

**CECIL COUNTY COMPREHENSIVE PLAN OVERSIGHT COMMITTEE  
 AGRICULTURE, PRESERVATION and MINERALS (APM) SUBCOMMITTEE  
 MEETING MINUTES**

**June 12, 2008**

<b>Member</b>	<b>Present</b>
John Bennett	X
Diana Broomell	X
Shawn Day	
Donna Deckard	
Sandra Edwards	
Robert Hodge	X
Phyllis Kilby	X
Daniel Polite	X
Vic Priapi (Vice Chair)	X
Rupert Rossetti	X
Owen Thorne (Chair)	X

**Call**

**to Order** – Thursday, June 12, 2008 at 6:40 p.m., TC Room 205 at Cecil College in North East by Chairman Thorne.

**New Business -**

Meeting started with a presentation of the Green Infrastructure (GI) Report on Cecil County from the Conservation Fund. Regular business followed the presentation.

**Presentation from the Conservation Fund.**

Guest speakers for the Conservation Fund: Joel Dunn, Ted Weber and David Burke.

<b>Other Attendees</b>	<b>Affiliation</b>
Joel Dunn	Conservation Fund
Theodore Weber	Conservation Fund
David Burke	Conservation Fund
John Bunnell	Mayor, Cecilton
Judith Cox	Mayor, Rising
WeinEric	SunCounty
SennstromBarbara	AdministratorCounty
Brown	PlannerPerryville
Clive Graham	Commissioner
Diane Lane	ERM Consultant Chairman, CPOC
Eileen Butler	<b>Concerned Citizens</b>
Jim Gawthrop	
Gary Stewart	
Gary Stewart Jr.	
Rich Paise	
Mike Vaughan	
Dan Whitehurst	
Dan Derr	
Dave Mayie	
Tom Frederick	
Dori Murphy	
Matt Bazar	
Sharon Weygand	
Ann Jackson	

**Joel Dunn** - The Conservation Fund established in 1989 by Pat Noonan. Dual Goal: to protect land and promote economic development. A revolving fund was used to conserve close to 6 million acres across the country by the Conservation Fund to date. Received an A+ rating from the American Institute for Philanthropy and a 4 star rating from Charity Navigator. 96% of the funding received goes directly into conservation and only 1% goes back into fundraising. Team includes David Burke who has worked on natural resource projects with 30 years experience. He has worked on an award winning non tidal wetlands program among other accomplishments. Theodore Weber is a Strategic Conservation Analyst for the Conservation Fund and worked on the DNR Green Infrastructure (GI) Assessment Program. Joel Dunn was a coordinator for the Better Models Sustainable Chesapeake Program and has worked for the Conservation Fund for 4 years. Two other members of the Sustainable Chesapeake Team were David Myers and

William Allen. Mr. Dunn was introduced to Cecil County when he worked on the John Smith Chesapeake National Historic Trail.

The Cecil County GI Study was initiated partly as a result of the Conservation Fund's participation in the 2006 Cecil Land Use Forums which were organized by concerned citizen volunteers and held at Cecil College. The meetings stirred new interest in environmental awareness and the need for conservation in Cecil County. Conservation Fund personnel spoke with the Board of Cecil County Commissioners about where Cecil County's green infrastructure is located and about the past and potential encroachment of development into these areas. The Commissioners provided \$25,000 and the Conservation Fund contributed \$35,000 for a GI study. Information from the forum also revealed a dramatic 50% increase of population predicted by 2030. One question was what impact did previous growth have on Cecil County GI and given the pattern of growth trends, what would the effect of future growth have on the GI if nothing was done to conserve surviving hubs and corridors. GI assessment reviews rank GI areas in importance. Protecting GI now will save the county money later. The Conservation Fund Study included a GI network designed to distinguish past and current hubs, a water quality maintenance and enhancement analysis, ecosystem services assessment including valuation of those services and a specific and detailed implementation quilt analysis.

