



Carroll County Environmental Advisory Council

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Karen Leatherwood, Chair
David Hynes, Vice Chair

Brenda Dinne, Staff Liaison
Department of Land
& Resource Management

Meeting Summary for March 9, 2016

Members

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

County Government

Brenda Dinne, Special Projects Coordinator /
EAC Staff Liaison
Jay Voight, Zoning Administrator

Other Attendees

None

1. CALL TO ORDER –

Ms. Leatherwood, Chair, officially called the March 9, 2016, meeting to order at 5:35 p.m. in Room 007 of the County Office Building. This was a special meeting in addition to the regular monthly meetings scheduled for the purpose of providing additional time for discussion regarding residential solar surface area requirements. However, a brief agenda item was added to address an issue that arose regarding the categories for the 2016 Environmental Awareness Awards.

2. ENVIRONMENTAL AWARENESS AWARDS CATEGORIES –

Several nominees across several categories were nominated for the same initiative. Ms. Leatherwood proposed a “Project of the Year” category be created just for the 2016 awards cycle. The Project of the Year category would allow the EAC to collectively recognize those involved with and nominated for this project. It would also allow more nominees to be recognized, as all of the usual categories would still have a winner from the remaining nominees. Since this is a special circumstance, the EAC would not intend to have this category or take this action for each awards cycle. The other EAC members agreed.

Ms. Leatherwood further proposed that an Honorable Mention be awarded in the Student category. Primarily, she felt that the projects were very similar, but also felt that it was important to encourage students to continue to take initiative to do projects that demonstrate environmental stewardship. There was consensus to move forward with an Honorable Mention award in the Student category.

3. RESIDENTIAL SOLAR SURFACE AREA REQUIREMENTS –

Mr. Voight shared several points of information:

- If solar panels are rented rather than owned, the credits may go to the solar company that installed them rather than the homeowner.
- Many property owners fence the ground-mounted systems to keep larger animals out.
- The angle of ground-mounted systems can be changed to take advantage of the changing angles of the sun. However, these systems tend to be more expensive.
- He has not received any complaints about glare.
- Systems can be mounted on a flat roof and can go up to 25 feet high.
- Systems can be mounted on trailers as well, but only if it is designed to support the weight.
- No adjoining property notice is required to install solar in a residential yard.
- Solar energy systems do not require a conditional or special use approval in the zones in which they are permitted.

Ms. Leatherwood contacted Washington County to inquire about their satisfaction with the current requirements and if they had received any complaints about solar systems installed. The staff had not heard of any problems and indicated that no revisions to the requirements were currently planned.

The members were satisfied with the size limit for roof-mounted systems as written, which allows the size of the entire roof surface of the principal dwelling as well as accessory buildings. The 120-square-foot size limit currently applies to the ground-mounted systems only.

Mr. Voight said in the Agricultural Zoning District, to which the EAC's work would not apply, the size currently cannot exceed the size of all of the square footage of all of the roofs, regardless of whether the panels are on the ground, on the roof, or some combination thereof. He explained the basis for the 120 square feet when it was originally recommended by the Planning Commission. The Planning Commission was worried about the appearance of the ground-mounted systems. The 120 square feet was not based on a specific case or factor that he could recall.

Mr. Voight offered that the Planning Commission, at the time the original solar requirements were adopted, was concerned that even small lots could be covered by big houses, leaving very little yard. The Planning Commission members did not want to see the entire backyard filled up with solar panels.

How this works with homeowner associations (HOA) was discussed. If anything other than what is required in the zoning code is desired, it would need to be addressed in the HOA's covenants and restrictions. Many HOAs do not enforce their requirements very well. However, even in cases where an HOA dissolves, the covenants and restrictions are still enforceable by the neighbors.

Ms. Krebs asked Mr. Voight what currently needs to be submitted when someone wants to put a solar energy system on their property. Mr. Voight responded that a plot plan is required, showing where the system will be located and what other structures are currently on the property. He added that conditions do change rapidly, and he has no way to verify that a system was installed as shown on the plot plan. Footing and electrical inspections are required, but not at the completion of installation. Although the Board is often concerned with additional costs to the

consumer/property owner, they are not requiring that the property lines be staked to ensure the measurements are accurate when placing a system.

The possibility of basing the size on the amount of electricity the house actually needs or uses was discussed. Mr. Barrett tried to estimate what size system he would need based on the 1,500 kwh that he uses. If he estimated correctly, he would need approximately 400-500 square feet. Mr. Voight reminded that it is important to come up with something this is simple to figure out as a homeowner and easy to administer, verify, and enforce. It was decided that there were too many variables, such as system technology, size of house, size of household, other potential energy sources to the home (such as natural gas, propane, geothermal) that also provide power, and occupant habits and conservation measures. In addition, the house would need a storage system, which would be an additional cost, to be able to use the generated electricity 24 hours a day, as the sun is not out 24 hours a day.

Basing the maximum size on a graded scale tied to the residential zoning district was discussed. Mr. Vleck suggested that the 120 square feet remain for lots found in the R-7,500 district, but be doubled for larger lots. He estimated square footage based on a percentage of the lot size. The 120 square feet on a 1/8-acre lot (R-7,500) would cover 2.4 percent of the lot. Based on this 2.4 percent, a 1/4-acre lot (R-10,000) would allow 240 square feet of solar panels; a 1/2-acre lot (R-20,000) would allow 480 square feet; and 960 square feet would be allowed for a 1-acre lot (R-40,000). However, he felt that 960 square feet was getting too big. However, many lots are larger than the minimum lot size allowed in a zoning district. Therefore, the lot size does not always correlate to the zoning.

Basing the maximum on the impervious area was considered, as some jurisdictions include requirements related to impervious coverage and/or lot coverage for ground-mounted systems. Ms. Dinne shared that Carroll County would consider a ground-mounted system to be an impervious surface. However, it would be considered self-treating/disconnected if the space between the panels were at least equal to the width of a panel and if grass could still grow under the panels. Ms. Dinne added that, although considered impervious cover, Carroll County does not currently have a fee related to impervious cover. Mr. Voight offered that there currently is no lot coverage requirement in Carroll County either. It also was felt this option would make it too complicated, especially considering one of the EAC's primary objectives was to keep the requirements simple.

Some jurisdictions base the maximum on lot size rather than zoning. Members discussed applying a graded scale to determine maximums based on lot sizes, similar to the one previously proposed by Mr. Vleck regarding zoning districts. It was suggested that systems on properties over 3 acres could be required to be placed on the roof. Mr. Voight pointed out requiring someone to put the panels only on the roof would be difficult, as not all roofs are south facing. Mr. Vleck proposed the graded scale be applied to lot size ranges, but apply the limit based on the aggregate of roof sizes to lots greater than 3 acres. This would eliminate the possibility of a huge array in the residential districts, but it was felt this might not be big enough for larger lots. Ms. Leatherwood proposed that the maximum surface area on lots over 3 acres could be 1-1/2 times the roof area, rather than just 1 times the roof area. Ms. Cutsail volunteered to prepare a grid with the house footprint and various sizes ground-mounted solar systems for the March 16 meeting to give the members a sense of the amount of space it would take in the backyard.

Mr. Voight stated that ground-mounted systems are currently only allowed in the rear and side yards. For the sake of aesthetics, they agreed this should not change. The current setbacks and

height requirements were reviewed, but as no reason to change these was offered, they agreed not to recommend a change.

4. ADJOURN –

The meeting adjourned at 7:25 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.