

2016 ANNUAL REPORT – DEPARTMENT OF PLANNING

1. Introduction

The Department of Planning provides professional planning, zoning, code enforcement, project management, and technical services to support Clarke County's planning and land use objectives. Staffing consists of four full-time employees (Director, Senior Planner/Zoning Administrator, Natural Resources Planner, and Administrative Assistant). A new Code Enforcement Officer-Inspector position was created in 2016 to be shared equally between the Planning Department and Building Department.

Department Functions and Responsibilities:

- Ordinance enforcement (Zoning, Subdivision, and various County Code provisions such as the Septic and Well Ordinance)
- Provide day to day customer service to citizens, appointed and elected officials, developers, and other stakeholders
- Process, present, and make recommendations on zoning map amendments (rezonings) and special use permits (SUPs)
- Draft, present, and make recommendations on text amendments to the Zoning, Subdivision, and other County ordinances
- Long-range planning activities including management of the County's Comprehensive Plan and ten (10) implementing component plans
- Natural resource planning activities including water resource protection and water quality improvement projects
- Manage continuing activities to support the Spout Run TMDL implementation plan
- Manage the County's conservation easement program
- Maintain the County's database of dwelling unit rights (DURs)
- Manage the County's historic preservation program
- Oversee the County's energy management program
- Oversee the County's biosolids monitoring program
- Conduct commercial site plan reviews
- Review and process subdivision plats and boundary line adjustments
- Administer the stormwater ordinance and erosion and sediment control ordinances in conjunction with the Building Department
- Zoning review of County building permits
- Zoning review of County business licenses
- Apply for and manage grants to support County projects
- Provide planning and zoning technical assistance to the Town of Boyce including:
 - Serve as the Zoning Administrator and subdivision agent for the town.
 - Provide daily customer service to persons seeking information on planning and zoning in Boyce
 - Conduct zoning review of building permits and business licenses
 - Process, present, and provide recommendations on applications for subdivision, site plan review, boundary line adjustment, rezoning, and special use permit
 - Serve as custodian for public documents pertaining to Town zoning applications
 - Attend meetings of the Town Planning Commission and Town Council and provide additional planning/zoning technical assistance when requested

- Staff support to numerous boards and committees including:
 - Planning Commission and Standing Committees/Special Subcommittees
 - Board of Zoning Appeals
 - Board of Septic and Well Appeals
 - Historic Preservation Commission
 - Conservation Easement Authority
 - Berryville Area Development Authority
 - Litter Committee
 - Other special committees designated by the Board of Supervisors
- Provide support to the County’s geographic information system (GIS) program
- Represent the County on various regional committees through the Northern Shenandoah Valley Regional Commission
- Coordinate/manage projects community development projects and other special projects as assigned by the County Administrator or Board of Supervisors
- Administrative functions including managing the Department website and developing/presenting the Department’s annual report to the Board of Supervisors

Departmental Goals

1. Deliver professional-level technical guidance in the following subject areas:
 - a. Land use planning
 - b. Zoning and subdivision ordinance development and application
 - c. Environmental and natural resource planning
 - d. Land conservation
 - e. Historic preservation
 - f. Energy management
 - g. Transportation
 - h. State legislative items
2. Conduct effective enforcement of County ordinances
3. Provide quality customer service across numerous platforms
4. Maximize finite County resources

2. Summary of Activities

Detailed descriptions of these and other projects undertaken by the Department, along with a summary of the land use requests processed by the Department in 2016, are included below.

A. Zoning Map Amendments

One new rezoning application was filed and approved in 2016.

- **RZ-16-01, Shenandoah Retreat Land Corporation/Philip Jones**
Approval of a rezoning request for a 2,223 square foot portion of the property identified as Tax Map #17A1-A-1, located west of 609 Laurel Lane in the Buckmarsh Election District, from Forestal Open-Space Conservation (FOC) to Rural Residential (RR). The Board of Supervisors approved this rezoning request on June 21, 2016.

B. Special Use Permits

One new special use permit application was filed and approved in 2016.

- **SUP-16-01/SP-16-01, Hecate Energy Clarke County LLC**
Hecate Energy Clarke County LLC requests approval of a Special Use Permit (SUP) and Site Plan (SP) to construct a 20MW solar power plant, large photovoltaic, on the property identified as Tax Map #27-A-5 located on the north side of Lord Fairfax Highway (U.S. 340) with frontage on the west side of Gun Barrel Road (Rt. 644), north of Double Tollgate Road (Rt. 670), north side of Highland Corners Road (Rt. 699), and on the east side of Stonewall Jackson Highway, in the White Post Election District and zoned Agricultural Open-Space Conservation (AOC). This application was approved by the Board of Supervisors on June 21, 2016.

C. Text Amendments

Four text amendments involving changes to the Zoning Ordinance were processed by the Department in 2016. Full text of each amendment is included in Appendix B:

- **TA-16-01, Public Outdoor Recreation Facility Lighting**
Proposed text amendment to amend §6-H-11, Outdoor Lighting Standards, of the Zoning Ordinance. The purpose of the amendment is to establish a new category for public outdoor recreation facility lighting including new lighting plan submission and design criteria requirements. The amendment was adopted by the Board of Supervisors on March 15, 2016.
- **TA-16-02, Streambank Protection Regulations**
Proposed text amendment to §3-E-1, Flood Plain District (FP), and §3-E-5, Stream Protection Overlay District, of the Zoning Ordinance. The purpose of the amendment is to establish to construction standards and regulations for the siting of boat landings, boat ramps, docks, decks, stairs, and similar structures along perennial streams including the Shenandoah River. The amendment also clarifies current ordinance language including referencing County Septic Ordinance regulations for the siting of portable privies and linking of complementary provisions in both sections. The amendment was adopted by the Board of Supervisors on March 15, 2016.
- **TA-16-03, Addition of Farm Distilleries as a Permitted Use in the AOC and FOC Districts; Use of Waterworks by Farm Breweries, Farm Wineries, and Farm Distilleries**
Proposed text amendment to amend §3-A-1-a, Agricultural-Open Space-Conservation District (AOC); §3-A-2-a, Forestal-Open Space Conservation District (FOC); §3-A-1-e and §3-A-2-e, Installation of Waterworks or Sewerage System & Treatment Works; §3-C, Supplementary Regulations; and §9-B, Definitions, of the Zoning Ordinance. The amendment was adopted by the Board of Supervisors on October 18, 2016.
- **TA-16-04, Amend Stormwater Management Regulations**
Proposed text amendment to amend Zoning Ordinance §3-A-8, Business Commercial (BC); §3-A-9, Business (B); §3-A-10, Business Park (BP); §3-E-1, Flood Plain District (FP); §4-F, Drainage; and Article 6, Site Development Plans; and to amend Subdivision

Ordinance Article 4, Procedure for Subdivision Approval; §8-I, Drainage; §8-J, Private Access Easements; and §11-A, Improvements. The purpose is to reconcile the Zoning and Subdivision Ordinances with the recent repeal of Chapter 154, Stormwater Management, of the Code of Clarke County. Former local stormwater management regulations will be replaced with reference to State regulations, and additional edits are proposed for clarity purposes. The amendment was adopted by the Board of Supervisors on January 17, 2017.

D. Site Plans

One site plan was approved by the Planning Commission in 2016.

- **SUP-16-01/SP-16-01, Hecate Energy Clarke County LLC**
Hecate Energy Clarke County LLC requests approval of a Special Use Permit (SUP) and Site Plan (SP) to construct a 20MW solar power plant, large photovoltaic, on the property identified as Tax Map #27-A-5 located on the north side of Lord Fairfax Highway (U.S. 340) with frontage on the west side of Gun Barrel Road (Rt. 644), north of Double Tollgate Road (Rt. 670), north side of Highland Corners Road (Rt. 699), and on the east side of Stonewall Jackson Highway, in the White Post Election District and zoned Agricultural Open-Space Conservation (AOC). This application was approved by the Board of Supervisors on June 21, 2016.

E. Administrative Site Plans

Ten Administrative Site Plans were approved by the Zoning Administrator in 2016.

- **ASP-16-01, T-Mobile**
Request administrative approval of a Site Plan Amendment to add new equipment within the existing lease area and install new microwave dish on the existing self-support tower at the facility on 20870 Blue Ridge Mountain Road. The property is identified as Tax Map \$30-2-1, in the Millwood election District, zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on February 2, 2016.
- **ASP-16-02, Jaspreet Singh (Jim's Old Country Store)**
Request administrative approval of a Site Plan Amendment to install a walk-in beer cooler at Jim's Country Store. The property is identified as Tax Map #37A1-30 located at 26 Shenandoah River Lane in the White Post Election District, zoned Commercial Neighborhood (conditional rezoned) CN. The Zoning Administrator approved this Administrative Site Plan on February 12, 2016.
- **ASP-16-03, Verizon Wireless**
Request administrative approval of a Site Plan amendment to replace 12 existing antennas with 12 new antennas on existing tower located at 134 Mount Carmel Road, Tax Map 339-a-71, Millwood Election District, zoned Forestal Open-Space Conservation (FOC). The Zoning Administrator approved this Administrative Site Plan on March 8, 2016.

