



# Carroll County Environmental Advisory Council

225 N Center Street  
Westminster, MD 21157-5194  
Telephone: 410-386-2145  
Fax: 410-386-2924  
[eac@ccg.carr.org](mailto:eac@ccg.carr.org)

Karen Leatherwood, Chair  
David Hynes, Vice Chair

*Brenda Dinne, Staff Liaison*  
Department of Land  
& Resource Management

## Meeting Summary for February 17, 2016

### Members

Karen Leatherwood, Chair  
Curtis Barrett  
Ellen Cutsail  
David Hynes – Absent  
Amy Krebs – Absent  
Frank Vleck  
Sandy Zebal

### County Government

Brenda Dinne, Special Projects Coordinator /  
EAC Staff Liaison  
Cindy Myers-Crumbacker, Recording Secretary

### Other Attendees

None

#### **1. CALL TO ORDER –**

Ms. Leatherwood, Chair, officially called the February 17, 2016, meeting to order at 2:58 p.m. in the Reagan Room of the County Office Building.

#### **2. PUBLIC COMMENTS AND CONCERNS –**

No public comments were offered.

#### **3. APPROVAL OF MEETING MINUTES –**

Ms. Zebal offered revisions to the minutes (see attached) regarding a couple items under the residential solar project. Additional discussion was held. Minutes were then approved with changes.

**APPROVAL OF MINUTES – Motion 243-16:** Motion was made by Curtis Barrett and seconded by Frank Vleck to approve the January 20, 2016, meeting minutes as revised. Motion carried.

#### **4. CHAIR AND COMMITTEE REPORTS –**

##### ***a. Solid Waste Subcommittee:***

Ms. Leatherwood informed the Environmental Advisory Council (EAC) that the Solid Waste Advisory Council would be presenting options and seeking direction from the Commissioners on Thursday, February 18, regarding short- and long-term recommendations for diverting and recycling some of the waste stream in the county.

## **5. STAFF LIASION REPORT**

Ms. Dinne reported that items thus far for the March meeting agenda included continued discussion of residential solar surface area requirements and discussion on the results of the tally of votes for the Environmental Awareness Awards. Recommendations on residential solar surface area requirements are due to the Commissioners by the end of April.

Ms. Dinne informed the Committee that we will hold off adding to the agenda the General Public MS4 Workshop and Lightweight Aggregate projects until some of the early year deadlines pass.

Financial Disclosure Forms were due by the end of January. Ms. Dinne asked members to get these turned in to the Ethics Commissioners as soon as possible if they have not done so already.

The Board requested at the annual joint meeting for the EAC to send copies of the Environmental Stewardship booklets to the Carroll County delegation. The booklets were sent to the delegation with cover letters signed by Ms. Leatherwood.

The Board invited two people to serve on the EAC to fill the current vacancies. Richard Lord has accepted the invitation. We are still waiting to hear from the other invitee. Once she receives copies of the acceptance letters, the new members will be added to the member lists, and Ms. Dinne will provide updated copies to the EAC members.

Several members asked for another copy of the 2016 Meeting Dates. Therefore, Ms. Dinne provided an additional copy to all members to add to their member materials packets. She indicated that the list of dates is also available on the EAC webpage.

## **6. OLD BUSINESS –**

### ***a. 2016 Environmental Awareness Awards Update***

Ms. Leatherwood was interviewed by Mike McMullen, President of the Chamber of Commerce, for the Chamber Chat radio show on WTTR. It is scheduled to air at 8:40 AM on Sunday, February 21. Ms. Leatherwood noted that in the future the EAC should remember the Chamber Chat as a means to get the word out. However, it would be better to contact the Chamber about two months ahead of the date of the item/event of interest.

Ms. Dinne shared that a news release was sent out on February 11. She said 11 nominations have been received so far. Mr. Vleck said he has a student entry to send in. Ms. Leatherwood requested Ms. Dinne send an email to Mr. Melvin Baile requesting him to spread the word in the agricultural community about the awards.

Ms. Dinne will send the nominations received thus far to the EAC the day after the meeting. Votes are to be sent to her by March 14. She will tally the votes and provide the results for discussion at the March 16 EAC meeting.

Ms. Leatherwood volunteered to email Wayne Carter with the Carroll County Times to see if he will write an article about the awards.

The Awards will be presented with the Board of County Commissioners on Thursday, April 21, at 1:30 PM. This is the day before Earth Day. Ms. Dinne will verify the location as the date gets closer.

