

**CECIL COUNTY COMPREHENSIVE PLAN
WATER RESOURCES SUBCOMMITTEE
MEETING MINUTES
9th April 2008**

Attendance

Member	Present
Eileen Butler (VCh)	Y
Dan Derr	Y
Robert Gell	N
Randy Hutton	Y
Ann Jackson	N
Phyllis Kilby (Secr.)	Y
Daniel Polite	Y
Vic Priapi	Y
Rupert Rossetti (Ch)	Y
Henry (Dick) Shaffer	Y
Chuck Smyser	Y
Tony DiGiacomo (Staff)	Y

Other Attendees	Affiliation
Jeff Coale	DPW
Scott Flanigan	DPW
Cindy Latham	MDE
Janice Outen	MDE
Jason Dubow	MDP
John Leocha	MDP
Matt Carter	Resident
Joseph DiNunzio	Artesian
John Higby	ARRO Consulting

Call to Order 18:30, 9th April 2008, Cecil College North East - TC214

Regrets received from Robert Gell & Ann Jackson.

Old Business

Future Meeting Dates: By general agreement, the WRE Subcommittee will meet the first Wednesday of each month at 6:30 p.m.

- 7th May - Cecil College North East - TC214
- 4th June - Cecil College North East - TC214
- 2nd July - County Admin Building - Perryville Room

WRE Technical Workshop:

The workshop was held on 25th March 2008 at MDE's office in Baltimore. Phyllis Kilby, Dan Polite, Rupert Rossetti & Ben Sussman attended.

Two facets of the WRE were covered:

- Point Source Nutrient Loading Cap & WWTP Capacity Planning
- Non-Point Sources of Pollution Analysis

Drinking Water Supply was not covered.

Point Source Nutrient Loading Cap & WWTP Capacity Planning

- Also see hand-out
- The equation to get from Flow & Concentration to Load per Year:
Flow * Concentration = Load
 $x \text{ mgd} * y \text{ mg/l} * 8.34 \text{ lbs/gal} * 365 \text{ days/year} = z \text{ lbs year}$
e.g.
 $0.5 \text{ mgd} * 4 \text{ mg/l} * 8.34 * 365 = 6100 \text{ lbs/yr}$

Major (Significant) Plants are addressed differently than Minors, with a different set of conditions applied to them.

- Majors are those plants with a capacity greater than 0.5 million gals per day
 - We have three such plants in Cecil County: Elkton, North East (Seneca Point) & Perryville.
 - They are capped at current nutrient load allocations (in lb N & P per year)
- Minors are those plants with a capacity less than 0.5 million gals per day
 - We have ~23 minor plants, some publicly owned and operated by the county or municipalities, some privately owned and operated.
 - They will be subject to a slightly more complex set of rules, dependent upon their current load allocations and plans for expansion.

Because we sent written questions, we got a quick, but not complete, analysis by MDE's Mr. Yan Der Cheng.

- While there are a series of caveats, the bottom line message from Mr. Cheng is that, if the county and municipalities were to partner and "pool" their allocations, there should be more than enough allowable load through the planning period (2030).
- We should wait until we get the clean and complete set of data before drawing any conclusions.
- Timing will be contingent upon the receipt and processing of data from the Municipalities, which is currently being collected by MDE.

Non-Point Sources (NPS) of Pollution Analysis

- Also see Hand out
- MDE has provided a set of interlinked spreadsheets, with the current data pre-populated - at a "Basin" level
 - We are in two Basins: Susquehanna & Eastern Shore
- Process:
 - Start with current Land Use / Land Cover & Current Septic Systems
 - Project Future Land Use / Land Cover & Future Septic Systems
 - Import the Point Source Loads
 - Crank the spreadsheet for various scenarios
 - Compare Results considering
 - NPS Nutrient Loads
 - Amount of Impervious Cover
 - Point & Non-point Nutrient Loads
 - Strive to find the least impactful Future Land Use model in terms of nutrient load to the Bay, and select the one that is best for the county.
 - WRE subcommittee should suggest to the Land Use subcommittee the type of land use scenarios that best meet our needs.