- **ASP-16-04, AT&T**
 Request administrative approval of a Site Plan amendment to install 3 new antennas, swapping 3 existing antennas for 3 new and adding 6 radios on the existing water tower cell site identified as Tax Map #14-A-6 located at 201 Tom Whitacre Circle, Russell Election District, zoned Agricultural Open-space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on April 1, 2016.
- **ASP-16-05, Powhatan School, Inc.**
 Request administrative approval of a Site Plan amendment to construct a greenhouse and deck for the property identified as Tax Map #29-A-16, located at 49 Powhatan Lane in the White Post Election District zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on July 19, 2016.
- **ASP-16-06, Shentel**
 Request administrative approval of a Site Plan Amendment for modifying an existing telecommunications facility with new antennas installed on the existing lattice tower and all ancillary equipment will be installed inside the existing fenced compound lease area on the property identified as Tax Map #13-A-61 located at 88 Ramsburg Lane in the Russell Election District and zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on September 7, 2016.
- **ASP-16-07, AT&T**
 Request administrative approval of a Site Plan Amendment to replace three existing panel antennas with three proposed panel antennas and three proposed RRHs on existing mounts on an existing 140' tall water tank located at 14341 Lord Fairfax Highway and identified as Tax Map #28-A-27D, White Post Election District, zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on October 24, 2016.
- **ASP-16-08, Verizon Wireless**
 Request administrative approval of a Site Plan Amendment for a 15' monopole extension and the installation of a 12' x 17' equipment pad, Verizon wireless outdoor equipment, 15 KW DC Generator, 12 antennas and 2 fiber lines to the existing monopole located at 4163 Harry Byrd Highway in the Buckmarsh Election District, zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on October 24, 2016.
- **ASP-16-09, All Points Broadband**
 Request administrative approval of a Site Plan Amendment to install equipment on an existing concrete pad inside an existing compound and for the installation, maintenance and operation of broadband communications equipment on the existing tower at the property identified as Tax Map #13-A-61 located at 88 Ramsburg Lane in the Russell Election District and zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on September 29, 2016.

- **ASP-16-10, Clarke County Parks & Recreation**

Request administrative approval of a Site Plan Amendment to install outdoor lighting for ball fields at the property identified at Tax Map #13-A-62 located at 225 Al Smith Circle in the Russell Election District and zoned Agricultural Open-Space Conservation (AOC). The Zoning Administrator approved this Administrative Site Plan on December 15, 2016.

F. Board of Zoning Appeals

One application was filed with the Board of Zoning Appeals in 2016.

- **BZA-16-01, Powhatan School, Inc.**

Request approval of a 50 foot variance from the 150 foot front yard setback requirement from the centerline of a secondary scenic byway to a proposed greenhouse and deck for the property identified as Tax Map 329-A-16, located at 49 Powhatan Lane in the White Post Election District zoned Agricultural Open-Space Conservation (AOC). The Board of Zoning Appeals approved this request on June 22, 2016.

G. Board of Septic Appeals

Two applications were filed with the Board of Septic Appeals in 2016.

- **BSA-16-01, Steven Soechtig**

Request approval of an administrative appeal of Staff's application of Chapter 143-9(B) and Table 1 of the Clarke County Septic Ordinance, specifically, "*The minimum separation distance from a Soil Treatment Area to springs at a lower elevation than the septic system is 500 feet.*" Staff's determination of a spring (meeting the definition in the Ordinance) being located on the property resulted in a Virginia Department of Health denial of an application for a sewage disposal system. The Board of Septic Appeals denied this request on May 26, 2016.

- **BSA-16-02 The Grace Ritzenberg Revocable Trust**

Request approval of a variance from the Clarke County Septic Ordinance Section 143-9-Table 1, specifically, "*The minimum separation distance from a Soil Treatment Area to springs at a lower elevation than the septic system is 500 feet.*" The Board of Septic Appeals approved this request on May 4, 2016.

H. Town of Boyce Activities

In 2016, Department Staff processed one boundary line adjustment application for the Town of Boyce in addition to review of zoning permit and business license applications throughout the year. Special technical assistance was provided on three matters for the Town:

- **Stormwater complaint.** Staff assisted the Town with the review of a complaint from a Town resident regarding stormwater coming through his back yard as a result of past development on the Boyce Volunteer Fire Department property. Planning Staff, with the assistance of Building Department Staff, coordinated with the property owner and Town officials to identify the specific concerns, conducted research into previous site plan approvals, and performed onsite inspections to determine compliance with the approved plans. In conjunction with the Town Attorney, a recommended course of action was provided to Town officials.

- Review of proposed antique mall. Staff also worked with Town officials regarding the proposed siting of an antique mall in a location that did not comply with Town Zoning Ordinance requirements. Staff spent considerable time researching the zoning history of the subject property and met on several occasions with the prospective business owner, property owner, and Town officials. A zoning determination letter was ultimately issued by Zoning Administrator Ryan Fincham at the request of the Town. This issue presented an opportunity to re-acquaint Town officials with the role of County Staff in providing planning and zoning technical assistance, and also resulted in the establishment of clearer procedures regarding review of business license applications between Town and County Staff.
- Bond release – Meadowview Subdivision. In the summer of 2016, the developer of Meadowview Subdivision requested the release of bonding for construction of improvements. While the water and sewer infrastructure had long been completed and subdivision streets had been accepted for maintenance by VDOT, final inspections and necessary paperwork had not been completed by the developer to authorize bond release. Staff worked with the Town Attorney, Sanitary Authority Staff, and the developer’s consultant to research the status of incomplete items and resolve them to enable bond release by Town Council.

I. Other Administrative Reviews

Planning Department Staff reviewed sixteen boundary line adjustment applications in 2016. Two administrative subdivisions (divisions consisting of lots 100 acres or larger) were filed in 2016.

J. Special Projects

In addition to land use and zoning activities, several special projects were undertaken by the Department during the year:

- Berryville Area Plan update. Town and County planning staffs completed the rewriting of the Berryville Area Plan – a project that began in 2012. The rewrite project consisted of editing, updating, and consolidating the current Plan into four chapters:
 - Chapter I – Introduction (containing background information, updated demographics, and new sections on the Town-County annexation agreements)
 - Chapter II – Plan Sub-Areas (includes updated descriptions and residential/commercial yield numbers for the designated Sub-Areas)
 - Chapter III – New chapter with clear statement of the Plan’s goals, objectives, and strategies
 - Chapter IV – Plan Implementation (plan conclusion containing implementation strategies and potential future growth areas)

Activities in 2016 included finalizing the revised Area Plan and making presentations on the draft as it proceeded through formal public hearings before the BADA, Town Council, and Board of Supervisors. The revised Area Plan was formally adopted by Town Council on May 10 and by the Board of Supervisors on May 17.

- Business Intersection Area Plans update – Waterloo and Double Tollgate Area Plans. Planning Staff worked with the Planning Commission’s Business Intersection Area Plans Subcommittee (consisting of Robina Bouffault, Anne Caldwell, Gwendolyn Malone, and Len Capelli) to revise and update the Waterloo and Double Tollgate Area Plans. The update project was designed to accomplish the following:
 - Review the original recommended policies for each plan, determine their degree of implementation, and identify which policies need to be updated. This evaluation included comparing the original assumptions and growth projections with the current state of growth in 2016.
 - Develop new policies and organize them in a goals/objectives/strategies format.
 - Integrate the recommendations of the 2013 Comprehensive Plan and the 2014 Economic Development Strategic Plan into the revised Area Plans.

The Subcommittee worked throughout the summer to develop revised Area Plan drafts. The Planning Commission held formal public hearings on October 7 and voted to recommend adoption of the drafts. The Board of Supervisors formally adopted both revised Area Plans following duly advertised public hearings on December 20.

- Agricultural Land Plan update. Planning Staff also worked with the Planning Commission’s Agricultural Land Plan Subcommittee to revise and update the Agricultural Land Plan. The Subcommittee was a collaboration between the Commission and the Agricultural & Forestal District (AFD) Advisory Committee – members included Robina Bouffault, Jon Turkel, and Randy Buckley from the Commission and Emily Day and Corey Childs from the Advisory Committee. Similar to the Business Intersection Area Plans update, the Agricultural Land Plan update project was designed to accomplish the following:
 - Review the original plan recommendations, determine their degree of implementation, and identify which policies need to be updated.
 - Develop new policies and organize them in a goals/objectives/strategies format.
 - Integrate the recommendations of the 2013 Comprehensive Plan and the 2014 Economic Development Strategic Plan.

The Subcommittee developed a recommended revised draft to the Commission in the fall and the Commission voted to recommend its adoption following public hearing on January 6, 2017. The Board of Supervisors voted to adopt the revised Area plan following a duly advertised public hearing on February 21, 2017.

