the already-drafted wellhead protection ordinance (to include specific itemization of permitted and prohibited uses).
6. Support state policies and actions to reduce nutrient pollution from all sources, including agriculture, stormwater management, and septic systems. Examples include Environmental Site Design requirements for new development, cover crop requirements, and septic denitrification requirements.
7. Require all new development in wellhead protection areas, or within 300 feet of streams to use septic denitrification systems. Elsewhere, consider requiring nutrient offsets for subdivisions built using septic systems.
8. Identify areas in the County suitable for treated wastewater land application techniques (such as spray irrigation) and tertiary treatment wetlands. Land should be acquired or reserved before 2030 to meet the County's longer term wastewater disposal needs.
9. Revise the County's stormwater management regulations to implement 2007 Maryland Stormwater Management Act. Under the Act, the County must do this by May, 2010.

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Community Facilities Needs and Funding

Table 5 Community Facilities Needs and Funding Summary 2030

Table includes only projects i) where there would be some County Funding ii) with funding needs beyond FY 2010. Table does not include Enterprise Fund Projects: Water, Wastewater, Solid Waste

Work in Progress 7-6-09

	\$ Cost in thousands		
	Total Project Cost ¹	Funding Through FY'10	Future Funding Need 2011-2030 ²
Cecil College	75,344	399	74,945
Public Schools	478,304	0	478,304
Libraries	53,510	1,500	52,010
Health	800	0	800
EMS	1,890	0	1,890
Roads	270,329	6,279	264,050
Fire	0	0	0
Public Safety	43,865	22,124	21,741
Parks	95,737	0	95,737
Senior Services	1,680	0	1,680
Information Technology	?	0	?
	\$1,021,459	\$30,302	\$991,157

Notes:

1: Costs are expressed in 2009 dollars

2: Based on costs provided in the CIP and estimates from various sources - see sources

Sources: Cecil County 2010 Capital Improvement Program 4/7/09; Cecil County Public Schools 2010 Educational Facilities Master Plan; February 2009 Comprehensive Plan Public Services COC Presentation; Cecil Community College Strategic Plan 4/28/05

Table 5 Community Facilities Needs and Funding 2030 Work in Progress -- DRAFT 7-6-09

Table includes only projects i) where there would be some County Funding ii) with funding needs beyond FY 2010. Table does not include Enterprise Fund Projects: Water, Wastewater, Solid Waste

