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Elizabeth Rosborg
Chair, Citizens Advisory Committee

Plan2040
Citizens Advisory Committee (CAC)
Meeting Notes
May 15, 2019 - 5:00 PM
Chesapeake Conference Room, 2nd Floor
2664 Riva Road, Annapolis, MD

CAC members present: Elizabeth Rosborg (Chair), Cate Bower, John Clark, Jamie Fraser, Joel Greenwell, Melanie Hartwig-Davis, Pat Huecker, Amy Leahy, Patricia Lynch, Charles Mannion, Gary Mauler, Caren Karabani, Ellen Moyer, Kristin Pauly, Will Shorter, Latoya Staten

Office of Planning and Zoning (OPZ) Staff present: Philip R. Hager, Planning and Zoning Officer; Cindy Carrier, Acting Planning and Zoning Officer; Patrick Hughes, Long Range Planner; Andrea Gerhard, Long Range Planner

Visitors: Jerry Pesterfield, George Donohue, G R McCandless, Jim Troy, Susan Cover, Pam Bush, Robert Smith, John Joynes, Susan Cochran

Review of Environmental Protection and Resource Conservation Background Report

Mr. Erik Michelsen, Administrator, Watershed Protection and Restoration Program, Department of Public Works

Anne Arundel County has over 530 miles of shorelines with 12 subwatersheds in the County. A watershed is an area of land that drains to a water body. Over the course of the past 15 years, the Watershed Protection and Restoration Program (WPRP) has been working on the mapping and analysis of watersheds in the County. This effort was finished last year, producing very detailed information on all of the watersheds. Information about the watersheds can be accessed from www.aacounty.org/departments/public-works/wprp/watershed-assessment-and-planning/watershed-studies/index.html. There is a watershed mapping application tool that gives citizens the ability to use the collected data. This data has helped County staff to identify the problem areas within the County using imagery and is used for the basis of their Capital Investment program. Also, the County looked at areas where there are opportunities for additional planting for restoration purposes.

The restoration program began 5 years ago to meet the regulatory mandates that are passed along from both the state and federal governments to maintain clean water. Some examples of these mandates are the Chesapeake Bay TMDLs, MS4s, and NPDES. TMDL is a reduction in nitrogen, phosphorus and sediment loads by 2025. Municipal separate storm sewer system permits (MS4

Permits) are issued to each county with a population of 100,000. Anne Arundel County has committed \$250 million to storm water restoration efforts.

Anne Arundel County also has upgraded the County's 7 Water Reclamation facilities to ENR at a cost of approximately \$252 million. These upgrades were all completed in 2017.

There are approximately 42,000 individual septic systems throughout the County. DPW has worked for a number of years to devise a strategy to transition some of these systems to less polluting alternatives. The initial estimates to convert 20,000 septic systems were approximately \$1.5 billion. Efforts thus far include upgrading septic systems and evaluating areas that would be appropriate for public sewer connection.

Streams and Stream Buffer- Anne Arundel County has approximately 1,750 miles of streams. Current stream projects Towsers Branch in the Little Patuxent Watershed, Tributary to Severn Run in the Severn Watershed and Cat Branch in the Magothy Watershed.

Furnace Branch Restoration Project in the Patapsco Watershed is one example of a restoration project. In the 1960s, this was a state of the art storm water management upgrading it to today's standards.

Floodplains - County provisions for flood plains are identified as part of the subdivision process and given to the County as a fee-simple easement. A 100-foot stream buffer is required to protect floodplains.

Wetlands (Non-Tidal) – There are County provisions to protect these areas with 25-foot buffer. Mapping layers are available to staff members to assist with their review and analysis.

Bogs - There is an enhanced 100-foot and 300-foot buffer protection around the bogs.

Tidal Wetlands – A 100-foot buffer is required to protect tidal wetlands.

Steep slope protection – Slopes that are 25% or greater and slopes that are 15% or greater in the Critical Area are currently protected under the County code.

Questions from the CAC:

- How can this committee help you with the GDP?
 - o We have an internal workgroup working on ways that the County can improve their processes around stormwater. We are working through a variety of strategies. I think there will be opportunity to present the findings from the work group.
- When it comes to grading permits, is there a difference in the process or how they are viewed for a development versus for the purpose of addressing a stormwater management?
 - o Yes, the WPRP works with Inspections and Permits and the Office of Planning and Zoning to develop a two-track process that identifies which projects are for stormwater for the purposes of trying to get an expedited review. There is also an opportunity for nonprofit groups to come to a monthly meeting to have the time for them to ask questions to staff from various County departments.
- Do you have a catalog of all of the streams in the County that need renewal?
 - o Yes. There is a layer that shows the priority for restoration.