- Telecommunications text amendment/Telecommunications Study. In order to support the Planning Commission’s ongoing efforts to revise the County’s regulations on telecommunications facilities to improve cellular, data, and broadband internet access, Staff worked with an engineering consultant to develop a Telecommunications Infrastructure and Broadband Study for Clarke County. The consultant was responsible for addressing the following items in the Study:

- Analyze the County’s current network of telecommunications facilities and its capacity for expansion both for cellular communications and high-speed data for internet applications.
- Determine where current and future communications needs are in the County and the optimal locations and heights for new monopoles to meet these needs.
- Identify new or emerging technologies accessible now or in the near future to provide telecommunications and high-speed internet access based on the County’s unique characteristics; recommend detailed strategies and funding opportunities for facilitating their development.

The Study is intended to be used to further develop the Commission’s Zoning Ordinance text amendment and to help the Board of Supervisors with strategies to make broadband internet options more diverse and available to more residents and businesses. Planning Staff worked in the spring with Joint Administrative Services Staff to develop and issue a Request for Proposals and select a consultant. The Atlantic Group was ultimately chosen and worked throughout the summer and fall to develop the Study in consultation with the Commission’s Telecommunications Subcommittee. The consultant’s final presentation of the Study was made to the Board of Supervisors on November 29 and the Board voted to accept the Study on December 20.

- MUNIS Implementation. Staff began active use of the Planning and Zoning module of the County’s new MUNIS system in Spring 2016 following extensive implementation activities throughout 2015 and early 2016. This module serves as an electronic database for the filing, processing, review, and ongoing records management of the Department’s land use and permit applications. The module is shared with the Building Department and connected to the Finance and Property modules to better coordinate permit reviews, cash handling, and historical record-keeping of changes to properties over time. Implementation activities included creating lists of all permit/application types and fees and inputting them into the MUNIS system; creating parallel lists for Boyce land use applications; identifying agencies involved in the review of specific permit/application types; and monitoring the transfer of critical property notes and DUR information from the AS400 system.

Upon “going live” with MUNIS, Staff has been inputting all land development applications into MUNIS including but not limited to site plans, boundary line adjustments, subdivisions, special use permits, rezonings, zoning permits, and business licenses. Staff has also worked extensively with Finance and IT staff and with other related departments to troubleshoot elements of MUNIS that are not working properly.

- Repeal of County Stormwater Management Ordinance. On June 15, 2016, the County was notified by Virginia Department of Environmental Quality (DEQ) staff that the County is not authorized under the Code of Virginia to enforce stormwater regulations that are more stringent than State regulations and that the County’s stormwater ordinance is “null and void.” State law only authorizes localities to have more stringent regulations if they are a Virginia Stormwater Management Program (VSMP) Authority responsible for issuing the State permits (an “opt in” locality). Localities such as Clarke County that have “opted out” of managing the VSMP process are prohibited under State law from

applying more stringent regulations. Those counties that have “opted in” and are VSMP Authorities can only have more stringent regulations if they are approved by the State to have such regulations.

Planning Staff worked in conjunction with the County Attorney to verify that DEQ’s position was accurate. This resulted in Staff developing a text amendment to remove the County’s stormwater ordinance from the County Code, and a companion text amendment to replace references to the County stormwater ordinance that appear in the Zoning and Subdivision Ordinances (TA-16-04). Staff also worked to adjust internal workflows and examine fee schedules to account for the removal of local stormwater review from our processes.

3. Building Permits

A. Residential Permits

A total of 66 permits to construct new single-family homes were issued in 2016. 29 were issued for parcels located outside of the towns and 36 permits were issued in the Town of Berryville. 1 permit was issued in the Town of Boyce.

Residential Building Permits Issued, 2000-2016

	County	Berryville	Boyce	TOTAL		County	Berryville	Boyce	TOTAL
2016	29	36	1	66	2004	81	45	4	130
2015	25	20	0	45	2003	72	53	2	127
2014	27	16	3	46	2002	78	49	2	129
2013	21	6	1	28	2001	86	50	2	138
2012	16	4	0	20	2000	68	33	0	101
2011	16	1	0	17					
2010	10	4	9	23					
2009	11	1	12	24					
2008	20	0	23	43					
2007	39	6	12	57					
2006	41	25	14	80					
2005	65	141	15	221					

B. Total Permits -- Valuation

Building permit valuation information is unavailable for 2016 due to technical problems with MUNIS.

4. Subdivisions

The table below lists the total number of new lots and acreage subdivided in the County and incorporated towns from 2000-2016. In 2016, nine minor subdivisions were approved by the Planning Commission resulting in the creation of nine new lots. Figures for Berryville include only subdivisions approved in the annexation area covered by the Berryville Area Plan.

Year	Lots/Acres	County	Berryville	Boyce
		Total	Total	Total
2000	Lots	25	5	
	Acres	2125	72	
2001	Lots	72	3	6
	Acres	535	0	1
2002	Lots	40	100	3
	Acres	281	81	1
2003	Lots	34	70	43
	Acres	412	54	21
2004	Lots	30	71	5
	Acres	325	72	2
2005	Lots	31	99	71
	Acres	370	60	15
2006	Lots	36	10	1
	Acres	799	32	<1
2007	Lots	25	1	2
	Acres	179	2	2
2008	Lots	25	0	0
	Acres	708	0	0
2009	Lots	6	0	1
	Acres	2	0	<1
2010	Lots	5	0	0
	Acres	191	0	0
2011	Lots	8	0	0
	Acres	98	0	0
2012	Lots	6	0	0
	Acres	67	0	0
2013	Lots	4	0	0
	Acres	144	0	0
2014	Lots	13	0	20
	Acres	252	0	6
2015	Lots	2	0	0
	Acres	18.71	0	0
2016	Lots	9	0	0
	Acres	175.7681	0	0

DWELLING UNIT RIGHTS

Dwelling Unit Rights (DURs) Used and Remaining by Magisterial District

Magisterial District	DURs Allocated	DURs Remaining	% Remaining
Greenway	1,590	1,092	68.7
Chapel	2,011	1,334	66.3
Battletown	1,496	779	52.1
Longmarsh	1,566	707	45.2
TOTAL	6,663	3,912	58.7

5. Conservation Easements

Conservation Easements Added/Dwelling Units Retired, 1974-2016

	VOF, OTHERS (acres)	COUNTY (acres)	DURs RETIRED
1974	72	0	n/a
1975	4	0	n/a
1976	195	0	n/a
1977	119	0	n/a
1978	667	0	n/a
1979	1,037	0	n/a
1980	166	0	n/a
1981	0	0	n/a
1982	100	0	n/a
1983	0	0	n/a
1984	0	0	n/a
1985	0	0	n/a
1986	0	0	n/a
1987	0	0	n/a
1988	807	0	n/a
1989	1,540	0	n/a
1990	2,503	0	n/a
1991	846	0	n/a
1992	64	0	n/a
1993	328	0	n/a
1994	2	0	n/a
1995	95	0	n/a
1996	42	0	n/a

	VOF, OTHERS (acres)	COUNTY (acres)	DURs RETIRED
1997	336	0	n/a
1998	485	0	n/a
1999	951	0	n/a
2000	1,453	0	n/a
2001	764	0	n/a
2002	1,180	0	n/a
2003	133	145	3
2004	957	35	1+13 lots in Boyce
2005	943	314	5
2006	425	579	18
2007	285	1,261	45
2008	0	250	12
2009	230	484	13
2010	0	473	21
2011	210	582	18
2012	0	709	26
2013	1,120	612	15
2014	65	404	15
2015	17	33	5
2016	0	1,262	30
SUBTOTAL		7,073	
TOTAL	18,140	25,213	240