Needs further research	2030 Community Facilities Need	\$ Cost in thousands			County Share of Future Funding Need	Source
		Total Project Cost ¹	Funding Through FY'10	Future Funding Need 2011-2030 ²		
Cecil College	Cecil College Engineering and Math Building - NE Campus	19,526	399	19,127	7,810	CIP FY'10, EFMP '10
	Cecil College HVAC Systems	573	-	573	229	CIP FY'10
	Cecil College Technology Infrastructure Phase II	425	-	425	170	CIP FY'10
	New Student Center (North East)	12,345	-	12,345	4,938	Cecil College Campus Master Plan
	New Facilities Management and Receiving Building (North East)	2,447	-	2,447	979	Cecil College Campus Master Plan
	New Learning Commons (North East)	1,718	-	1,718	687	Cecil College Campus Master Plan
	Arts and Sciences Building Renovations (North East)	1,519	-	1,519	608	Cecil College Campus Master Plan
	Technology Center Renovations (North East)	995	-	995	398	Cecil College Campus Master Plan
	Community Cultural Center Renovation/Addition (North East)	1,915	-	1,915	766	Cecil College Campus Master Plan
	Facilities Maintenance Projects (North East)	1,728	-	1,728	691	Cecil College Campus Master Plan
	New Academic Building (North East)	10,829	-	10,829	4,332	Cecil College Campus Master Plan
	Future Maintenance Projects (North East)	324	-	324	130	Cecil College Campus Master Plan
	New building (Bainbridge)	21,000	-	21,000	8,400	Cecil College Campus Master Plan
Public Schools	New Comprehensive Career and Technology (CTE) High School	62,463	-	62,463	30,854	CIP FY'10, EFMP '10
	North East High School Addition/Renovation	62,245	-	62,245	32,125	CIP FY'10, EFMP '10
	North East Middle School Addition/Renovation	35,696	-	35,696	17,219	CIP FY'10, EFMP '10
	New Gilpin Manor Elementary School	24,456	-	24,456	12,216	CIP FY'10, EFMP '10
	Perryville Elementary Addition/Renovation	19,276	-	19,276	9,380	CIP FY'10
	Chesapeake City Elementary Addition/Renovation	15,775	-	15,775		CIP FY'10, EFMP '10
	Bohemia Manor Middle / High School (Addition)	47,352	-	47,352	22,877	EFMP '10
	Cherry Hill Middle School Renovation	24,407	-	24,407	11,819	EFMP '10
	Leeds Elementary Addition/Renovation	19,110	-	19,110	9,932	EFMP '10
	Thomson Estates Elementary Addition/Renovation	15,573	-	15,573	8,016	EFMP '10
	Kenmore Elementary Addition/Renovation	11,951	-	11,951	5,871	EFMP '10
	Elementary Schools (4) to accommodate 2020 to 2030 growth	80,000		80,000		ERM, CCPS
	High School (1) needed to accommodate 2020 to 2030 growth	60,000		60,000		ERM, CCPS
Libraries	Elkton Central Library Replacement (replace by 2022)	25,000	-	25,000		COC Presentation 2/09, CCPL
	North East Branch Library Replacement (includes central library HQ)	19,810	1,500	18,310		CIP FY'10, CCPL
	Rising Sun Branch Library Expansion (replace by 2025)	3,000	-	3,000		COC Presentation 2/09, CCPL
	Elkton & Rising Sun Security Upgrade	595	-	595		CIP FY'10
	Port Deposit / Bainbridge Landscaping	105	-	105		CIP FY'10
	New Cecilton Branch Library	4,000	-	4,000		COC Presentation 2/09, CCPL
	Conowingo / Oakwood Branch	1,000	-	1,000		CCPL
Health	Health Department Systemic Upgrades	800	-	800		CIP FY'10
	Health Department expansions to Perryville and Cecilton	?	-	?		COC Presentation 2/09
	Health Department expansion in Elkton building (main facility)	?	-	?		Health Department
EMS	Fair Hill Station Construction	875	-	875		CIP FY'10
	Sylmar Tower Construction	515	-	515		CIP FY'10
	Paramedic Station #4 Perry Woods	500	-	500		CIP FY'10
Roads	Roads and Bridges Through 2014	72,134	6,279	65,855		CIP FY'10
	Roads and Bridges 2015-2030	197,565		197,565		ERM, Future need based on CIP
	Elkton Loop Road - Entire Length - Planning and Environmental Compliance	400		400		ERM, 2007 Roadway Strategic Plan
	Elkton Loop Road Right of Way acquisition	170		170		ERM, 2007 Roadway Strategic Plan
	US 40 to MD 7 connector (linking mixed use areas west of Elkton) - Right of Way acquisition	60		60		ERM
	US 40-MD 213 intersection improvement, Planning (County forward fund?)	?		?		ERM
Fire	Fire Training Facility in the County	0	-	0	0	COC Presentation 2/09
	New Fire Station in the Perryville area	0	-	0	0	COC Presentation 2/09
	Cecil College campus replacement fire station to serve the North East area	0	-	0	0	COC Presentation 2/09

	2030 Community Facilities Need	Total Project Cost¹	Funding Through FY'10	Future Funding Need 2011-2030²	County Share of Future Funding Need	Source
Public Safety	Cecil County Detention Center renovations	31,755	22,124	9,631	4,703	CIP FY'10
	Land acquisition for correctional facility expansion/replacement	110		110		Sheriff Janney
	Juvenile detention facility?	?		?		COC Presentation 2/09
	Sheriff Substation in the proximity of Chesapeake City and Cecilton	6,000	-	6,000		COC Presentation 2/09, Sheriff Janney
	Sheriff Substation in the proximity of Rising Sun and Conowingo	6,000	-	6,000		COC Presentation 2/09, Sheriff Janney
Parks	Acquire & develop 250-410 acres	25,961	-	25,961		LPPRP '05
	Facility development projects	25,951	-	25,951		LPPRP '05
	Acquire 1,750 acres of additional park/open space land to meet needs through 2030	43,825		43,825		ERM/Dept Rec & Parks
Senior Services	Southern County Community Center	1,680	-	1,680		CIP FY'10
	Additional 2020-2030 needs?	?		?		
Information Technology	Needs?	?		?		
	TOTAL COST³	\$1,021,459	\$30,302	\$991,157		

Notes:

