

**Environment and Energy Conservation Commission**  
Approved

Summary of May 23, 2011 Meeting  
2100 Clarendon Blvd, Azalea Conference Room

Members Present: Shannon Cunniff, Dean Amel, Lisa Larimer, Eric Harold, Mike Hanna, Shannon Siart, Bree Raum, Claire O'Dea, Alex Sanders

Members Absent: Brooks Rainwater, Matt Forman, Sarah Meservey, Scott Bauer (attending CIP meeting)

Guests: Michael Raizen, Travis Cutler (Dominion), Christine Ng,

Staff Present: Joan Kelsch (DES), Kelly Zonderwyk (DES), Allan Rowley (DES)

**1. Public comment on general topics**

There was no public comment.

**2. Overview of Arlington's Stormwater Capacity Study (Allan Rowley, DES)**

Allan Rowley is a Stormwater Infrastructure Planner in DES working with storm sewers, sanitary sewers, and hydraulics. He presented an update on the County's Stormsewer Capacity Study. The goals of the capacity study are to:

- reduce the risk of potential stormwater threats to public health, safety and property;
- develop models that can assess the impacts of new development on system capacity; and
- comply with State and Federal stormwater and floodplain management regulations.

Mr. Rowley emphasized that he and his team don't "solve" stormwater problems – they reduce risk.

There are 366 miles of storm sewer lines and 28.5 miles of open channel in Arlington. The stormwater modeling effort addresses box culverts 36 inches in diameter or larger. The model is calibrated based on the June 2006 event (the highest flow recorded in 50 years). They are also modeling a 10-year Type II storm. Emphasis is placed on sewer basins experiencing capacity issues during the June 2006 event.

Basins will be modeled based on flooding issues that have been reported. If a house floods, water can only leave via the floor drain in the basement. Thus, if there is such flooding, subsequent drainage can then lead to someone else's house downstream being flooded by sanitary sewer backups. This causes serious damage. Three areas that will be studied as high priority:

24<sup>th</sup> Street and N. Sycamore Street

John Marshall Drive and Lee Hwy  
West Little Pimmit Run Phases I and II

The analysis from the consultant will be completed this fall with the Stormwater Master Plan completion planned for the spring 2012.

The study will identify projects where capacity will be increased to reduce the risk of flooding. Shannon Cunniff inquired about related efforts to retain water onsite. Mr. Rowley responded that onsite storage and infiltration for small frequency events is encouraged, but this study focuses on capacity to handle large storm events.

Dean Amel asked about pipe replacement and aging infrastructure. He asked if this study will consider the age of pipes to prioritize replacement. Mr. Rowley said that about 20% of the stormwater system has been replaced. Stormwater pipes are in better shape than the sanitary system. The sanitary system still has some terracotta pipe which is not desirable. Reinforced concrete pipes are much better. Mr. Amel asked whether repairs and resizing occurs when there is a break, which provides an opportunity for correction. Mr. Rowley said that the County does do that if opportunities arise. Pipe replacement is complicated, but efforts are made to upgrade whenever possible.

Shannon Siart asked who operates and maintains both pipe systems (sanitary and sewer). DES's Water Sewer Streets Bureau maintains both pipe systems. She also asked about climate change impacts. Alexandria has flooding issues related to the Potomac River, which can have big impacts particularly during high tide. The river responds slowly so water levels rise slowly. In Arlington, flooding issues are associated with smaller streams that respond very quickly as water moves out of the system. Predicted increases in rainfall volumes based on models used to predict impacts of climate change in Arlington indicate that future flow increases are fairly small.

Eric Harold asked if the 10-year storm volume will occur more frequently due to climate change issues. A 0.10 inch change in rainfall volume won't result in major volume changes in the stormwater system. Mr. Rowley noted that they haven't looked at sea level rise. The County is looking only at situations relevant to Arlington.

The County does not have easements for all the pipes that cross private land. Mr. Rowley said they are working on that.

### **3. Discussion of Fresh AIRE programs – Green Games and Retail Doors (Kelly Zonderwyk, DES)**

Kelly Zonderwyk, from DES's Fresh AIRE program, reported on the Arlington Green Games program. Green Games is a friendly competition for commercial property owners and managers and office tenants to reduce costs while reducing greenhouse gas emissions.