Conservation Easement Purchase Summary, 2003-2016

YEAR	DUR'S TERMINATED	APPRAISED VALUE	DUR PURCHASE VALUE	OWNER SHARE	COUNTY SHARE*	GRANT SHARE	GRANT SOURCE
2003	3	\$251,000	\$0	\$26,000	\$225,000	\$0	
2003	0	\$0	\$0	\$0	\$0	\$0	
2005	2	\$198,100	\$0	\$123,100	\$75,000	\$0	
2005	2	\$200,000	\$0	\$125,000	\$50,000	\$25,000	SRDCD
2006	3	\$578,400	\$0	\$445,133	\$133,267	\$0	
2006	3	\$736,950	\$0	\$166,575	\$114,075	\$228,150	VOF
2007	5	\$1,126,813	\$0	\$162,125	\$8,062	\$478,313	VLCF, VDACS, FRPP
2008	3	\$346,551	\$0	\$86,638	\$86,638	\$173,275	FRPP
2008	2	\$180,000	\$0	\$53,100	\$42,300	\$84,600	FRPP
2008	5	\$716,500	\$0	\$179,125	\$27,750	\$509,625	VLCF, VDACS, FRPP
2008	1	\$131,500	\$0	\$32,875	\$16,437	\$82,188	VDACS, FRPP
2010	1	\$0	\$25,000	\$0	\$12,500	\$12,500	VDACS
2010	2	\$0	\$80,000	\$0	\$40,000	\$40,000	VDACS
2010	1	\$0	\$28,000	\$0	\$14,000	\$14,000	VDACS
2010	6	\$0	\$240,000	\$0	\$120,000	\$120,000	VDACS
2010	5	\$0	\$140,000	\$0	\$70,000	\$70,000	VDACS
2010	2	\$0	\$80,000	\$0	\$40,000	\$40,000	VDACS
2010	2	\$0	\$60,800	\$0	\$30,400	\$30,400	VDACS
2010	1	\$0	\$30,400	\$0	\$15,200	\$15,200	VDACS
2011	2	\$240,500	\$0	\$60,125	\$30,063	\$150,312	VDACS, FRPP
2011	1	\$0	\$13,000	\$0	\$6,500	\$6,500	VDACS
2011	2	\$0	\$25,000	\$0	\$25,000	\$0	
2011	2	\$0	\$80,000	\$0	\$40,000	\$40,000	VDACS
2012	2	\$0	\$80,000	\$0	\$40,000	\$40,000	VDACS
2012	4	\$345,500	\$0	\$86,375	\$20,000	\$239,125	PEC, VDACS, FRPP
2013	4	\$30,300	\$0	\$125,000	\$27,500	\$347,500	PEC, VLCF, VDACS, FRPP
2013	4	\$542,500	\$0	\$135,625	\$32,813	\$374,062	PEC, VLCF, VDACS, FRPP
2013	3	\$255,000	\$0	\$63,750	\$3,125	\$188,125	PEC, VLCF, VDACS, FRPP
2013	4	\$560,000	\$0	\$140,000	\$97,500	\$322,500	PEC, VLCF, VDACS
2014	3	\$0	\$69,600	\$0	\$34,800	\$34,800	VDACS
2014	2	\$173,500	\$0	\$43,375	\$2,718	\$128,468	PEC, VLCF, VDACS, FRPP
2014	3	\$194,500	\$0	\$48,625	\$687	\$145,187	VLCF, VDACS, FRPP
2014	1	\$0	\$0	\$0	\$20,000	\$20,000	VDACS
2014	2	\$0	\$60,000	\$0	\$30,000	\$30,000	VDACS
2016	1	\$0	\$40,000	\$0	\$20,000	\$20,000	VDACS
2016	3	\$0	\$120,000	\$0	\$60,000	\$60,000	VDACS
2016	2	\$0	\$80,000	\$0	\$40,000	\$40,000	VDACS
2016	2	\$0	\$32,000	\$0	\$16,000	\$16,000	VDACS
2016	2	\$0	\$32,000	\$0	\$16,000	\$16,000	VDACS
2016	4	\$0	\$64,000	\$0	\$32,000	\$32,000	VDACS
2016	2	\$0	\$32,000	\$0	\$16,000	\$16,000	VDACS
2016	3	\$74,500	\$0	\$18,625	\$9,313	\$46,562	VDACS, ALE
2016	2	\$140,500	\$0	\$35,125	\$17,563	\$87,812	VDACS, ALE
			Total	\$2,156,296	\$1,758,211	\$4,324,204	
			% of Total	26.2	21.3	52.5	

* Represents County funds used to purchase conservation easements; program began in 2003

Note – No easement purchases were made in 2015.

Grant Sources

VDACS = Virginia Department of Agriculture and Consumer Services (State)

VLCF = Virginia Land Conservation Fund (State)

FRPP = Farm & Ranchland Protection Program (Federal)

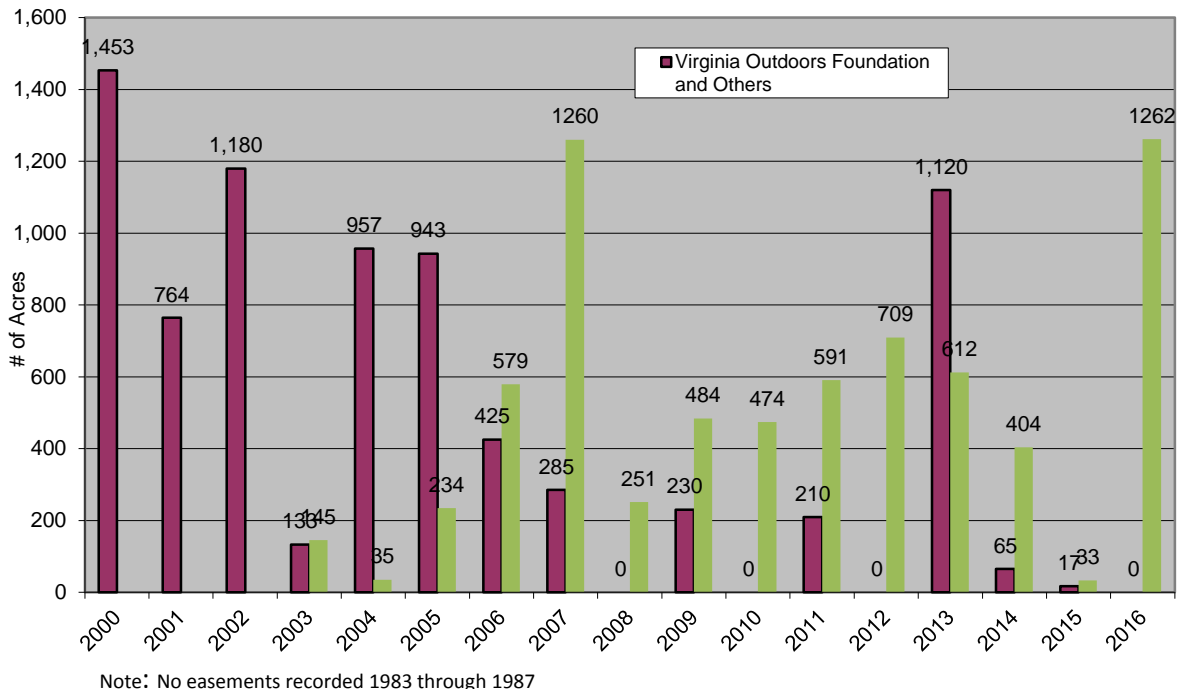
SRDCD = Shenandoah Resource Conservation and Development Council (State)

VOF = Virginia Outdoors Foundation (State)

PEC = Piedmont Environmental Council

The first conservation easement was recorded in 1974 by the Virginia Outdoors Foundation. Between 1974 and 1999 10,359 acres were placed in easement. The chart below details the acreage of easements by year from 2000 through 2016.

Conservation Easements – Virginia Outdoors Foundation, Virginia Department of Historic Resources & Clarke County Conservation Easement Authority



Special projects

- Greenway Court renovation project. The Clarke County Conservation Easement Authority holds an easement on Greenway Court and is charged with administering the rehabilitation of the historic structures and archeological surveys. In 2014, the County applied for and received a \$97,240 Hurricane Sandy Disaster Relief Assistance Grant to renovate the Land Office and Smoke House at Greenway Court. In addition, \$12,718 was provided by the Friends of Greenway Court; for an overall budget of \$109,858. Zinman Properties (Jay Hillerson) was awarded the contract and the work has been completed. An open house to view the work will be conducted in May 2017.
- Easement inspections program. A part-time intern was employed during the Summer of 2016 to perform compliance inspections on all properties containing easements held by the Clarke County Easement Authority. The intern was paid through the Authority’s stewardship fund and successfully completed onsite inspections and reports on approximately 90 properties. The Department expects this to be a reoccurring program and will maintain a database of inspection results.

6. Biosolids Applications

On July 15, 1997 the Board of Supervisors approved the adoption of a text amendment establishing standards for the land application of bio-solids.

Beginning in 1998, two companies, Bio Gro and Recyc Systems applied biosolids in the County. Currently Synagro (formally Bio-Gro) and Wright Trucking spread on area farms. The following table summarizes the acreages applied each year.

In 2004, State law repealed Counties ability to regulate biosolid application beyond testing and monitoring. The change permits Counties to request reimbursement for expenses relating to monitoring and testing but eliminates increased setback standards that Clarke County had adopted to protect ground and surface water resources in sensitive karst areas.

Beginning January 1, 2008 the Virginia Department of Environmental Quality (DEQ) assumed regulatory oversight of all land application of treated sewage sludge, commonly referred to as biosolids. This action, which moves oversight of the Biosolids Use Regulations from the Virginia Department of Health to DEQ, was at the direction of the 2007 General Assembly, which voted to consolidate the regulatory programs so that all persons land applying biosolids would be subject to uniform requirements, and to take advantage of the existing compliance and enforcement structure at DEQ.

Biosolids Applications

Year	Acres	# Farms
1998	180	2
1999	625	3
2000	0	0
2001	1830	11
2002	1145	11
2003	350	3
2004	150	4
2005	263	3
2006	950	9
2007	1,063	10
2008	1,307	13
2009	1,287	13
2010	1,989	21
2011	1,800	18
2012	1,539	18
2013	838	8
2014	1,784	23
2015	665	13
2016	61	1
19 Year Total	17,161	

DEQ has established an Office of Land Application Programs within the Water Quality Division to manage the biosolids program, as well as land application of industrial sludges, septage, livestock and poultry waste, and water reclamation and reuse. The Virginia Department of Health will continue to consult with DEQ and advise the public on health issues related to biosolids applications.