- Is there any type of collaborative relationship regarding access?
 - o The WPRP strives to incorporate access conversations as much as possible with the community. Based on property owner wishes sometimes public access is not possible.
- What do you think your biggest challenge is in achieving your mission?
 - o Education of land owners is a big challenge. The County does a lot of work on private property and trying to build trust with property owners who are not used to people coming in wanting to voluntarily do work to improve properties takes time.
- Glad to hear the County is using LiDAR. What is the age of the data? When it comes to LiDAR, what is the most recent data and how it disseminated to the public/staff? Has there been any spectral analysis using LiDAR?
 - o 2016 is the most recent flyover; updates are scheduled about every 3 years. This tool is used as a flagging tool for reviewers who then request additional studies and analyses. The County has not been able to do spectral analysis on a Countywide level. If the public wants access to this data, the County has external hard drives that can be borrowed.
- Where is Spring Ridge?
 - o In Odenton.

Review of Water Resources Background Report

Mr. Chris Murphy, Engineer Administrator, Technical Engineering, Department of Public Works

Public water system: The County water system has 12 different pressure zones and 8 of the 12 are interconnected. The system includes 15 well fields with 57 water supply wells. The Upper Patapsco, Lower Patapsco, Patuxent, Magothy and Aquia are the aquifers from which the groundwater is withdrawn for public use.

The County routinely conducts studies to ensure there is an adequate water supply. In 2016, the County completed a Comprehensive Water Strategic Plan (CWSP) which was incorporated into the 2017 Water and Sewer Master Plan (WSMP). The WSMP identifies future projects, whether they are planned by a developer, a capital improvement funded by the County, and future projects which are not funded. The Sewer and Water Allocation Management and Planning System (SWAMP) is a computerized system which provides the County with an accurate means of tracking water and sewer system capacity and is a useful tool in assessing current development plans to ensure water and sewer capacity is available for the proposed development and also as an engineering tool when conducting strategic planning, recommending capital improvements and preparing updates to the County's Water and Sewer Master Plan.

The 2016 CWSP developed a baseline of 2010 public water demand and projections in 2020, 2030 and buildout (2087) based on current zoning. The analysis resulted in the sizing and siting of future system facilities including major transmission mains, pumping stations, water treatment facilities and storage facilities. For the buildout scenario, emphasis was placed on reducing reliance on the Baltimore City supply. The resulting recommended capital improvement projects (CIPs) were then used to develop a long-term capital water development plan. Particular largescale CIPs were phased over several years based on demand projections and capital budget limitations. More information about the Water and Sewer Master Plan can be found here:

<https://www.aacounty.org/departments/planning-and-zoning/long-range-planning/water-andsewer/index.html>

The County has developed a chart illustrating the production, current demand and projecting the demand based on several build-out scenarios. The County takes the most conservative projection; however, the analysis is re-run every ten years to ensure accuracy and demand will be met. The 2016 CWSP recommended that any major investment in new supply sources be made only within the eastern or central portions of the County. New potential wells have been identified in Arnold, Broad Creek, Crownsville and Crofton.

There are 11 Sewer Service areas, 8 are served by facilities owned by the County. The County shares Wastewater Treatment Plant (WWTP) with Annapolis. Some flows are sent to Baltimore City and Calvert County. The County has spent \$260 million on Enriched Nutrient Removal (ENR) to upgrade plants.

There are 36,708 Septic systems in the County serving residential properties; 2,318 serving non-residential properties. The average total nitrogen (TN) pollutant load for an onsite disposal system (OSDS) is between 7-19 lbs TN/yr. When a property is connected to public sewer, it is estimated that the load is reduced to 3 lb TN/yr.

The County conducted an OSDS Evaluation Study and Strategic Plan in 2008. Nitrogen loads were calculated for all existing OSDS Countywide with the study recommending a treatment strategy for each OSDS. The treatment strategies recommended included: public sewer system extensions where feasible, cluster wastewater treatment facilities, upgrades of individual septic systems to Best Available Technologies (BAT) systems, and no near-term action, which consists of low-density, low-nitrogen delivery onsite systems. A recently formed Septic Task Force completed a report in June 2018 that developed near-term and long-term strategies and areas that needed additional investigation. The task force met over the span of a year and included environmentalists, developers, community members, and County staff. The Task Force was broken into three working groups – land use, fiscal, and policy to analyze the specific aspects of these issues. Since the completion of the report, the County has hired an OSDS program manager to look at grant funding opportunities and ways to implement recommendations from the report.