### ***b. Residential Solar Size Requirements – Review of Other Jurisdictions' Requirements***

Ms. Krebs created a matrix of requirements of other Maryland counties that the EAC members found through their research and shared at the February 17 meeting and forwarded it to Ms. Dinne on February 16 to distribute to the EAC for review prior to the meeting. Ms.

Dinne noted that she revised it to add information that Mr. Barrett and Ms. Zebal provided after Ms. Krebs sent the file.

Ms. Dinne will ask Jay Voight, Zoning Administrator, how many kilowatts per month are used by the average household and have the information for the next meeting. Mr. Vleck found 1,000 kwh per month as the average based on the [EIA.gov](http://EIA.gov) website.

Ms. Dinne suggested they start the discussion by reviewing the information she provided in December from other jurisdictions outside of Maryland. A wide range of options should be reviewed before narrowing down options toward a recommendation.

Mr. Barrett encouraged the members to agree on some general concepts or approaches to pursue or promote first to guide their discussion. After some discussion regarding what priority should be given to the amount of credits a property could generate, it was generally agreed that the amount of credits that could be generated or the amount of electricity needed would not be the main focus. Decisions should not be based on a person's ability to make extra money if all other criteria are met.

The consensus among the EAC members was that aesthetics and how a solar energy system relates to the neighborhood are the most important factors to be addressed in deciding on the EAC's recommendations. Beyond that context, the EAC would not seek to be overly restrictive.

Ms. Zebal talked to a staff member at Frederick County and shared that they had experienced no disputes with neighbors related to ground-mounted systems. They have had no complaints regarding visual impact either. No changes to their code are anticipated.

Mr. Vleck briefly summarized the requirements of the codes provided by Ms. Dinne on other jurisdictions around the country. Ms. Dinne referred the members to the most common options used by other jurisdictions that were included in the Scope for the project. This list of options would help the EAC to fully consider the approaches available.

The EAC members agreed that they did not want to recommend a fixed maximum for roof-mounted systems. They also agreed that they did not want to recommend that NO maximum be set overall for any combination of roof- and ground-mounted systems that a property would install.

Members discussed the relevance of the size of the lot, square footage of the house, and footprint of the house as a basis for determining an overall maximum size limit. Ms. Cutsail noted that two houses could have the same footprint, but one could be twice as large as the other, thereby possibly using more electricity. Ms. Leatherwood countered that there are cases where the square footage is also irrelevant. Some houses use only electricity, others use a combination of additional sources, such as propane, natural gas, or geothermal. Therefore, the amount of electricity used may not be indicative of the total amount of energy needed.

Ms. Leatherwood focused the discussion on what the group already agrees on. They agreed that the standards for roof-mounted systems need to be separate or different than ground-mounted systems. She summarized that the solar panels should not exceed the square footage of the roof area and need to incorporate any additional safety and permitting factors as well. [Carroll County currently limits roof-mounted systems to the size of the roof.] A recommendation should be made to allow roof-mounted systems on accessory buildings as well.

The members discussed requirements for roof-mounted systems. Mr. Vleck suggested that systems on pitched roofs be required to be flush mounted, and that "flush mounted" should

be defined to mean the same angle or pitch as the roof. Flush-mounted systems would look better and probably be less subject to issues such as winds. However, systems on flat roofs would not be required to be flush mounted. A height requirement would be needed for those that are not flush mounted. Ms. Zebal added that Carroll County currently does not allow any portion of the system to extend more than 10 feet from the highest portion of the principal structure to which it is attached.

Ms. Cutsail noted that a property could install some on the roof and some of the ground. Mr. Vleck added that this could include wall-mounted if they want to recommend allowing wall-mounted panels. They may be self-limiting. Ms. Dinne suggested that they may be more applicable to larger or multi-story residential buildings such as apartment buildings and condos, simply because solar access for wall-mounted systems on lower buildings may be subject to more obstructions.

Ms. Leatherwood indicated that further discussion to decide if an overall combined limit is needed and, if so, what it should be.

The members shifted the discussion to where ground-mounted systems should be allowed to be located in the yard. [Carroll County currently does not allow them in the front yard, and those located in the rear or side yard must meet setbacks for that district.] No consensus was reached.

Ms. Leatherwood asked Ms. Dinne to prepare a list of the items that the members have agreed on at this point, as well as outstanding issues. Ms. Dinne will email it to the members.

All agreed that 120 square feet is not enough for the maximum surface area for ground-mounted systems.