All applications have been closely monitored by County and State representatives and have been in compliance with all requirements. In accordance with State Regulations, Counties may be reimbursed for the testing and monitoring expenses; in 2016 the County was reimbursed \$590.07. Land applications were way down due two factors; 1) Blue Plains was formerly the source of much of the biosolids applied in Clarke County. As a result of significant process changes, Blue Plains generates less than half the volume of material as in the past, and their supply is not going primarily to Clarke; and 2) Milton Wright was formerly a major land applier in Clarke, but that operation has seen significant cutbacks in activity. The Piscataway biosolids contract is now held by another land applier who does not operate in Clarke.

The total number of acres permitted for biosolids application in the County is 11,125, proportionately more biosolids than many other Counties in the area, averaging 18,000 wet tons per year. The biosolids contain about 5-8 pounds of nitrogen per ton of biosolids. There is interest and concern about the effect of biosolids application on the quality of ground water in Clarke County. In order to address this concern, the County applied for and received 2 grants in 2013, totaling \$16,000 to monitor 10 springs in northern

Shenandoah Valley for discharge, TN, TP, ammonia, ortho phosphate, nitrate-nitrite, E. coli, flow, general water chemistry. Springs are in located in karst areas. Purpose is to identify contribution of contamination from springs to surface waters to assist in 1) determining appropriate BMP's on agricultural lands and 2) impact of biosolids applications on water quality as compared to other fertilizer sources. A report detailing the study is available from the Planning Department.

7. Historic Preservation Commission Activities

No Certificates of Appropriateness were filed in 2016.

- ***Special projects***

The Historic Preservation Commission received a \$9,500 grant from the Department of Historic Resources to complete an outline for a book entitled "Clarke County, Virginia History through Architecture". This is the first of 3 phases needed to complete the book. The research and writing will be completed by Maral Kalbian, Architectural Historian. Match was contributed by the Board of Supervisors, \$1,000; the Conservation Easement Authority, \$2,500 and the Clermont Foundation, \$2,000.

APPENDIX A – Miscellaneous Activity Tables

1. Minor Subdivisions

2016 MINOR SUBDIVISIONS						
FILE #	NAME	DESCRIPTION	TAX MAP(S)	ZONING	ELECTION DISTRICT	ACTION
MS-16-01	William & Kathleen Weiss		16-4-21	AOC	Buckmarsh	Approved 2/5/16
MS-16-02 (SEE MLSE-16-01)	Byron B. Timberlake	19.7516 (MLSE) <u>83.2484 residual</u> 103 total	21-A-14	AOC	White Post	Approved 3/4/16
MS-16-03 (SEE MLSE-16-02)	Grace Ritzenberg	2 lots, 177.7502 ac.	16-A-39	AOC	Buckmarsh	Approved 6/10/16
MS-16-04 (SEE MLSE-16-03)	Moore & Dorsey, Inc.	2 lots, 116.5794 ac.	16-A-22	AOC	Buckmarsh	Approved 8/25/16
MS-16-05	James A. Wine, Jr. & Carol Flaherty	2 lots, 31.0680 ac.	32-A-77	FOC	Millwood	Approved 9/22/16
MS-16-06	Lindsay Harris/Peter Schaffer, Jr.	1 lot, 3.119 ac.	33-7-4	FOC	Millwood	Approved 2/3/17
MS-16-07	Gregory & Joann Davis	2 lots, 42.284 ac.	15-A-55	AOC	Buckmarsh	Approved 9/2/16
MS-16-08	Margaret Dillow, et al.	2 lots, 25.5128 ac.	7-A-7E	AOC	Russell	Approved 11/18/16
MS-16-09	Ronald DeHaven	2 lots, 47.933 ac.	6-A-16	AOC	Russell	Pending

2. Boundary Line Adjustments

2016 BOUNDARY LINE ADJUSTMENTS						
FILE #	NAME	DESCRIPTION	TAX MAP(S)	ZONING	ELECTION DISTRICT	ACTION
BLA-16-01	Bryan & Cynthia Casey		23-A-19 & 23-A-20	AOC	Buckmarsh	Approved 4/15/16
BLA-16-02	Robert E. Johnson		8-A-55D, 9-A-27 & 9-A-27A	AOC	Russell	Approved 3/7/16
BLA-16-03	Philip Jones		17A1-8-100A	FOC	Buckmarsh	Approved 6/22/16
BLA-16-04	Shenandoah Retreat Land Corp		17A2-10-105, 106, 107 & 108	RR	Buckmarsh	Approved 3/14/16

BLA-16-05	Kenneth Bell		38-A-44,45,47,48	AOC	White Post	Pending
BLA-16-06	Scott & Judith Tredway		7-5-1 & 7-5-3	AOC	Russell	Withdrawn 9/29/16
BLA-16-07	Indie Development, LLC (Charles Snead)		31-A-20 & 20A	FOC	Millwood	Approved 10/7/16
BLA-16-08	Dennis & Mary Godbold		2-A-4 & 4A	AOC	Russell	Approved 11/15/16
BLA-16-09	Donna Hayes		28-A-10 & 28-A-8A	AOC	White Post	Approved 10/11/16
BLA-16-10	Paul Massanopoli	Equal change of 6096.15 sq ft for each lot	24-A-30A & 24-A-30B	AOC	Buckmarsh	Approved 10/17/16
BLA-16-11	Robert Johnson & Teresa		16-A-58E & 16-A-58F	AOC	Buckmarsh	Approved 11/9/16
BLA-16-12	Cabin Properties, Inc. Agent: Scott Smalley		40A-A-4E,F,G, H, K & L	AOC	Millwood	Approved 12/7/16
BLA-16-13	Cabin Properties, Inc. Agent: Scott Smalley		40A-A-4I, J & M	AOC	Millwood	Approved 12/7/16
BLA-16-14B	Barry & Karen Myers/ William & Karen Dean		21A1-A-3 & 21A1-A-4	R-1	White Post	Approved 11/18/16
BLA-16-15	Margaret Dillow		7-A-7E & 7-A-7I	AOC	Russell	Approved 12/1/16
BLA-16-16	David & Mary Nalls		15-3-7A & 15-3-8	AOC	Buckmarsh	Approved 1/3/17
BLA-16-17	Auggie LTD, Partnership		8-A-35	AOC	Russell	Approved 1/19/17

2016 Home Occupation Permits

Name	Address	Map #	Date	Business Type
Abercrombie, Deborah	138 Leslie Lane Berryville, VA 22611	6-2-32	8/1/16	Deborah's Honey and Lace Place (Direct Sales Clothing)
Bernard, Joseph	17617 Raven Rocks Road Bluemont, VA 20135	18-A-5	9/20/16	Special Tactics, LLC (Defense & Security Consulting)
Bogert, Aubrey	15 Greenway Avenue Boyce, VA 22620	21A2-A-57A (Town of Boyce)	10/12/16	Bre Bogert Photography (photography services)
Bowman-Harlow, Gale	2330 Crums Church Road Berryville, VA 22611	7-A-112	9/27/16	Opus Oaks Artisan Workshop (art education & appreciation, gallery seasonal, workshops, teaching at are venues) (Business license only)
Brodd, Keith W.	145 Ebenezer Road Bluemont, VA 20135	26-A-104A	10/13/16	Mountainside Home Improvements (Handyman Services)
Buckley, Gary	11113 Harry Byrd Highway Berryville, VA 22611	7-A-48	3/28/16	Rest Easy Repairs (Home Repair)
Burkart, Mary Kay	472 Old Charles Town Road Berryville, VA 22611	3-A-3B	8/26/16	Rebound Equine Bodywork, LLC (Equine Performance Massage)
Cannon, Charles L., Jr.	294 River Park Lane Bluemont, VA 20135	32A-1-28	3/14/16	Cannon Electric
Casey, Michael & Melissa	778 Springsbury Road Berryville, VA 22611	14-A-58A	1/19/16	Adventureholics (Internet)
Conradi, Gregory G.	360 Ebenezer Road Bluemont, VA 20135	26-1-7	5/20/16	Eagle Landing Arms (Firearms & Accessories)
Devereux, Brooke Anthony	1671 Lockes Mill Road Berryville, VA 22611	23-A-11	6/21/16	Fencing
Duvall, Peggy	2053 Mill Road (PO Box 213) Millwood, VA 22646	30A-A-56	2/8/16	Art & Furniture Gallery
Flick, Carisa	107 W. Main Street Boyce, VA 22620	21A1-A-9 (Town of Boyce)	6/23/16	Apple Valley Lawn Care (Lawn mowing & snow removal)
Feltner, Wendy	230 Ironrail Lane Boyce, VA 22620	29-A-9	9/13/16	Cleaning Houses
Funkhouser, Justis	87 Old Waterloo Road Boyce, VA 22620	21A1-A-109	1/8/16	Lanes Home Improvements (repair services)
Gray, Charles	423 Russell Road Berryville, VA 22611	7A-2-1	12/5/16	Gary's Fleet Service (Mobile Repair)
Holter, Kathryn	741 Senseny Road Berryville, VA 22611	13-A-31B	5/12/16	Hacienda – Modern Vintage (home interior)
Hummer, Kevin	72 Lime Marl Lane Berryville, VA 22611	22D-1-5	4/18/16	Deal & Hummers Hardwood Floors
Johnson, C. Parker	19043 Blue Ridge Mountain Road Bluemont, VA 20135	26-A-134	7/13/16	Transient Occupancy Rental