Questions from CAC:

- Where are we on these task force recommendations? How many have been implemented?
 - o The OSDS program manager is looking at different ways to solve these problems.
- How can this committee help?
 - o Keep in mind that land use recommendations have an impact on the County's ability to provide public water and sewer and affect pollutant loadings. A Water Resources Element is required by the State to be an element of the General Development Plan. As the GDP is developed, water supply, the ability to provide public sewer and pollutant loadings will be considered when making land use recommendations.
- When talking about BAT system upgrades, is the County looking to de-emphasize the Bay Restoration Fund?
 - o Restoration funding helps to decrease pollutant loadings and is significant where connection to public utilities is not feasible.
- In terms of cost sharing, what are the sources of funding?
 - o The main source is the Bay Restoration fund. A septic system fund helps with sewer service connection (\$20,000).
- When you add new wells that will be added to the Patuxent watershed, do you coordinate with City of Annapolis? Are you capped?

- MDE is the ultimate regulator of permitting water withdrawals.
- In regards to Sewer, what level of investigation has been done for localized cluster systems?
 - The County has evaluated where it would be appropriate to have cluster systems.
- Do you wish you had more flexibility from the State or a change in policy? Do you wish there would be a change in policy?
 - There doesn't need to additional flexibility or changes in State policy.
- What is your approach to communities we would like to target to connect who are nervous about the cost of connection?
 - The County is not allowed to proactively reach out to communities for connecting to public utilities. Communities or individuals are required to petition the County to connect to public utilities. The Septic Task Force recommended changing this procedure.
- Have you looked at any type of retrofit technology for these failing septic systems?
 - Septic systems that do not have BAT are not failing septic systems. Septic systems naturally discharge nitrogen. Most of the current septic systems are older and not nitrogen reducing systems.

Comments from CAC members:

- Where the nitrogen is discharged is really important. If the discharge is in the Critical Area, there is more of an impact to the Bay than if the discharge first traveled further through soil. MDE is currently updating their models based they are adjusting the credit that is received for bringing properties onto public sewer systems based on location.
- Another way for a localized plant to be built is if a developer could pay for it. If you could incentivize it, a developer may help to pay for it. There is a higher maintenance cost per gallon for smaller units.

Agricultural and Woodland Protection

Barbara Polito, Agricultural Program Administrator, Department of Recreation and Parks

Preservation of land is important for farm and forest industries, food security, rural character and resource protection. The criteria for being considered within an Agricultural Preservation area includes being located outside of the sewer service areas. Farmland and development are not always compatible.

There are various land owner options for preservation:

- Anne Arundel County Agricultural Preservation Program, with application periods on April 1st and Nov 1st. This program was started in the 1990s to supplement the MD Agricultural Land Preservation Foundation program and requires 50 acres (versus the State program which requires 100 acres)
- Rural Legacy: protects agricultural and wooded lands
- Other partners:
 - Scenic Rivers Land Trust
 - Maryland Environmental Trust- tax benefits

Funding Sources:

- County: \$41 million since the beginning of the program, \$2.6 million in the current budget
- Maryland Agricultural Land Preservation: \$17 million
- Rural Legacy: \$12 million in grants

- Tobacco Settlements: \$2.7 million

Progress to date includes 154 farms and nearly 14,000 acres.

Questions from the CAC:

- Funding sources you mentioned are they cumulative since the beginning?
 - o State program started in 1980s but yes, it is cumulative. The \$41 million is more County funds than State funds. \$2.6 million is left over from previous year.
- Maryland has more horses than any other state. Now there is an increase in need for land for retirement of these horses. Is this a possible funding source in the future for Anne Arundel County?
 - o The funding that exists is for perpetual easements, but there could be a need for some easements that are less than perpetual but for now this is all we have.
- Do you have a map like this that shows properties in the future that you would like to protect?
 - o Barbara will send this map to Cindy Carrier to distribute to the group.
- Isn't the MALPF program temporary?
 - o No, in the beginning, MALPF program used to have a clause that a farmer could petition the State to purchase back their development rights after 25 years but as of 2004 that clause was removed. Rural Legacy has always been perpetual and the County program in the past 10 years has been perpetual.
- Is Weinberg Park part of this program?
 - o The County actually owns that property. There are no current plans of how that property will develop in the future.
- What is the average that the County is offering per acre?
 - o \$5,000-\$7,000 acre. Before the downturn in the economy it was \$12,000.
- This is a perfect segway from septic systems. Farms are a large contributor of nitrogen to the Bay. Is there a way to tie best management practices into the easement agreements?
 - o Farms are required to have nutrient management plans which are tied to the easement.
- Agriculture can be a lot of things. Is solar an allowed use?
 - o Solar on top of a barn and used for your own production is allowed in the preservation areas.