**Ted Weber** - GI is "an interconnected network of natural areas, green space, and working landscapes that protects natural ecological processes, supports wildlife and benefits people."

- **Hubs** - Areas of major ecological importance covering at least 100 acres.
- **Corridors** - Features that link hubs and allow animal & plant movement between them
- **Gaps** - Areas impacted by human activity within the hub-corridor network that could be targeted for restoration.

DNR in 2000 delineated a statewide infrastructure network from 1990 data. Since then about a thousand acres per year are being developed. Development is happening everywhere. Between 1992 and 2002, 39 of 46 hubs in Cecil County were affected by development activity and 36 hub and corridor connections were broken by that development. Using 2005 aerial photos, surviving areas of green were identified and importance of hubs ranked through certain criteria: amount of forested land cover in a watershed, impervious surface in a watershed, riparian forest in a watershed, riparian forest at the site level, and wetlands at the site level. Among our surviving GI the Elk Neck Peninsula is the highest ranked GI hub and the North East Creek is the highest ranked GI corridor.

Cecil County has 39 watersheds of which 10 are conservation focus watersheds (with more than 40% forest/wetlands and less than 7% impervious surface), 16 are reforestation focus watersheds (with 30-40% forest/wetlands and less than 7% impervious surface), and 13 other watersheds (with less than 30% forest/wetlands and more than 14% impervious surface).

The next task county should undertake is a water quality analysis. We can measure the ecological and economic importance of water quality. Water sheds have a major impact on water quality. Forest cover has a positive impact and impervious surface, a negative impact. Areas with more than 50% forest cover and wetland and less than 7% impervious surface have the highest water quality. Wetlands are the kidneys of the landscape. Conservation Fund

findings regarding forest cover, impervious surface and water quality agree with other studies. Watersheds feed into drinking water supplies. Permeable soils filter the rain and runoff. Therefore planting forests improve degrading water quality. Water sheds with more than 10% impervious surface have a negative effect. Currently there are 46 water sheds in county. 16 of these are conservation focus watersheds. Reforestation focus watersheds include Susquehanna, Mill Creek, Principio Creek, Stoney Run, the Bohemia and Sassafras River tributaries.

#### Recommendations:

1. Retain forest and wetlands in key watersheds.
2. Wastewater treatment plan upgrades.
3. Denitrifying septic systems through code changes and incentives
4. Require or create incentives for construction of tertiary treatment wetlands.
5. Offset nutrient loads by planting riparian forest for each acre of agriculture and forest land developed. Help county to meet nutrient goals.

#### Ecosystem Service Assessment:

1. Clean air and water
2. Carbon sequestration and wood products.
3. Water supply and hydrologic regulation
4. Flood protection and storm water management
5. Erosion control and sediment retention
6. Regulation of water temperature
7. Fish and Wildlife habitat
8. Recreation
9. Soil and peat formation
10. Pest control and pollination
11. Genetic information and biological diversity
12. Savings in community services
13. Increase in property values

People want to live next to parks and trails so conservation of hubs and corridors increase property value of those residential areas near parks and lands in preservation. Also, it is desirable for businesses to locate in areas that have these types of communities because their employees will want to live here.

In 2006, 81% of the value of the county fell within 37% of the green infrastructure which represents an estimated \$1.7 billion in ecosystem services. Ecosystem Services Map showing the value of land. Elk Neck, highest value among Cecil County's surviving GI.

Cecil County is losing green infrastructure at break neck speed.

#### **David Burke** - Implementation Quilt Analysis

Moving from network design to real conservation is very difficult to do. He has worked on the nontidal wetlands program for the State of Maryland and counties wanted to be grandfathered in because the wetland locations didn't agree with their comprehensive plans. It's been the same reaction with GI conservation. A lot of county planners are now saying the same thing:

Resource Assessment Maps are inconsistent with their comprehensive plans.