ERM Status - Ben Sussman:

Maggie and I have made good progress in developing the draft of the existing conditions portion of the Water Resources Element, and have also begun to frame some of the policy issues that the subcommittee will need to consider. We're waiting on MDE for some important data (through a separate consultant related to BRAC issues, MDE is collecting data on point sources/wastewater treatment plants, and will be forwarding that information to us), but our framework for evaluating that data is largely built. We have also put in a request to MDE for the nonpoint source modeling spreadsheet.

We will shortly be able to provide you with a WRE example from Garrett County, to give you a feel for the content and structure.

New Business

The bulk of the meeting was focused on the DPW *Drinking Water Action Plan*. Scott Flanigan, DPW Director led the discussion, with Jeff Coale, Chief of the Water and Wastewater Division, on hand to assist. A pdf version of the Powerpoint presentation is attached. The following notes are a compilation of the voice-over for the charts and of the concurrent Q&A.

The *Drinking Water Action Plan* outlines the various approaches DPW is taking to maximize and expand the county's *Drinking Water* capacity to provide sufficient Capacity to Support the County's Strategic Objectives:

- Smart Growth
- Economic Development
- Quality of Life
- Protection for the Environment, etc

The Action Plan elements (slide 7) include:

- Maximize Existing Capacity
 - Leak detection program
 - Conservation measures
 - Currently focused on education rather than on incentives/disincentives or regulation.
 - It is inevitable that we move to incentives, but we're not there yet - need more organizational energy behind it first.
 - Maintain the infrastructure
- Expand Capacity
 - Obtain additional sources
 - Elk Neck Peninsula Ground Water
 - Plan a series of wells on a combination of private and county park land, outside the designated water service area

- Initial wells are promising
- Aquifer is the Coastal Plain Potomac
- Recharge areas - need to know where these are so that we can protect them.
- Costs are estimated in \$millions
- Explore possibility of joint Town of Elkton/County water plant
 - Contemplating shared water supply project from the tidal portion of the Elk River
 - May utilize desalination technology
 - Costs are estimated in the \$tens of millions
- Further develop Meadowview water supply
 - This is a somewhat controversial project. The county is looking to MDE to be honest brokers who will ensure that the proposed groundwater supply is reliable.
 - Intent is to reduce reliance on out of state water sources - in this case, from United Water of Delaware
 - There are risks in using out of state suppliers - from both a cost control and a supply control standpoint.
 - Would like to renegotiate the current contract, or seek a new supplier and ensure that the contract terms are more favourable.
 - May be able to "wheel" the Elk Neck water through the Elkton System and pick it back up on the north side of town to supply the county growth area.
- Susquehanna River
 - The Susquehanna River, and the Bay, are the largest reliable sources of water, so withdrawals from the Susquehanna River are on the radar screen.
 - To a certain extent, that can happen through the Artesian agreement, since Artesian has a tie-in to the Chester Water Authority, which gets some of its water from the Conowingo Pool:
Susquehanna → CWA → Artesian → Elkton → County
- Elkton West Water/Sewer Service Franchise Agreement
 - In progress - will likely end up with out of state water supplies, and the lawyers are working on the contract, which is quite complex.

Q&A

- Damming Big Elk Creek is not an active initiative
- The Urban Growth Boundary Plan is useful in that it shows the areas that the municipalities will service, at some time in the future, and the county won't plan on providing service to those areas.
- Re. Private vs Public operation:
 - There is a lot to be gained by doing our own job, rather than to privatize the water & sewer operations
 - The objective is to do it right
 - Need to avoid being held hostage by private companies

- One of the underlying issues is that, when County-run, the Board of County Commissioners sets the rates, and there is always a political element. Private companies, on the other hand, have their rates set by the Public Service Commission, so are insulated from the rate increases.
- Tony D.: The Master Water & Sewer Plan is a policy document that provides definition to the Comprehensive Plan, identifying the areas where community facilities will be placed.
 - The MWSP is created by the departments, reviewed by the Planning Commission and approved by the Commissioners
 - It is governed by COMAR regs
 - Has a Triennial Review and Update requirement
 - John Leocha will provide the COMAR reference - see attachment
 - Janice Outen will provide the MWSP Checklist

Cindy Latham, from MDE's Source Water Protection & Water Appropriation Permits section, who has been working with Cecil County's water appropriations since the early 1990's, provided some background on the Appropriations process, and Cecil's groundwater resources.

