

**CECIL COUNTY COMPREHENSIVE PLAN  
WATER RESOURCES SUBCOMMITTEE  
MEETING MINUTES  
6th May 2009  
TC 106 Cecil College**

**Attendance**

<b>Member</b>	<b>Present</b>
Eileen Butler (Co Ch)	Y
Dan Derr	Y
Robert Gell	Y
Ann Jackson	
Phyllis Kilby (Secr.)	Y
Daniel Polite	Y
Vic Priapi	
Rupert Rossetti (Ch)	Y
Henry (Dick) Shaffer	
Chuck Smyser	
Tony DiGiacomo (Staff)	Y
Ben Sussman	
Maggie Cawley	

<b>Attendees</b>	<b>Affiliation</b>
John Leocha	MDP
Brigid Kenney	MDE
Janice Outen	MDE
Carl Walbeck	COC
Jeff Coale	DPW
Joseph DiNunzio	Artesian
Bruce Kraeuter	Artesian
Scott Towler	Artesian
James Eder	ARRO
Jim Majewski	Town of Rising Sun
Matt Carter	Citizen

**Other Attendees:**

**Cecil Land Trust:** Bill Kilby, Sandy Cope, Bob Porter, Cynthia Rossetti, Patti Gray, Joe Carabetta, George Esry, George Spence, Sarah Mackie, Edwin Merryman

**Cecil College Soils Class:** Judith Owen, Becky Kilby, Nancy Valentine

**Upper Western Shore Trib Team:** Laura O'Leary & Laura Paligo (HCPS), Cliff Bienko (USDA), Steve Witt

**Call to Order 18:35**

Reversed the order of the Agenda, and approved a relaxation of subcommittee rules to allow the public to participate in the presentation portion of the meeting. After a short break, the subcommittee would reconvene for its business meeting.

**Meeting Purpose:** To learn more about Tertiary Treatment Wetlands

Introductory quote from a 1988 EPA Design Manual "Constructed Wetlands and Aquatic Plant Systems for Municipal Wastewater Treatment":

*"The trend of the past 70 years in the construction of water pollution control facilities for metropolitan areas has been toward "concrete and steel" alternatives. With the advent of higher energy prices and higher labor costs, these systems have become significant cost items for the communities that operate them. For small communities in particular, this cost represents a higher percentage of the budget than historically allocated to water pollution control. Processes that use relatively more land and are lower in energy use and labor costs are therefore becoming attractive alternatives for these communities"*

**Guest Speaker:** Jay Kirk CH2M HILL

**Topic:** **Sustainable Approaches for Total Water Management** -The Clayton County Water Authority Story and how it might apply to Cecil County

See pdf file for the presentation. Note: This is a 16 megabyte file Follow this link:

<http://www.ccgov.org/uploads/PlanningAndZoning/Meetings/cpcoc/CPCsubcommittees/ClaytonCountyWaterAuthorityPresentation.pdf>

Voice-over highlights include:

Slide 1: Clayton County is in the Atlanta metropolitan area and is home to the Hartsfield-Jackson International Airport.

Slide 5: : Clayton County is on the continental divide between the Atlantic Seaboard and the Gulf of Mexico, so is at the upper reaches of both drainage basins, with little available water.

Slide 14: On-stream storage means that the waterway is dammed up. Off-stream storage means that the water is held in a catch basin off the course of the natural waterways. Have been doing recharge using reclaimed water since the 1970s.

Slide 16: "Micro-constituents" include such things as pharmaceuticals and chemicals

Slide 17: Water production is currently at 26 mgd, and is permitted for 40 mgd.

Slides 18 / 19: Estimate that they have saved the equivalent of \$2 million in water recaptured through leak prevention.

Slide 21: Have been doing land application since the 1970s. Have 4000 acres set aside, with 2400 in spray irrigation. At one time, there were 22,000 sprinkler heads to maintain, with 22 full time employees.

Slide 23: Looked at alternatives in 2000, when the use of constructed wetlands was envisaged. A lot of PR was required.

Slide 25: The actual time in the wetlands is between 7 - 21 days.

Slide 28: Through a study of both large and small wetland systems, the average requirement is 15 acres per 1 mgd treatment of N & P.