The Implementation Quilt is a series of steps, tools, programs, funding, and people to contact to meet GI goals.

Existing State programs include Program Open Space (POS), Rural Legacy Program (RLP), Maryland Agricultural Land Preservation Foundation (MALPF), Maryland Environmental Trust (MET), and the Maryland Historical Trust (MHT). County has been successful in POS, MALPH and Rural Legacy.

State monies should be leveraged for the biggest bang for the buck. Cecil County also has its own PDR and TDR Program. These two programs often need time to get started and fine tuned.

Federal Programs: Conservation Reserve Program & Conservation. Reserve Enhancement Program, Wetlands Reserve Program, Wildlife Habitat Incentives Program (WHIP), Farm and Ranch Lands Protection Program, Environmental Quality Incentives Program (EQIP), Forest Legacy Program, Coastal and Estuarine Land Conservation Program, Pension Protection Act of 2006

Incorporate GI into Landscape & Site Level Land Use Controls and Create Green Infrastructure Network Overlay through performance metrics to protect ecological integrity of network, maintain linkages, address cumulative impacts and reduce fragmentation. Also need to enhance cluster development options to limit grading and impervious surface area through downscaled road design criteria; low impact development techniques; explicit impervious surface thresholds and building envelope limits.

Without these tools, new standards will not be enforced. Tools were incorporated in the past. Better Models for Conservation explores how some areas have done it right.

Summarize statistics of what's happening to the network. Rate of fragmentation, how many corridors are left?. Not successful if you ignore. A new department should be created to address GI concerns, goals and enforcement. Other responsibilities could include administer New Forest Act, manage GI Fund and manage small tree nursery operation.

County should also explore new mechanisms for obtaining conservation capital. The Sage Group study recommended impact fees. Real estate transfer tax is another proven, recommended option. Examine ways to balance smart growth incentives and disincentives. Discourage rural development especially in critical resource areas. Encourage compact growth patterns supported by community infrastructure. Investigate deferral of upfront water and wastewater hookup fees in municipal and county service areas. Have to keep in mind that the EPA could lay down new restrictive laws on MTDL's . Examine nutrient trading system rules and county pilot program. Create and improve partnerships. Develop an effective marketing campaign to educate the public.

Summary -

• **Elk Neck Peninsula:** Highest ranked GI hub and a Conservation Focus Watershed =

Should be among our highest priority conservation areas.

- **Northeast Creek:** Most important of several remaining GI corridors in northern part of Cecil County.
- **Development Location Within Watershed Types:** Higher densities outside of PFA's should progress from highest to lowest within Non-focus Watersheds; Reforestation Focus Watersheds; and Conservation Focus Watersheds. Situate development in lower end of watershed where there is usually less negative effect per acre than in headwaters
- **Density In and Around Municipalities:** Future development of municipalities along route 40 is best accommodated south of route 40, except as noted regarding the protection of Elk Neck Peninsula.
- **Ecological Greenways:** In addition to Elk Neck Peninsula, DNR in their 2000 Greenways Atlas identified Principio Creek, Octoraro Creek and Tri-State Greenway as Ecological Greenways.

Joel Dunn: GI not just about aesthetics, but quality of life. Also, prioritizing conservation of our GI will save the county citizens and taxpayers money.

Design your new development plan with GI in mind. Our GI Plan has tools you can use in your revised comprehensive plan. Cecil County is in a race with time to conserve GI.

Chairman Thorne: In 2005 our Cecil County Commissioners unanimously passed the Land Preservation Parks and Recreation Plan. Chapter V includes a lot about GI. We need to implement State and County natural resource recommendations quickly and definitively if we are to have a working GI available to support our future generations.

Rupert Rossetti: You have presented us with a dilemma because a significant portion of our focus watersheds are in the growth corridor.