Jones, David L.	21990 Blue Ridge Mountain Road Paris, VA 20130	40A-1-34	3/8/16	WMD Protection, LLC
Longerbeam, Jesse	469 Moose Road Berryville, VA 22611	6A-1-14	8/25/16	Jesse Longerbeam Contracting (Painting, drywall & carpentry work)
Mainello, Vicki S.	1875 Allen Road Berryville, VA 22611	4-4-7	1/4/16	Refit Your Way (promote fitness & health)
Marcum, Cheryl	P.O. Box 75 Bluemont, VA 20135	17A-4-A	2/29/16	Child Care
Martin, Garrett	9533 Howellsville Road Boyce, VA 22620	38-A-37C	4/29/16	VentureLife Films
McLean, William, III	486 Summerville Road Boyce, VA 22620	21-A-16	7/14/16	Quad Contracting, Inc. (construction)
Merriman, James Jr.	1982 Old Winchester Road Boyce, VA 22620	20-A-7A	6/8/16	Everyday Carry Box (internet business offering camping/survival items)
Metesh, Jennifer	303 Lime Marl Lane Berryville, VA 22611	22-A-33	2/24/16	Highfly Equine, LLC (traveling equine massage and PEMF therapy practitioner)
Morris, Tracey	50 Cherry Lane Bluemont, VA 20135	17-A-18	9/8/16	Tracey's Home Daycare
Nee, Phyllis	P.O. Box 358 Millwood, VA 22646		9/19/16	Interior Expressions (Business License only)
Poland, Robert	598 Timber Lane Bluemont, VA 20125	17A1-2-83	2/2/16	Carpentry
Runge, Howard	1307 Calmes Neck Lane Boyce, VA 22620	31-6-B	4/22/16	Runge Tech LLC Consulting
Simmons, Louis D., Sr.	17597 Raven Rocks Road Bluemont, VA 20135	18A-1-2	7/25/16	LDS Construction & Home Services, LLC
Talley, Machelton A. P.	5720 Harry Byrd Highway Berryville, VA 22611	15-A-31	6/2/16	KMSO Stitch & Embroider (sewing, embroidery, repair & teaching)
Thompson, Dale L.	690 Gun Barrel Road White Post, VA 22663	20-A-26F	2/1/16	Dale L. Thompson, LLC (Property Management)
Turner, Ann	403 Mill Lane Boyce, VA 22620	22-1-10	8/1/16	The Flour House (Baking)
Weber, Judith	1048 Browntown Road Boyce, VA 22620	22-A-125	10/24/16	Judith Weber/dba NOVA Senior Law (Law practice)
Whitehouse, Frank D.	51 Stonecrest Lane Bluemont, VA 20135	33-8-1	11/23/16	FDW Consulting, LLC (Technology Consulting)
Villatoro, Vilma	131 Poston Lane Bluemont, VA 20135	32-8-7	8/30/16	The Maid Experts, LLC (Cleaning Services)
Villeceo, Jason	1190 Wrights Mill Road Berryville, VA 22611	6-5-4	10/11/16	Global Energy Solutions (lighting/electrian)
Watts, Carol	132 Bedrock Lane Berryville, VA 22611	7-A-103J	2/23/16	Just 2B Creative (Wood Decor)

4. Land Disturbance Permits

- a. Major**
None in 2016
- b. Minor**
None in 2016

5. Maximum Lot Size Exceptions

There were 4 Maximum Lot Size Exceptions filed in 2016.

6. Sign Permits

There were three sign permits issued in 2016.

7. Zoning Permits-under 200 sf and/or agricultural use only

Applicant	Address	Map #	Date	Affidavit	Purpose
Fred & Janet Alger, Jr.	400 Kimble Road Berryville, VA 22611	7-A-77	12/6/16	No	Carport for storage
Clarke County Public Schools	309 W. Main Street Berryville, VA 22611	13-A-61	12/19/16	No	Scoreboard
Clawson, Teresa (AG)	381 Springsbury Road Berryville, VA 22611	14-A-67B	3/14/16	Yes	Barn & Hay Shed
Hart, Gregory (AG)	775 Wadesville Road Berryville, VA 22611	3-11-4	6/21/16	Yes	Barn for Agriculture
Drake, Kyle (AG)	172 Triple J Road Berryville, VA 22611	7-A-47	6/17/16	Yes	36 x 48 barn for animal & feed
Hillerson, Jay	3269 Bishop Meade Road Boyce, VA 22620	22-A-49	12/2/16	No	Porch on existing dwelling
Holy Cross Abbey (AG)	901 Cool Spring Lane Berryville, VA 22611	16-A-53	3/31/16	Yes	Replacing barn destroyed in snow storm
Kline, Jason	43 Greenway Ave., South Boyce, VA 22620	21A1-A-103	10/19/16	ZP no BP	Storage shed
Koon, Robert W. (AG)	525 Fishpaw Road Berryville, VA 22611	6-A-60	10/17/16	Yes	Barn addition/ Milking parlor
Licking Valley Construction	7000 block of Howellsville Road	37A2-7-1	12/1/16	No	New House
Loe, Steven (AG)	936 Gun Barrel Road White Post, VA 22663	28-4-1	9/22/16	Yes	Pole shed for storage of farm equipment
Lunceford, Larry W.	76 Vista Lane White Post, VA 22663	28-7-19	5/25/16		12x20 storage bldg
Matthew White Builders, LLC	3143 Castleman Road Berryville, VA 22611	16-1-6	12/6/16	No	New House
Pence, Brian – Trustee	9724 Aman Chapel Road Great Falls, VA 22066	23-A-59	9/15/16	Yes	Barn

Pence, Stephen & Joelle	11990 Market Street, Unit 815 Reston, VA 20190	24-A-13F	4/4/16	Yes	Equipment barn, tractor, implements, garden tools
Moody, Andy	176 Lost Boys Lane Bluemont, VA 20135	26-A-127	6/17/16	Yes	40 x 36 barn for farm equipment
Moore & Dorsey	P.O. Box 152 Berryville, VA 22611	15-A-65	7/14/16	Yes	Agricultural Storage
Onorato, Danny	502 Richards Lane Alexandria, VA 22302	24-A-13D	6/17/16	Yes	36 X 24pole barn equipment storage
Snapp, Michael S	2029 Triple J Road Berryville, VA 22611	12-A-40E	10/31/16	Yes	Run-in Shed-Ag

APPENDIX B – 2016 ADOPTED TEXT AMENDMENTS

**ZONING ORDINANCE TEXT AMENDMENT (TA-16-01)
Public Outdoor Recreation Facility Lighting
(Adopted by the Board of Supervisors on March 15, 2016)**

Description:

Proposed text amendment to amend §6-H-11, Outdoor Lighting Standards, of the Zoning Ordinance. The purpose of the amendment is to establish a new category for public outdoor recreation facility lighting including new lighting plan submission and design criteria requirements.

Zoning Ordinance Amendment Text (changes shown in bold italics with strikethroughs where necessary):

6-H-11 Outdoor Lighting Standards

The purpose and intent of this section is to establish outdoor lighting standards that reduce the impacts of glare, light trespass, and over-lighting, promote safety and security and encourage energy conservation.

6-H-11-a General Outdoor Lighting Standards

1. ***Requirements for lighting fixtures; maximum installation height.***
 - a. All exterior light fixtures shall be a full cut-off type. Such light fixtures shall have flat cut-off lenses. The lenses of lights mounted into eaves or canopies shall be mounted so as to be flush or recessed. The direct light from exterior light fixture elements shall not be visible off the subject property.
 - b. No exterior light fixture shall be installed at a height greater than 25 feet above finished grade as measured from the bottom of the fixture.
 - c. ***This section shall not apply to the installation of public outdoor recreational lighting as set forth in Subsection 6 below.***
2. Flashing, revolving, intermittent, or high intensity beams used for exterior lighting shall be prohibited.
3. Up-cast lighting used to illuminate flags, signs, landscaping, buildings, or other objects and structures shall have directional control shields to prevent stray lighting and to ensure that no light source is visible from or causes glare on public right-of-ways or adjacent properties and shall be limited to 150 watts or less standard incandescent light elements or equivalent brightness (defined as 2500 lumens).