1: Costs are expressed in 2009 dollars

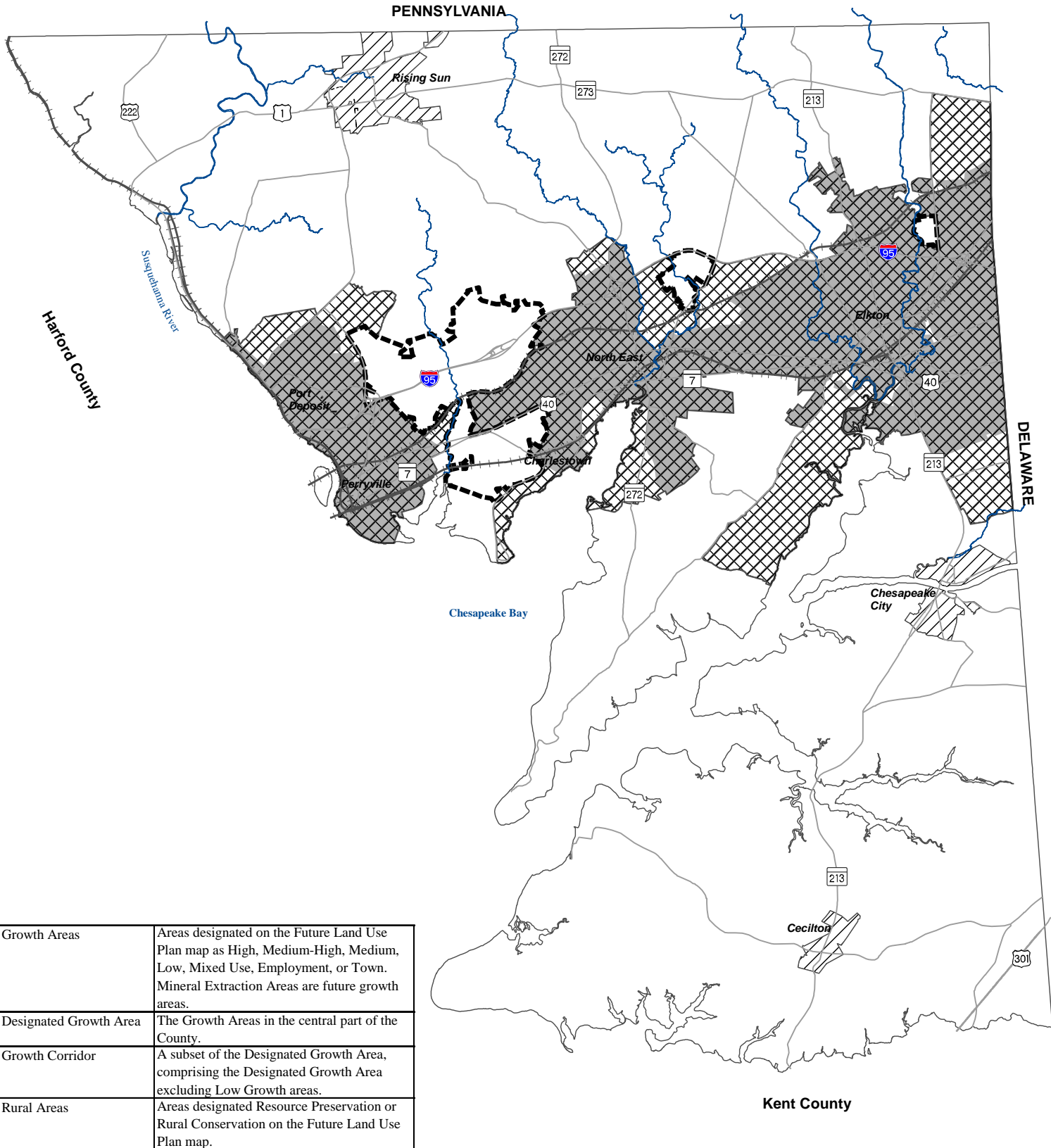
2: Based on costs provided in the CIP and estimates from various sources - see sources in notes in electronic version of the table

Sources: Cecil County 2010 Capital Improvement Program 4/7/09; Cecil County Public Schools 2010 Educational Facilities Master Plan; February 2009 Comprehensive Plan Public Services COC Presentation; Cecil Community College Strategic Plan 4/28/05

	Potential Projects (beyond 2030)					Source
Roads	Cecil College expansion to Bainbridge - delayed due to economic conditions					CCC Strategic Plan '05 & update
	Elkton Loop Road - 279 East to US 40 Construction \$	5,200				ERM, with inputs from JMT, SHA
	Elkton Loop Road - 279 West to Marley Road Construction \$	17,200				ERM, with inputs from JMT, SHA
	Elkton Loop Road - Amtrak and MD 279 Crossing (assumes bridge)	26,000				ERM, with inputs from JMT, SHA
	US 40 to MD 7 connector (mixed use area) Construction \$	2,000				ERM, with inputs from JMT, SHA
	US 40 -MD 213 Intersection Reconstruction					SHA - Jim Dooley



Revised Growth Areas Map



Growth Areas	Areas designated on the Future Land Use Plan map as High, Medium-High, Medium, Low, Mixed Use, Employment, or Town. Mineral Extraction Areas are future growth areas.
Designated Growth Area	The Growth Areas in the central part of the County.
Growth Corridor	A subset of the Designated Growth Area, comprising the Designated Growth Area excluding Low Growth areas.
Rural Areas	Areas designated Resource Preservation or Rural Conservation on the Future Land Use Plan map.

Figure X: Growth Areas and Rural Areas
2010 Cecil County Comprehensive Plan

Legend

- Growth Areas
- Designated Growth Area
- Mineral Extraction Areas
- Growth Corridor
- Rural Areas