Joel Dunn: Those areas that aren't mentioned in the focus watersheds could handle higher densities. You have current zonings and plans that have some problems with its position on development. You should have a performance matrix to limit development in the GI area. Determine a hierarchy that can best accommodate growth but use the tools to determine how. You always have options. We never said relocate all your development to here. Determine how you are going to shift what you had on the books to what you want.

Rupert Rossetti: We are currently using a 12-digit water shed. Should it be more granular?

Ted Weber: That would require more analysis.

David Burke: Go to the sub watershed level.

Rupert Rossetti: Brandywine Conservancy looks at individual patches of forests and identifies specific information on ages of trees and types. How do we get the development and protect the water quality and habitats? May end up in a more granular level if the corridor stays where it is.

Chairman Thorne: It's probably less precise in some areas in determining than in the larger

blocks of GI. Different scales and sub-watershed sizes of areas have different problems to deal with ...and higher costs for some.

John Bennett: Funding sources were not mentioned. The Green Fund of \$25 million is there to attack projects of non point sources.

David Burke: The Governor had an initiative to require “No net loss” of forested land. It was not taken up in the legislature this year. It remains to be seen when that is going to pass. The County could move in that direction to shape its policies to meet the expected goals. Don’t fall below the 40% level. Regarding the Green Fund, I don’t know how Secretary Griffin will hand out that money.

John Bennett: In Carroll County do you know if the land owner has to first do a survey of their property or is the county helping with that cost? (John refers to Carroll County having worked closely with landowners and developers to achieve an 82% forest retention rate compared to the State average of 65%.)

David Burke: I don’t think the county front ends the cost but it’s about \$12,000 per acre in credits.

Robert Hodge: Fifteen years ago no storm water management was required.

Ted Weber: The Storm Water Management Act of 2007 focuses on natural recharge of water. Goal is to retain trees, permeable soils, and wetlands. A lot of the development which occurred was prior to when storm water management ponds were required.

Robert Hodge: New regulations are recharging and other methods?

Ted Weber: Anything that can be done to development to have less of an impact on hydrology is a good thing.

David Burke: You are suggesting that 7% is the old studies. All of this low impact development does reduce imperviousness. We can do more. Keith Underwood is doing a study of last ditch storm water management which includes carbon streams. You might be able to have more impervious surface but it’s going to cost more to mitigate those.

Chairman Thorne: The difference between the 7% (stream is still healthy) and 10% (stream is in decline) is very small.

*Editor’s note: 10% imperviousness is a good rule of thumb, but doesn’t work in all situations. Some species are impacted at significantly less than 10% (Brook Trout: 2%; Salamanders: 3 – 5%), others can survive higher. The GI Study used thresholds of 7% and 14% in its modeling. The Conservation Fund Water*

*Quality Technical Report (p. 21) states that: “Watersheds with >50% forest cover generally had the best stream conditions, followed by watersheds with 40 – 50% forest. . . . Impervious*

*surface also affected water quality. We found significant thresholds at 7 and 14% statewide. Watersheds with <7% imperviousness generally had the least impacted streams, followed by watersheds between 7 – 14%.” This is reflected in their conservation model (p. 23) which scores <7% at 20, 7 – 14% at 10 and > 14% at 0.*

Rupert Rossetti: MDP hasn't come out with their 2007 data on land use for us to use. We extrapolated information from 2002 to 2007. Once that information does come in, how easy is it to update our data?

Ted Weber: It shouldn't be too difficult. We had to use aerial photos for our study.

Rupert Rossetti: You spoke a lot on forest but not on wetlands. Is the digital soil survey available?

Ted Weber: Not yet but once it is you could run a model.

Rupert Rossetti: Would we run the model or could you do it?

Ted Weber: Our work is completed and handed over to the county. You should find someone else.

John Bennett: For reforestation to be a success, you need money for maintenance and it was not included in your plan.

