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| <b>Dept. of Facilities and<br/>Environmental Services</b> | <b>Albemarle County</b> |
| <b>Environmental Quarterly Report</b>                     | <b>Q2-FY17</b>          |

*This report includes environmental program updates for October, November, and December 2016.*

**General:**

- The Environmental Services Division is now fully staffed, with the filling of an Office Associate position on October 10 by Meredith Povisils.
- The Division has initiated the process of procuring the services of a funding consultant to assist with the development of a stormwater utility. Proposals from firms were due on January 17.
- The Division is collaborating with the Parks and Recreation Department and the Project Management Division to procure term contracts with a number of civil/environmental consulting firms to provide CIP design and other professional services. Proposals from firms were due January 19.

**Environmental Compliance:**

- The Virginia Go Green Government Challenge Platinum certification will be presented at the February 1<sup>st</sup> Board of Supervisors meeting.
- Chris Green Lake Park and Ivy Creek Natural Area well water systems both received Notice of Violations for missing bacteria testing during a specified date range; However, bacteria testing prior to and immediately following those time periods indicates the systems successfully met Department of Health water quality testing standards for bacteria.
- ACPD Regional Firearms Training Facility water works system successfully met Department of Health inspection and water quality testing standards for bacteria and metered usage.
- Safer Chemical Waiver submitted and approved.
  - Crozet Stormwater Wetlands BMP for invasive plant control, one time application over winter 2016-2017.
- Completed lead abatement cleaning and filter changes at ACPD Regional Firearms Training Center via WACO, Inc.
- Completed the 3-year asbestos monitoring at Old Crozet School (i.e. Field School and Arts Center) via TJL Environmental Services.
- Facility inspections at COB McIntire, 5<sup>th</sup> Street, Walnut Creek Park, Chris Green Lake Park, Mint Springs Park, Simpson Park, Greenwood Community Center and ACPD Firearms Training Facility.

**Energy Management:**

- An Energy Service Company has been selected to work with Schools and Local Government as part of the Energy Performance Contract program. This program, administered by the Virginia Department of Mines, Mineral, and Energy (DMME), couples government entities with pre-approved private energy service companies to finance and install energy conservation measures to achieve future energy cost avoidance. A panel comprised of schools and local government staff reviewed four proposals and presentations during the selection process. All school

buildings and the two main county office buildings will be audited by March 1<sup>st</sup> and potential projects will be identified and submitted for approval. A Memorandum of Understanding for technical audits for Schools and Local Government to be signed in January 2017.

- The chart below represents “Baseline” energy comparisons to the most current 12-month average ending December 30, 2016 for the three county office buildings. The baseline year for energy is 2005. The change is represented in percentage from baseline annual usage; negative percent equals reduction in use and positive percent equals additional usage from baseline amounts.

|                            | Electricity | Natural Gas | Total Energy |
|----------------------------|-------------|-------------|--------------|
| McIntire COB               | - 33%       | - 51%       | - 40%        |
| 5 <sup>th</sup> Street COB | - 18%       | + 6%        | - 12%        |
| Court Square               | - 19%       | - 14%       | - 17%        |
| Combined                   | - 24%       | - 27%       | - 25%        |

- Water usage overall is down -45% from baseline year 2006.
- We are continuing to switch to LED lights incrementally and where applicable throughout all facilities.
- Working with contractor for price quotes on the Crozet Train Depot LED project. LED projects for Stations #11 and #12 will follow Train Depot pending budget.
- Additional energy projects outside the Energy Performance Contract will be planned for consideration in the future including solar thermal, solar photovoltaic, lighting, timers and mechanical equipment as budgets allow.
- Facilities and Environmental Services submitted application to join the SolSmart certification program. The SolSmart Foundation is providing a full time staff position to serve as an advisor to Albemarle County and the City of Charlottesville. This program focuses efforts within local government purview to ease and remove barriers to solar photovoltaic installations in the community. The US Department of Energy (DOE) and the International City/County Management Association (ICMA) sponsor the program. The objective of the advisor will be to assist Albemarle County in gaining Bronze level certification in the SolSmart program.

### **Solid Waste and Recycling**

- Staff kicked-off the mixed-paper recycling pilot program about 6 months ago. Currently we have collected an estimated 4 tons of paper product for recycling. We have learned valuable lessons through this process and are working to improve the process. One such lesson is associated with levels of contamination and non-accepted paper in the system. We will work on quality control issues by providing better information to users and monitoring the collection.
- Division staff have supported the Solid Waste Alternatives Advisory Committee (SWAAC). As part of this ongoing work, we will be assessing the solid waste and recycling operations at county office buildings for Committee consideration of service levels.

**Water Quality Protection:**

- Staff submitted a required annual report on the MS4 Program (local government and public schools) to DEQ on October 1. DEQ notified the County of its approval of the annual report on December 8.
- As part of the annual report, staff submitted a Local TMDL Action Plan to address benthic and bacteria impairments to the Rivanna River and tributaries. DEQ notified the County of its approval of the action plan on December 20.
- This year's efforts will focus on the requirements to submit 1) an outfall map and 2) stormwater pollution prevention plans for key County operations.
- Staff are working to enhance the routine maintenance of County owned/operated stormwater management facilities to better meet DEQ mandates and community expectations.
- Staff initiated an internal, simulated audit of the MS4 Program to prepare for a DEQ inspection of the Program expected in the latter half of FY17.
- Staff will kick-off the design phase of several capital projects (stream restorations and stormwater facility retrofits) following the execution of term contracts with civil/environmental consulting firms.
- Staff have begun negotiating the sharing of costs and water quality credits for a collaborative stream restoration project with the City of Charlottesville.
- Staff have begun working with the Department of Parks and Recreation and the Rivanna Conservation Alliance (formerly StreamWatch) to develop public-facing webmaps of water quality monitoring data.

**Infrastructure Management:**

- Staff continue to map area stormwater infrastructure using GIS, primarily using temporary staffing. The GIS includes various attributes characterizing the infrastructure. Staff have mapped approximately 60% to 70% of infrastructure in the urban areas.
- The Division, using temporary staff, conducted a survey of comparable localities' policies and procedures related to taking responsibility for and maintaining conveyance infrastructure.
- Staff conducted new inspections of 50 private and public stormwater management facilities to ensure proper operation and maintenance by the owners.

**Staff Development and Training:**

- Several Division staff attended training on the use of LiDAR data, newly available from Virginia.
  - Staff attended DEQ training on Virginia Stormwater Management Program rules and guidance relating to the design and maintenance of stormwater facilities. FES Public Works Division staff attended in-house environmental awareness annual refresher training.
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**Abbreviations**

BMP – Best Management Practice (aka, stormwater management facility)

DEQ – Virginia Department of Environmental Quality

LiDAR – Light Detection and Ranging, an aerial surveying method using laser light

MS4 – Municipal Separate Storm Sewer System

TMDL – Total Maximum Daily Load (used to denote the process to clean up impaired waters)