Review of the Resource Conservation Background Report

Patrick Hughes, Senior Planner, Long Range Planning, Office of Planning and Zoning

The Critical Area was established in 1984 as a comprehensive resource protection program for the Chesapeake Bay and its tributaries. The goal of the program is to minimize adverse water quality impacts, conserve plant and animal habitat, and address land use policies for development in the Critical Area. The Act created a special planning area called the Critical Area, and identified this area as all land within 1,000 feet of the mean high water line of tidal waters and/or within 1,000 feet of the landward edge of tidal wetlands, and all waters of and lands under the Chesapeake Bay and its tributaries. The Critical Area Commission oversees the development and implementation of local Critical Area programs.

The State is in the process of updating the Critical Area boundaries based on higher resolution aerial imagery and base elevation data. Once the State completes its analysis, the County will adopt its set

of maps. The State is conducting this analysis statewide and when complete will have a seamless Critical Area map across the State. The State will notify each property owner in Anne Arundel County if there is 1% or greater change, regardless of whether it has been added to the Critical or removed. The notifications are anticipated to be sent in the next few months. The State will also be holding a series of at least four meetings in the County to review the process, the technology used, and why there are changes. Draft maps will then be sent to municipalities and must be adopted by the County Council within two years; however, the County plans to accelerate this process.

The County reviews all subdivision, rezoning, special exception, and variance applications pertaining to property located within the Critical Area for impacts on water quality and habitat. Habitat Protection Areas (HPA) are wildlife and plant habitats of particular significance due to their uniqueness, rarity, or possible future diminution. The Critical Area buffer is a minimum 100-foot wide vegetated buffer that is to be protected and maintained. This buffer, a designated HPA, is geographically located within the Critical Area and encompasses lands within 100 feet of mean high tide or the edge of tidal wetlands and tributary streams. The buffer is expanded when steep slopes, hydric soils, highly erodible soils exist contiguous to the 100-foot buffer. No development activity is permitted within the buffer without prior approval of the County.

The Critical Area is classified into three areas – the Intense Development Area (IDA) which includes lands where existing or adjoining uses were predominantly higher density residential, commercial or industrial and can be developed with medium to high-density housing, 5 commercial, or industrial uses, according to the underlying zoning designation; Limited Development Area (LDA) which are moderately developed lands and can be developed with low to medium density housing, commercial and small industrial uses; and Resource Conservation Area (RCA) which is primarily undeveloped or low density developed lands.

The Forest Conservation Program was created in 1991 to meet the requirements of the Maryland Forest Conservation Act of 1991. The Department of Inspections and Permits administers the reforestation and afforestation requirements of the Critical Area Program and the Maryland Forest Conservation Act. The requirements apply to new subdivision plans on sites that are greater than 40,000 square feet. Applicants submitting a subdivision plan or permit application must include a forest stand delineation and a forest conservation plan that: identifies, delineates and characterizes forested areas, specimen trees, floodplains, erodible soils, and other sensitive areas on the site; establishes forest retention areas or reforestation areas that meet a minimum conservation threshold; and protects these areas through forest conservation easements. Applicants are required to complete a forest conservation worksheet as part of the application. A list of Critical Area and Non-Critical Area Offsite Reforestation Banks can be found on the County's website at: <https://www.aacounty.org/departments/inspections-and-permits/code-compliance/index.html> or by contacting the Department of Inspections and Permits.

Landowners and community associations can apply to participate in the reforestation projects through the Forest Conservation Fund. As of 2014, when the last aerial analysis was conducted, there are 102,614 acres of forested areas within the County, which equates to approximately 40% of the land cover.