David Burke: I agree and without funding for maintenance you get different results in success. I asked DNR for data because I already know if you don't follow up there are failures. Your options include an excise tax and other fees but the commissioners said "good luck with that." Need to put a revenue source in the reforestation program otherwise it won't work.

John Bennett: Please use whatever influence you have on the Green Fund to help our county.

Chairman Thorne: How successful is reforestation? If we have to keep up with the State levels, we must implement when and at what level.

David Burke: Very successful. Some have had to thin their forest out.

Dan Polite: How long does it take to get the maximum benefit from the reforestation?

Ted Weber: Benefits are realized quickly: absorbing nutrients, soil, less than 10 years roots established and soil stabilized, roots go deeper and pulling nitrate from the groundwater.

David Burke: Carbon systems vary, curves for most of their functions. Depends on what they are for, timber soft v. pulp. Natives are better adapted. Maps of the forest service about climate changes and invasive species.

Eileen Butler: How do you determine a high quality watershed?

Ted Weber: How much will that stream change down stream in the watershed. Could review it on a topographic map. Between 7% and 15% is a well established threshold for impervious cover. With a 1,000 acre water shed and you have 100 acre parcel with 50 acres developed . If you developed 50% of that site that area would be degraded. Look at the soils and other factors. When you are higher in the watershed it should be more restrictive because there will be more of an impact. But there is no perfect number. Just look at the cumulative impact and think about the broader context of things.

David Burke: There are impervious thresholds, but you have to look at where you are. It's called cumulative impacts. Now we have a good idea of what a subdivision impacts. The performance standard will take care of all development: landscape and site controls.

Meeting reconvened at 8:35 p.m. after a 15 minute break.

**Approval of Minutes** – Accepted as presented.

**Old Business -**

**Meeting in October** - DNR has agreed to reschedule their presentation tentatively until the October meeting.

**List of Committee's Goals** - Consultant Clive Graham advised that the Committee needs to look at the goals for sensitive areas and priority preservation elements. Mr. Graham stressed the importance of not getting bogged down in detail. Keep in mind the questions: How big does the county want to be? How big can the county be? From the water perspective is it possible? Regarding build out, can the county support?

John Bennett: I am seeing a dichotomy of the 1990 plan and what we heard tonight. How do we come to a balance? Save forests or farms?

Rupert Rossetti: 50,000 acres of farmland saved in perpetuity. Is that an example?

Clive Graham: To be realistic, those numbers have to be based on something. We are interested in preserving a critical mass - whatever that number might be. The Parks and Land Preservation Plan probably has some numbers you can pull from. The more specificity is better.

Chairman Thorne: If you preserve farms and forest piecemeal they will die. Is that the type of general thing you can run with?

Clive Graham: Yes.

Chairman Thorne: Goals are pretty general. In the priority preservation elements the goals are harder to find but they are in there. We could come back and be prepared to discuss and then vote on them. You can bring to meeting or send them to me by email.



Clive Graham: My goal is to have a fewer number of key goals.

Robert Hodge: Why are there two committees looking at mineral extraction? Ag Preservation and Economic Development.

Clive Graham: I think its fine that each committee looks at the issue as it affects the topic you have been assigned.

Chairman Thorne: If it's important to you, put it on your list. A follow up meeting to complete tonight's agenda is scheduled for July 10 at 6:30 p.m. Send our lists to Owen by July 3<sup>rd</sup>. If you don't want to send it to me, bring to the meeting. I will contact Dr. Lane to reserve TC Room 205 for Thursday, July 10.

**Recommendations/Action Items for Oversight Committee**

**1. RSVP meeting date and send a list of proposed goals or ideas to Chairman Owen Thorne by July 3<sup>rd</sup>.**

**Adjournment: 9:12 p.m.**

**Next meeting: July 10, 2008 @ 6:30 p.m., Cecil College, TC 205**

**Minutes Prepared by: Diana Broomell**

**Date: 6/14/08**