Slide 30: A variety of clay loam soils

Slide 33: The entire constructed wetland site is above the 500 year floodplain. Banding indicates different vegetation. There are 9 different plant species used. The site is 90 acres total, with 55 acres wetted.

Slide 35: At Huie, they are phasing in the wetlands as they phase out the land application. G was first, followed by D, E & F. A, B & C are going in now. The numbers represent the individual wetland cells.

Slide 37: Yes, we did cut down the trees, which were part of a silviculture program, to put the wetlands in. It is a trade-off. We're going down from 2400 acres of spray irrigation to 200 acres of wetlands with a lot less staff. The trees had been subjected to 200 inches of spray per year, and are something of a fire and safety hazard once the spray is stopped.

Slide 40: The capital cost for the Huie site is \$42 million, with an additional \$50 million for the construction of the mechanical treatment plant, or about \$3.8 per gallon. Equivalent mechanical treatment would cost \$8-10 per gallon.

#### Highlights from Q&A:

- Stormwater piping is completely separate. Fee structure for the Stormwater utility is an impervious cover charge and is attached to the monthly bill.
  - Huie is designed to operate under 25 - 100 year storm conditions.
  - The mechanical side of the WWTP gets everything - solids plus ...
  - The wetlands are another step in the treatment train and allow the limits at the WWTP outfall to be relaxed a bit
  - Wetland cells are ~6 inches deep, with their bottoms intended to mimic nature as much as possible.
  - They were planted, not seeded.
  - Tallest vegetation is 15-20 feet high ... cut grass, some willows.
  - The growing season is April to October. The system is designed around this seasonality and operates 12 months of the year
  - There are wetlands operating 12 months of the year in Canada. In the growing season, the treatment is through the plant mass. In the winter, it is microbial. They create an air gap between the ice and the wetland and this air gap acts as an insulator.
  - We anticipate 20 years before we need to clean out. Have tried harvesting and burning.
  - The P is adsorbed into the soil. Initially there is a big uptake, and then it levels off to a stable condition.
  - There are a lot of new amphibians
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- Comment from the audience: In Maryland, the reservoirs are typically upstream and the treatment plants downstream of the population centers. This is very different.

### **Clarification of Comments made at the April WRE Meeting.**

In response to an email (attached) from Matt Carter, a perennial attendee at subcommittee meetings, Joe DiNunzio clarified some of his comments:

With respect to the timing of Infrastructure expansion:

- It is a matter of economics and timing. One doesn't want to make capital investments without having a revenue stream.
- Artesian is committed to serve its customers in its designated franchise area, and is now doing the necessary permitting, which is the long lead time item, so that they will be ahead of the curve.
- Construction will happen when people arrive and request service
- First service is going to be up in the Cherry Hill area, because of demand from W.L. Gore.

With respect to the sale of county assets:

- Not a fire sale. The facilities were sold on net asset value, which is what the regulations require. In the past, Public Service Commissions had been caught when entities sold their assets to one another at inflated values as a way of overly increasing rates.

With respect to the linear cost of water:

- Would much rather serve commercial and industrial than residential

With respect to the county maintaining the lead:

- That isn't up to Artesian, that is up to the county

With respect to getting infrastructure in the Route 40 Corridor:

- The county is unwilling to make the investment; private enterprise will.

Question from the subcommittee: Regarding the minimum density required for water & sewer ... 1 EDU per acre or 2?

- There is no magic wand. The greater the density, the lower the cost per EDU.
- The last thing we want is three miles of pipe with no-one to serve.

General Discussion:

- With Gore and the Cherry Hill Village community, there is a vast expanse of rural land in between. What will happen to it?
- How do we ensure that the infrastructure goes into the areas where we want it to go (i.e. into those areas designated for the highest density development) and not elsewhere?

- Suggestion: Take advantage of the tools provided in the recently passed "Smart, Green and Growing" legislation (HB 295 et al) to establish specific measures and indicators. These will help to ensure that the zoning ordinances and regulations, and such ancillary plans such as the Master Water & Sewer Plan, conform to the goals and intents of the Comprehensive Plan.