The County's current Greenways Master Plan, adopted in 2002, is a functional master plan that identifies the interconnected network of protected corridors of woodlands and open space. The master plan identifies strategies that will help protect ecologically valuable lands, provide open space,

recreational and off-road transportation benefits for people, provide adequate habitat to support healthy populations of plant and animal species, and improve water and air quality. In 2010, the County completed an implementation report that summarized progress on implementation of the 2002 Greenways Master Plan. In 2016, the County began the process of updating the Greenways Master Plan to include additional criteria. This draft plan will be renamed the Green Infrastructure Master Plan. The expanded criteria to be included in the green infrastructure network includes the following properties or characteristics - Federal, State and County parks; public and private lands acquired for preservation; agricultural and forest conservation; floodplain, wetland and open space easements; trails and other outdoor recreation; historic and cultural resources; land zoned Open Space; Undeveloped lands that meet the minimum criteria for size, protection status, and land use characteristics. The plan maintains that hubs should be at least 250 acres and corridors should be at least 200-feet wide. Due to better technology, the County was also able to conduct a parcel-based analysis.

The proposed network is 109,000 acres, and 66% of the network is currently protected.

Questions from the CAC:

- What is afforestation?
 - o Afforestation is adding trees to where there were no trees prior to development.
- Still accepting plan comments on Green Infrastructure Plan?
 - o The project is on hold until the GDP is further along.
- On one of the slides it shows for the years 2011-2014 there was 3,000 acres of lost forest coming out of the recession when there were few building permits. Can you explain that?
 - o It is a raw number based on imagery. The decrease in forest cover is not directly related to development. For instance, a diseased forest and stream restoration projects show up as lost forest. There is a difference between canopy and forest. An afforestation project is going to take years to show up. For these reasons, there is concern regarding this rough number.
- There is a fund for afforestation or reforestation. How are you using those funds to increase plantings in Critical Areas or stream beds? Community Outreach? Is there no County program that focuses on this effort?
 - Community groups have used those funds. The Department of Inspections and Permits is responsible for spending the funds. They are looking at land but the biggest issue in Anne Arundel County is finding property for afforestation. The County is evaluating different programs and opportunities.
- Is there any prioritization for where you are looking for afforestation opportunities?
 - The new administration is looking at purchasing properties for afforestation opportunities. The County is not in a position to proactively pursue land banks however; these are a profitable business so there is the potential for additional opportunities.
 - Has there been any analysis of violations within the Critical Areas? Are the maps really indicative of what is happening on the ground?
 - o We keep records on violations.
 - The County has lots of public land. Are there any plans to plant trees in those areas?
 - o County projects have used Recreation and Park properties for tree planting instead of doing fee in lieu.

Comments from CAC:

- There is a big difference between planting trees and reforestation. It is a misnomer to say that planting trees is reforestation. What if we brought in larger trees to make it grow faster into a forest but the survival rate was low.
 - o Smaller stock has a greater survival rate.
- There is a property in Broadneck that seriously violated critical area provisions and ended up with a negotiated penalty of a 4-1 planting. What I was told is that they weren't monitored for their compliance. When were they supposed to replant? They were supposed to replant when they got around to it. I want to make a point if there is no deadline these people have no rush to make this happen.
- At Beechwood Park, organizations came together to plant trees. Coordination between Magothy River Association and Rotary Club came together. If you have the opportunity, plant as many trees as possible.

Housekeeping items:

- Cindy Carrier put together a tentative calendar for the committee that goes all the way to the adoption of the Plan. This calendar has some room for adjustments if for example, the committee wants more specific presentations.
- The CAC meeting for July 3rd meeting will be cancelled and instead, the committee will make up the meeting on July 31st.
- The individual biographies have not been combined yet but it will be sent out to the group soon.
- Because the CAC is an appointed committee, each member will have to take ethics training. Ms. Carrier will provide additional information at the next meeting.

Approval of Meeting Notes

Mr. Shorter made a motion to approve the meeting notes as presented; Ms. Bower seconded the motion. The motion passed 16-0.

Additional announcements by the CAC:

- Name tags will be provided to the CAC meetings to wear at the community visioning meetings.
- Next Tuesday on May 21, Smithsonian Environmental Research Center and Dr. William Sweet from NOAA will be giving a presentation on Sea Level Rise.
- Move Ann Arundel! The Transportation Functional Master Plan for the County is online for a 45-day review. Make sure to review and comment on this Plan. It is available on aaccounty.org but Ms. Carrier will send out link to the Plan.

There was a motion to adjourn and seconded. Meeting officially adjourned at 6:54pm. The next meeting is June 4, 2019.