4. All exterior lighting shall be oriented not to direct glare or excessive illumination on streets in a manner that may distract or interfere with the vision of drivers on such roads and streets.
5. All canopy lighting shall be recessed and flush mounted. That portion of the canopy façade not included in the sign area shall not be illuminated.
6. ***Public outdoor recreational facility lighting.***
 - a. ***In addition to the general requirements of Subsection 7 below, photometric plans for public outdoor recreational facility lighting shall conform to the requirements set forth in the most current edition of the Illuminating Engineering Society of North America (IESNA) RP-6 Recommended Practice for Sports and Recreational Area Lighting and the IESNA Lighting Handbook. Appropriate lighting criteria shall be selected based on the class of play of the facility and participants as defined by the IESNA.***
 - b. ***For the purposes of this subsection, poles for the mounting of lighting fixtures shall be exempt from minimum setback requirements.***
 - c. ***Event hours – All events shall be scheduled so as to complete all activity before or as near to 11:00 p.m. as practical, but under no circumstances shall any illumination of the playing field, court, or track be permitted after 11:00 p.m. except to conclude an event that was reasonably scheduled to conclude prior to 11:00 p.m.***
 - d. ***Lighting fixtures shall be installed to meet the criteria of a full cutoff fixture and shall include internal and/or external glare-control louvers.***
 - e. ***Initial lighting levels shall not exceed the target levels specified by the IESNA by more than 30% to account for light loss factors such as lamp lumen depreciation and luminaire dirt depreciation.***
7. Photometric Plan Requirements
 - a. A photometric lighting plan shall be submitted and approved in conjunction with any required site plan. The photometric lighting plan shall be certified by the National Council on Qualifications for the Lighting Professions (NCQLP), or a **Virginia** licensed professional engineer, or architect.
 - b. All such plans shall include the following:
 - (1) Plans indicating the location on the premises of all lighting fixtures, both proposed and existing on the site, including a schematic layout of proposed outdoor lighting fixture locations that demonstrate adequate intensities and uniformity, and light coverage resulting from the proposed light layout.
 - (2) Description of all lighting fixtures, both proposed and existing, which shall include but are not limited to catalog cuts and illustrations by

manufactures that describes the equipment, including lamp types, wattage and initial lumen outputs, glare control devices, lamps, proposed placement of all fixtures, including engineering detail of fixtures, manufacturer, model and installation of same.

- (3) Photometric data, such as that furnished by manufacturers, or similar, showing the angle cut-off light emissions and glare control devices.
- (4) Lighting levels for exterior lighting, *except for public outdoor recreational facility lighting described in Subsection 6*, shall not exceed the following standards:
 - (a) 2.5 foot-candles for parking lots;
 - (b) 5 foot-candles at entrances from local rural/urban road entrances;
 - (c) 10 foot-candles along fronts of buildings, at loading docks, and at entrances from primary highways and rural/urban arterials and collectors;
 - (d) A uniformity ratio of 4:1 shall be provided across all parking lots, travelways, and private/public streets and roads. The project site shall be modeled with all lighting (building, canopy, parking, etc.) in operation.
 - (e) Lighting levels shall not exceed 0.2 foot-candles at any common property line.
 - (f) The first three measurements shall be made at the ground surface. The fourth measurement shall be made on a vertical face with the property line at five feet above the ground.

c. Field verification of installation required. Upon completion of lighting installation, the applicant shall provide written certification that the lighting is installed and operates in conformance with the approved photometric plan and the provisions of this ordinance.

8. Lighting Definitions

- a. Candela – The system of luminous intensity. One candela is one lumen per candle (steradian).
- b. Foot-Candle – A measure of light falling on a surface. One foot-candle is equal to the amount of light generated by one candle shining on one square foot surface located one foot away. Foot-candle measurements shall be made with a photometric light meter with a specified horizontal orientation.
- c. Foot-Candle (Average Maintained) – The average of a number of points of foot-candle calculations or foot-candle readings in a given area which have been adjusted to account for maintenance which includes luminaire dirt depreciation and lamp lumen depreciation.
- d. Glare – The sensation produced by a bright source within the visual field that is sufficiently brighter than the level to which the eyes are adapted to cause

annoyance, discomfort, or loss in visual performance and visibility. The magnitude of glare depends on such factors as the size, position, brightness of the source, and on the brightness level to which the eyes are adapted.

- e. Lighting Fixture – A complete lighting unit consisting of the lamp, lens, optical reflector, housing and electrical components necessary for ignition and control of the lamp, which may include ballast started and/or photo control.
- f. Lighting fixture, full cut-off – A lighting fixture from which a luminaire has zero candela intensity occurring at or above an angle of 90° above nadir.
- g. Light fixture, recessed canopy – An outdoor lighting fixture recessed into a canopy ceiling so that the light source is either completely flush or recessed within the underside of the canopy.
- h. Light Trespass – Unwanted light going beyond the property line and spilling over onto the adjacent or neighboring property. It can also represent the direct light (glare) that reduces a person's vision or ability to see.
- i. Luminaire – A complete lighting unit consisting of a lamp or lamps and the parts designed to distribute the light, to position and protect the lamp(s), and to connect the lamp(s) to the power supply.
- j. Nadir – The angle pointing directly downward from the luminaire.
- k. Public outdoor recreational facility lighting – Lighting fixtures and mounting structures designed to provide permanent outdoor lighting for public recreational and athletic fields and facilities, owned and/or operated by a unit of Federal, State, or local government or by the Clarke County Public Schools.***

ZONING ORDINANCE TEXT AMENDMENT (TA-16-02)
Streambank Protection Regulations
(Adopted by the Board of Supervisors on March 15, 2016)

Description:

Proposed text amendment to §3-E-1, Flood Plain District (FP), and §3-E-5, Stream Protection Overlay District, of the Zoning Ordinance. The purpose of the amendment is to establish construction standards and regulations for the siting of boat landings, boat ramps, docks, decks, stairs, and similar structures along perennial streams including the Shenandoah River. The amendment also clarifies current ordinance language including referencing County Septic Ordinance regulations for the siting of portable privies and linking of complementary provisions in both sections.

Zoning Ordinance Amendment Text (changes shown in bold italics with strikethroughs where necessary):

3-E SCHEDULE OF OVERLAY DISTRICT REGULATIONS
(7/17/07)

3-E-1 Flood Plain District (FP)

3-E-1-b Permit and Application Requirements

(5/19/87)
(4/20/93)
(10/18/94)
(6/20/00)

1. All uses, activities, and development occurring within any Flood Plain District shall be undertaken only upon the issuance of property zoning and building permits. Such development shall be undertaken only in strict compliance with the provisions of the Ordinance and with all other applicable codes and ordinances, as amended and the Clarke County Subdivision Regulations. Prior to the issuance of any such permit, the Zoning ~~Officer~~ **Administrator** shall require all applications to include compliance with all applicable state and federal laws.
2. All zoning and building permit application for development within the Flood Plain District shall incorporate the following information:
 - a. For structures to be elevated, the elevation of the lowest floor (including basement).
 - b. For structures to be flood-proofed (non-residential only), the elevation to which the structure will be flood-proofed.
 - c. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) that exceed five acres or fifty lots, whichever is the lesser.

d. Any other requirements as set forth in this section or in §3-E-5, Stream Protection Overlay District (SP).

3. Any encroachments, including fill, new construction, substantial improvements and other developments is prohibited unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge.
4. The placement of manufactured homes (mobile homes) is prohibited, except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation, and encroachment standards are met.

3-E-1-c Permitted Uses (Exceptions) in the Floodway District

(5/19/87) The following uses and activities are permitted provided that they are in compliance with the provisions of the underlying area and are not prohibited by any other ordinance and provided that they do not require structures, fill, or storage of materials and equipment:

1. Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
2. Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, **boat launching and swimming areas**, horseback riding and hiking trails, wildlife and nature preserves, game farms, fish hatcheries, trap and skeet game ranges, and hunting and fishing areas.
3. Accessory residential uses, such as yard areas, gardens, play areas, and pervious loading areas.
4. Accessory industrial and commercial uses, such as yard areas, pervious parking and loading areas, **airport landing strips**, etc.

3-E-1-d Use Regulations in the Flood Plain District

(5/19/87) In the flood plain district the following provisions shall apply:

- (4/20/93) 1. Under no circumstances shall any proposed use, activity, and/or
- (10/18/94) development adversely affect the capacity of the channels or floodways of
- (6/20/00) any watercourse, drainage ditch, or any other drainage facility or system.
- (10/18/11)

2. In riverine situations, adjacent communities and the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) shall be notified prior to any alteration or relocation of a watercourse, and copies of such notifications shall be submitted to FEMA.
3. Uses and Structures Prohibited in the Flood Plain District:
 - a. Structures used for residential or non-residential use, either temporary or permanent, shall not be permitted in the Flood Plain District **except as set forth in subsection 4 below.**
 - b. Recreational vehicles shall not be located, within 100 feet of the Shenandoah River, from January 1 through March 31 of any year. ~~A truck camper or cap shall not be removed from its transporting vehicle nor shall wheels be removed from a trailer, within 100 feet of the Shenandoah River, at any time of the year.~~ **A truck camper or cap, located within 100 feet of the Shenandoah River, shall not be removed from its transporting vehicle nor shall wheels be removed from a trailer or recreational vehicle at any time of the year.**
 - c. There shall be no **land** disturbance of any kind within 100 feet of the Shenandoah River except as provided in Section 3-E-5, Stream Protection Overlay District.
4. The following uses may be permitted, with issuance of a Zoning and/or Building Permit, in the Flood Plain District limited by the regulations imposed by this section, the underlying zoning district, and the Uniform Statewide Building Code:
 - a. Recreational Vehicles located in the Flood Plain District between shall meet the following minimum requirements:
 - (1) be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions; or
 - (2) meet all the requirements for manufactured homes in this ordinance and the Uniform Statewide Building Code.
 - b. Agricultural uses which do not include utilization of structures with an aggregate floor area of more than 500 square feet. However, no structure for such uses shall be allowed within 100 feet of the Shenandoah River.
 - c. Recreational uses limited to parks, playgrounds, golf courses, driving ranges, ~~boat landings, docks,~~ picnic grounds, and transient amusement enterprises, provided such facilities are not usable for human

habitation.