- We have three types of groundwater aquifer:
 - Hard Rock
 - Confined Coastal Plain
 - Unconfined Coastal Plain
- The Piedmont is hard rock, with the "volcanic complex of Cecil County" from the old Geological Survey maps being some of the most difficult in which to find water.
 - For residential wells in the Piedmont, one well per acre is a good rule of thumb
- The Coastal Plain aquifers include the Potomac & Magothy Formations.
 - In the Potomac Group, the confining beds are quite often leaky.
 - In the Coastal Plain, quantity is not a problem
- Surficial aquifers are present in both the Piedmont (upland gravels) and Coastal Plain
- Two handouts included MDE's Application to Appropriate and Use Waters of the State and several documents pertaining to Public Well Procedures.
 - MDE considerations include
 - the impact on reserves
 - the impact on stream flow
 - amount asked for, and the use to which it will be put. A residential well will be permitted for that amount of water the residence needs, not the maximum amount the well could produce
- In addition, Cindy provided a wall-sized map showing the wellhead protection areas for Cecil's public wells.
 - It appears that the County needs to implement a Source Water Protection ordinance
- Contamination of the water supply appears to be another issue we need to explore

The meeting adjourned at approx 9:15 p.m.

Questions for the Subcommittee (items in blue are the questions we need to answer per the WRE component chart from ERM)

1. Are water supplies adequate for existing and future development?
 - a. Sources: Groundwater, Surface Water
 - b. Public systems, private wells.
 - c. Users: Residential, commercial, industrial, agricultural (irrigation).
2. Current or potential water quality concerns?
 - a. Minerals, metals, pollutants (failing wells).
 - b. Source water protection policies
3. Issues to be discussed:
 - a. The uncertainties around groundwater supply
 - b. Need for alignment of the Master Water & Sewer Plan and the Water & Sewer Action Plan
 - c. Position on County-run vs Privatized Water & Sewer operations
 - d. Contamination of the water supply
 - e. Source Water Protection
 - f. Need for maps on such matters as water resource protection areas, source water protection areas, etc.

Questions for Staff

1. Elk Neck Groundwater wells: Where are the recharge areas? Please ask the consultant to provide them.
2. Where is the latest draft of the Source Water Protection ordinance?

Carry-overs from last month

1. Do we need to take a position on sump pump and downspout connection to sewer lines, or is this already covered in the county code?
- ~~2. What is the status of the County Master Water & Sewer Plan and how does it complement the DPW Action Plan~~
3. What is the origin and breakdown of the 9-12 million gals per day WWTP capacity needed in the growth area? Is this county only, or county and municipalities?
4. What percentage of the county population is on sewer and what percentage on septics? Do these numbers include Municipalities?
5. Where are the areas of failed septics?
6. Follow-up questions for Scott & Tim: What is the current split between residential and commercial/industrial WWTP capacity for both "current usage" and for "allocated but as yet unused"? Can you break it down by WWTP?

Recommendations/Action Items for Staff and Consultants

1. See Questions for Staff

Recommendations/Action Items for Oversight Committee

1. None at present

Adjournment

Next meeting: May 7th, 6:30 pm at Cecil College North East Campus Room TC 214, will focus on understanding issues related to the Non-Point Source Assessment

Facets we need to consider for the Non-Point Source Assessment

1. What is the discharge of nutrients (N, P) from non-point sources to the Bay?
 - a. Stormwater runoff (urban, rural, agricultural sources).
 - b. Location of new septic systems

Minutes Prepared by: Rupert Rossetti / Phyllis Kilby

Date: 18th Apr 2008

Post-meeting Follow-up from John Leocha, MDP

The MDP link to the Water Resources Element Models and Guidelines.

http://www.mdp.state.md.us/order_publications.htm

This link will give you the WRE M&G plus all the other documents from MDP. Look at the WRE Supplement for lots of weblinks to related information . Also the MDP Analytical Flow chart is very informative to helping wrap up all the information you are collecting right now.... Either Jason or I can help with any questions on this.