Point of Information:

- Harford County has submitted their draft Water Resources Plan for review by MDE. Rupert to contact Pat Pudelkewicz to request a copy. Done: Follow this link.
  - [www.harfordcountymd.gov/PlanningZoning/Download/1117.pdf](http://www.harfordcountymd.gov/PlanningZoning/Download/1117.pdf)

**Adjournment:** ~20:30

**Next meeting:** TBD.

- Pencil in: Sept 30<sup>th</sup>; Oct 7<sup>th</sup>

**Questions for the Subcommittee**

**Questions for Staff**

**Recommendations/Action Items for Staff and Consultants**

**Recommendations/Action Items for Oversight Committee**

**Subject:** Re: WRE Minutes 1st April 2009; Next Meeting, 6th May  
**Date:** 4/23/2009 8:40:56 A.M. Eastern Daylight Time  
**From:** [matt\\_carter@comcast.net](mailto:matt_carter@comcast.net)  
**To:** [RupertRossetti@aol.com](mailto:RupertRossetti@aol.com)

Thanks, Rupert. A couple of questions or comments:

- I thought Scott's comments about Seneca expansion were spot on and I'm glad he takes opportunities to inform folks of things that his staff instinctively understands, such as the fact that bigger sooner is not necessarily better and a particularly oversized WWTP is not economical, incurs too much financial risk, and is very difficult to operate within its permit (this is the part that folks really stumble over, but it's true).
- I was troubled but not surprised by Joe's comment that Artesian will not expand infrastructure in the designated growth area until there is demand ready to use it. Permit a brief rant here. This is exactly the problem we've had since the 1960s when we started talking about "water and sewer in the Route 40 corridor!" Did the CCG, in negotiating a contract with Artesian not require some timeframe for providing that infrastructure in the DGA to ensure that there would be some mechanism to, as the existing Comprehensive Plan says, "encourage development in the DGA." If Artesian does not "build it so that they will then come," how is their ownership of the facilities better than the County's? I thought the whole point was that we couldn't access the capital to take on the risk of the infrastructure - if Artesian either can't or won't access that capital and take that risk, what have we gained by selling them at a fire sale price (\$13 MM? are you kidding? who appraised these facilities?) these facilities that include a service area outside of the comfort zone of many Countians? Joe's answer to the linear cost of water and sewer makes it clear that they will eschew at least the commercial and industrial areas of Route 40 because there won't be sufficient demand immediately to provide a return on investment that meets their goals; instead, they will develop the fertile residentially zoned areas immediately near Cherry Hill and Meadowview, which, while at least partially in the DGA, are not the target areas most Countians have in mind. Most Countians would like to see the encouragement to be in the residentially zoned areas along and near Route 40. I'm not blaming Artesian - their job is to grab and run with the best deal they can get, and it appears from Joe's comments that Artesian received a monopoly on a large franchise area at a fire sale price with few if any constraints or obligations to assist with the managed development goals of the County. I hope I'm wrong or that he just spoke poorly. End of rant; thank you for your indulgence.
- Having not been there, I am skeptical of Scott and Joe's concurrence that the County will maintain the lead in determining where water and sewer is developed in the DGA. If their faith is entirely grounded in the BOCC's authority over the Master Water and Sewer Plan, I think history has shown that the various BOCCs have been feckless in this regard and it hasn't really been a forward looking plan as much as it's been a set of minutes of what we decided to do at some particular time. I think if you look at the service area that the County will have versus the service area Artesian will have and the facilities that each will own and, importantly, the potential for development in their service areas (Seneca Point's area is dominated by the Stewart holdings, many of which won't develop for decades and in any event will develop at the Stewarts' pace and along their priorities, not the County's, perhaps as it should be), you'll see that Artesian will indeed be the lead and will drive what happens, when, and where. Put another way, I'd ask how the County will be able, contractually, legally, to "maintain the lead responsibility for overseeing sewer and water infrastructure in the growth area?" [This doesn't really qualify as a rant; more of a point of order, a comment, a question, really]

Thanks for letting me play. By the way, in case no one has mentioned it lately, thanks to you and your colleagues for your service to Cecil County; you do a tremendous amount of work and for many of you, there's no ulterior motive or agenda. So, thanks. Matt