Participants track their baseline usage and then work on issues related to energy, water, waste, and tenant engagement. Awards are available at three levels (Bronze, Silver, and Gold).

Participants enter energy and water data in the EPA's Portfolio Manager database which is shared with the County for tracking purposes. Ms. Zonderwyk demonstrated the online Green Games website and participant tracker.

Tenants' participation is measured by a self evaluation which is an online green action scorecard. Energy, transportation, waste, materials, employee outreach, and innovation are considered. Currently there are 120 competitors with 63 buildings, and 57 tenants. This covers 15 million square feet of commercial office space, or about one-third of the County's total commercial office space. The deadline for participation was extended to accommodate more participants.

There are many training opportunities for participants – breakfast meetings, lunch brown bags, and webinars throughout each month. Staff meets with participants one-on-one to go over the specifics of their office.

Energy issues may be out of the tenant's control. Staff encourages tenants and property managers to work together toward common goals or reduced environmental impact and lower utility costs. If all participants achieve 10% energy reduction, savings would be 36 million kWh (equivalent) and about a savings of \$3.3 million per year.

Recruitment of participants will continue. The inaugural season will culminate in an awards ceremony in the spring 2012. Staff hopes to expand the program to other sectors including restaurants, hotels, and retail (within the year). Multi-family buildings may be able to participate in the future as well.

Staff is working on a voluntary program to encourage retailers to keep doors closed to save energy. Window clings will be distributed to participants. The closed door pledge will be incorporated into the Green Games webpage. The County will recognize participating stores on its the website and is looking at other mechanisms such as Facebook to further promote those that participate. This retail closed doors program will launch soon. Shannon Cunniff supported the idea of developing an App that would identify closed door participants so those interested in supporting those merchants know who they are and where they are located as such could incentivize and reward participation.

Arlington applied to ICLEI to receive technical support to replicate a green office challenge that was successful in Chicago. Arlington customized the program to be unique to the County.

Ms. Zonderwyk invited E2C2 members to send the names of potential participants to staff who can follow up.

#### **4. Overview of DES Reorganization (Joan Kelsch, DES)**

Dean will call Solid Waste Bureau staff regarding concern about loss of outreach person in solid waste. E2C2 is concerned about the reduced staff at the Solid Waste Bureau in light of the changes to the Solid Waste Ordinance for multifamily and commercial properties. Outreach and communication will be critical for implementation success.

**5. Approval of Meeting Summary – April 25, 2011**

Approved as amended.

**6. Old/New Business**

Shannon Cunniff received a mailing from the Green Party asking for E2C2's support for the bag tax. The Greens focus on single-use plastic bags from grocery stores and chain drug stores and Styrofoam food containers from food service outlets. The Green Party believes that the County has the authority to regulate solid waste and thus could institute such a ban. The contact person at the Green Party is John Reeder at [jreeder123@msn.com](mailto:jreeder123@msn.com). Dean Amel said he heard that the Arlington County Attorney said that the County does not have the authority to ban bags. Joan will ask if the Attorney has taken a position on the matter. Shannon will contact Mr. Reeder as follow up to his communication.

Bree Raum attended a site plan meeting on the Monument View project. Boeing will occupy the building. The building is proposed for an empty lot north of Crystal City. The building is proposed to be LEED Silver. One community concern is that the site is a single-use office building (not mixed-use) and is located next to the Long Bridge Park site and would separate the community from Long Bridge. The project includes a "park" area but the community fears that the public won't be able to easily access nor use the park. E2C2 will continue to track this project.

Dean Amel reported that Urban Forestry discussed the Clarendon Dog Park. The site will be half dog park and half other park uses. Drainage is an issue of concern for dog parks. The plan is to use sand with pipes underneath to facilitate and collect drainage. The Urban Forestry Commission is skeptical about the viability of planned tree planting in light of the extensive use of sand at the site.

Urban Forestry continues to work on the distribution of funds from the Tree Canopy Fund. Dean Amel also reported that the Land Acquisition group is working on various issues. The County has not set specific goals for open space needs.

The County Board approved the Community Energy and Sustainability Task Force Report. Twenty speakers spoke in favor of the plan; four spoke against the plan. The Board accepted the Report which starts the 18-month Implementation Plan process.

Alex Sanders reported that the meeting on the Beaver Pond Improvement Project will be held soon.

Meeting adjourned at 9:10pm.