Mr. Vleck felt that the recommendations should be similar to what is allowed in Frederick and Washington Counties, since they are similar to Carroll. Ms. Cutsail said they should compare, but it shouldn't dictate what they recommend.

Ms. Zebal asked Ms. Dinne to add Carroll County to the matrix of requirements for other Maryland counties.

Ms. Leatherwood volunteered to research the specific uses for which wall-mounted systems are appropriate.

Ms. Leatherwood proposed that a special meeting be scheduled before the next regular meeting to continue this discussion to help ensure the project stays on schedule. The meeting will begin at 5:30 PM. Ms. Dinne will check on room availability in the County Office Building for an evening meeting.

## **7. NEW BUSINESS –**

### **a. *Chapter 31 Code Amendment***

Ms. Dinne provided a copy of Chapter 31 with the proposed revisions to remove the Tree Commission references shown using Track Changes. She reviewed the process for amending the Code. The next step is to get time on the Board's agenda to brief them on the concept again and request approval to proceed to public hearing. Ms. Leatherwood volunteered to be the spokesperson. Ms. Cutsail will step in if Ms. Leatherwood is not available.

## **8. OTHER –**

Nothing to report.

**9. ADJOURN REGULAR MEETING –**

**ADJOURNMENT – MOTION 244-16:** Motion was made by Ellen Cutsail and seconded by Curtis Barrett to adjourn the February meeting. Motion carried.

The meeting adjourned at 4:35 p.m. The next regular monthly meeting is scheduled for **Wednesday, March 16, 2016 at 3:00 p.m.** in the Reagan Room of the County Office Building.

systems. Those that had requirements in place primarily seemed to allow systems on the roof. If ground-mounted systems were mentioned, they had to follow the setbacks and size requirements of other accessory uses. Three of the counties did address utility-scale systems, but not residential.

Ms. Zebal checked on **Baltimore County**. Baltimore County also required ground-mounted systems to follow the setback and size requirements of other accessory uses. She called the zoning office in Baltimore County. The equipment cannot cover more than ~~a certain percentage~~ 40 percent of the lot, ~~but no height restriction was mentioned and is restricted to 15 feet in height. She found out t~~ he code for roof mounted systems was recently revised to address difficulty of access to roofs by firefighters. Additional separation between panels and from chimneys was needed. Separations between panels and around chimneys were made less restrictive.

Mr. Hynes visited the **Howard County** offices for information. Electrical and building permits are required for residential solar installations. Therefore, most are reviewed on a case by case basis. No specific height requirements are included in the code. He was told most requests are for roof-mounted facilities, which generally get approved.

Mr. Hynes added that a building permit is needed in **Baltimore City** as well. Panels cannot be raised more than 42 inches above the roof surface

Ms. Krebs looked at **Eastern Shore** counties. She said that, because stormwater is regulated, there are requirements in some areas for spacing and angles.

Mr. Vleck researched Alleghany, **Garrett**, and Washington Counties. He said he did not find any requirements for Garrett County. However, he found an article that stated that Garrett County has a signed agreement with Solar City. They have five spots around the county to provide solar power for utilities.

Mr. Vleck also checked on **Washington County**. He felt they had substantial information available, particularly finding the three-page section regarding solar and wind turbine facilities useful. He said solar facilities are treated as accessory uses in all zoning districts. Bulk requirements included 6-foot setbacks and 20-foot maximum height, and the footprint cannot exceed half the building footprint or 600 square feet – whichever is greater. There are some exceptions. They are permitted on the roof or on a wall, not to extend beyond 12 feet above the roofline. Applicants are required to provide a structural certificate to show the structure can accommodate the proposal. They can be located on accessory structures as well. The requirements include a provision making it the applicant's responsibility to coordinate with neighbors and secure any needed easements to prevent structures or landscaping on adjacent properties that would block the sun. There is no recourse with the County; it must be worked out with the neighbor.

Ms. Zebal also researched **Frederick County**. Wall or roof-mounted solar collection systems are allowed in all zoning districts. Solar arrays are permitted in any zoning district. The total square footage of all arrays cannot exceed the footprint of the principle structure. The footprint of an individual array shall not exceed one half the footprint of the principle structure or 600 square feet. Solar facilities are allowed in all districts, on the roof or on walls. The size is not to exceed the footprint of the principal structure. Ms. Leatherwood pointed out that, because of the angling of the roof, the square footage of the roof would be more than the building footprint. Mrs. Leatherwood pointed out that, because of the angle of the array, the square footage of the footprint would be more than the square footage of the array itself.