State Water and Sewer Plan regulations

The information that I provided on the State Water and Sewer Plan regulations can be found in Article 26.03.01.01 - .08, of which I offered to send to you either by link to the State Law website or in paper format. State Code Weblink:

<http://www.dsd.state.md.us/comar/26/26.03.01.01.htm>

Once you are here, change the last number from .01 to ,02 and then to .03, etc up to .08 to read those sections.

Master Water & Sewer Plan:

The Water and Sewer Plan is a County level document and it is to be kept current with the operational and growth information from all owners and operators in the County. I am sure you and your committee members are aware of the importance of this information being up to date and accurate in the overall planning efforts of coordinating the County Land Use Plan and Comprehensive Plan. With the work that is being completed by the consultant collecting the Water and Sewer information for Cecil and Harford Counties you should receive the basics of information that will help to bring the current plan in to conformance with the minimum State regulations. This information will help to shape the overall County Land Use Plan.

Maryland Code/ENVIRONMENT /TITLE 9. WATER, ICE, AND SANITARY FACILITIES/SUBTITLE 5. COUNTY WATER AND SEWERAGE PLANS

<http://michie.lexisnexis.com/maryland/lpext.dll?f=templates&fn=main-h.htm&cp=>

the click on Maryland Code, then Environment, then Title 9-Water, Ice, and Sanitary Facilities, then sub title 5, County Water and Sewer Plan. See 9.503 (b). for the Three year Update requirement.

John Leocha

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Follow-up from Jason Dubow

As I discussed briefly at the 4/9 Cecil County WRE Citizens Oversight Committee meeting, after examining the forecasted water and wastewater needs, and the forecasted WWTP, septic tank, and stormwater runoff pollution impacts from different land plan options, one of the next steps is to examine potential policy and program recommendations for inclusion in the Water Resource Element.

Here are some resources that might help the Committee with development of WRE policy and program recommendations. Note: except for the M&G, MDP does not endorse any particular organization or document.

* Water Resource Element M&G 26 - see pp. 25-26, pp. 31-32, pp. 38-39

* U.S. EPA Office of Smart Growth, Water Resource Publications - <http://www.epa.gov/smartgrowth/publications.htm#water> - Protecting Water Resources with Smart Growth includes 75 policy ideas and examples of local jurisdictions efforts to implement some of the policies as well. Growing Toward More Efficient Water Use also has water resource policy ideas and case studies.

* Source Water Collaborative - "Advice Worth Drinking, A Planner's Guide" - <http://www.protectdrinkingwater.org/docs/SWCHandoutAugust2007.pdf> - page 2 provides policy ideas.

* Nonpoint Education of Municipal Officials (NEMO) - Addressing Imperviousness in Plans, Site Design, and Land Use Regulations - http://nemo.uconn.edu/tools/publications/tech_papers/tech_paper_1.pdf - although part of this document is related to how to develop a comprehensive plan, also included are water resource-related policy recommendations that could be included in a comprehensive plan.

* MDP guidance documents related to smart growth - http://www.mdp.state.md.us/order_publications.htm - these provide smart growth policy recommendations and model ordinance language including Infill and Redevelopment, Smart Neighborhoods, and Urban Growth Boundaries. Smart growth is one method that can be used to protect water resources at a regional scale - for an analysis of this issue, see Protecting Water Resources with Higher-Density Development (EPA Smart Growth Office) - http://www.epa.gov/smartgrowth/water_density.htm.

* The American Planning Association also has model ordinances related to smart growth - <http://www.planning.org/smartgrowthcodes/>

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