(1) Structures with walls related to such uses shall not exceed an aggregate floor area of five hundred (500) square feet per parcel or have less than one hundred and two hundred (200) square feet. Such structures shall be set back at least 100 feet from the Shenandoah River.

(2) Structures without walls related to such uses shall not exceed an aggregated floor area of 1500 square feet per parcel or have less than 200 square feet. Such structures' roof framing shall be at least one foot above the 100-year flood elevation; however, the structures' height shall not be more than 15 feet above grade. Such structures shall be set back at least 500 feet from the Shenandoah River.

d. Accessory structures not more than 500 square feet or less than 200 square feet in floor area ~~to include~~ **limited to** roadside and park stands for the sale of food, fruit and vegetables, fishing bait, and boat rental, provided such facilities are not usable for human habitation. However, no structure for such uses shall be allowed within 100 feet of the Shenandoah River.

e. Construction of boat ramps, boat landings, docks (permanent or floating), and similar structures shall meet the requirements set forth in §3-E-5, Stream Protection Overlay District.

f. Siting of portable privies shall meet the requirements of the Clarke County Septic Ordinance (Chapter 143) and §3-E-5, Stream Protection Overlay District.

3-E-5

Stream Protection Overlay District (SP)

3-E-5-d

The following types of development shall be allowed in a stream buffer if allowed by the Zoning Ordinance and provided that the requirements of this section are satisfied:

1. A building or structure that existed as of 1 January 2000 may continue at such location.
2. However, any expansion or enlargement of such structure may not encroach upon the stream buffer more than the encroachment of the existing structure.
3. On-site or regional stormwater management facilities and temporary erosion and sediment control measures, provided that:
 - a. To the extent practical, as determined by the Natural Resource Planner, the location of such facilities shall be outside of the stream buffer;

- b. No more land shall be disturbed than is necessary to provide for construction and maintenance of the facility, as determined by the Natural Resource Planner;
 - c. The facilities are designed and constructed so as to minimize impacts to the functional value of the stream buffer and to protect water quality; and
4. ~~Water-dependent facilities;~~ water wells; passive recreation access, such as pedestrian trails and bicycle paths; historic preservation; archeological activities; provided that all applicable federal, state and local permits are obtained.
- 5. Temporary siting of portable privies is allowed provided that they meet all requirements of the Clarke County Septic Ordinance and §3-E-1, Flood Plain District.**

3-E-5-e

Types of development in a stream buffer that may be authorized by the Natural Resource Planner in the circumstances described below, provided that a mitigation plan is submitted and approved pursuant to section 3-E-5-f:

- 1. a lake, pond, or ecological/wetland restoration project;
 - 2. construction and maintenance of a driveway or roadway, if the Natural Resource Planner determines that the stream buffer would prohibit reasonable access to a portion of the lot which is necessary in order for the owner to have a reasonable use of the lot;
 - 3. construction, installation and maintenance of water and sewer facilities or sewage disposal systems, on parcels recorded before 1 January 2000 if the Natural Resource Planner determines that the stream buffer would prohibit the practical development of such facilities or systems;
 - 4. construction of a structure, on parcels recorded before 1 January 2000, if the Natural Resource Planner determines that the stream buffer would result in the loss of a building site, and there are no other available building sites outside the stream buffer on the parcel.
- 5. construction of boat ramps, boat landings, docks (permanent or floating) or similar structures provided that:**
- a. The property owner obtains any required State or Federal permits and provides copies of approved permits to the Natural Resources Planner prior to construction, if applicable;**
 - b. Land disturbance and construction plans satisfy all requirements of 3-E-1, Flood Plain District; and**
 - c. Land disturbance and construction plans are consistent with criteria for streambank construction listed in Subsections 6 and 7 below.**

6. Decks, docks and stairs; site and construction criteria. In the Stream Protection Overlay District, no stairways, decks, docks or other structures shall be constructed until a permit is obtained from the Natural Resource Planner. Stairways and decks shall meet the following design requirements:

- a. Stairways shall not exceed four feet in width. Wider stairs may be used for public open-space recreational properties.**
- b. Landings for stairs or decks shall not exceed 32 square feet in area.**
- c. Permanent canopies or roofs are not allowed on stairways, decks, or docks.**
- d. Stairways, docks, or decks may be either constructed above the ground on posts or pilings or placed into the ground provided they are designed and built in a manner that ensures control of soil erosion.**
- e. Stairways, docks or decks shall be located in the most visually inconspicuous portion of lots, as viewed from the river assuming summer leaf-on conditions, whenever practical.**

7. Private ramps: site and construction criteria. In the Stream Protection Overlay District, no private ramps shall be constructed until a permit is obtained from the Natural Resources Planner. Private ramps shall meet the following design requirements:

- a. The site can support a ramp without pilings, dredging, or other special site preparations.**
- b. Boat ramps with vehicular access shall have slopes no greater than 15% and no less than 12%.**
- c. Ramps shall be constructed of gravel, natural rock, steel matting, or other durable inorganic material not exceeding 7 inches in thickness.**
- d. Ramps shall be no more than 12 feet wide along the shore and 10 feet waterward of the shoreline or into a water depth of 4 feet, whichever is less.**
- e. Excavation of no more than 5 cubic yards (to create a suitable slope and launching area) and placement of no more than 5 cubic yards of crushed rock, gravel, clean sand, or small stone are allowed to provide a stable base or maintain use of the ramp.**
- f. Boat ramp construction requires erosion-control measures such as a floating silt fence to limit the spread of sediment stirred up by construction.**

3-E-5-f

An owner who seeks to develop in a stream buffer pursuant to section 3-E-5-e shall submit to the Natural Resource Planner for review and approval a mitigation plan as provided herein:

1. The owner shall submit a mitigation plan that satisfies the applicable requirements of this section, **a required** processing fees ~~of \$100~~ and a certification stating that all requirements of the approved plan will be complied with.
2. The mitigation plan shall be reviewed by the Natural Resource Planner to determine whether it complies with the requirements of this section and all other requirements of this article. The Natural Resource Planner shall approve or disapprove a mitigation plan within thirty days that a complete plan was

accepted for review. The decision shall be in writing and shall be communicated to the owner. If the plan is disapproved, the reasons for such disapproval shall be stated in the decision.

3. Each mitigation plan shall:
 - a. identify the impacts of proposed development on water quality and lands within the stream buffer;
 - b. ensure that, where development does take place within a stream buffer, it will be located on those portions of a site and in a manner that will be least disruptive to the natural functions of the stream buffer;
 - c. demonstrate and assure that development will be conducted using best management practices;
specify mitigation that will address water quality and stream buffer impacts;
and;
 - d. contain all other information requested by the Natural Resource Planner.
4. Each mitigation plan shall be evaluated by the Natural Resource Planner based on the following criteria:
 - a. whether all reasonable alternatives to development in the stream buffer have been explored and exhausted;
 - b. whether the development in the stream buffer is the minimum necessary and is conducted in a manner that will be least disruptive to the natural functions of the stream buffer; and
 - c. whether best management practices will effectively mitigate adverse impacts from the encroachment on the stream buffer and its natural functions.

ZONING ORDINANCE TEXT AMENDMENT (TA-16-03)
Addition of Farm Distilleries as a Permitted Use in the AOC and FOC Districts;
Use of Waterworks by Farm Breweries, Farm Wineries, and Farm Distilleries
(Adopted by the Board of Supervisors on October 18, 2016)

Description:

Proposed text amendment to amend §3-A-1-a, Agricultural-Open Space-Conservation District (AOC); §3-A-2-a, Forestal-Open Space Conservation District (FOC); §3-A-1-e and §3-A-2-e, Installation of Waterworks or Sewerage System & Treatment Works; §3-C, Supplementary Regulations; and §9-B, Definitions, of the Zoning Ordinance. The amendment serves two purposes:

1. To create a new permitted use, “farm distilleries,” in the AOC and FOC Districts, and to define and establish supplementary regulations for the use. Language is included to require zoning approval and issuance of a business license prior to operating a farm distillery including provision of approved private well and onsite septic system permits issued by the Virginia Department of Health.
2. To allow the use of a waterworks by farm breweries, farm wineries, and farm distilleries in the AOC and FOC Districts. This allowance is necessary in order to avoid potential conflicts with Code of Virginia regulations on these uses. The amendment also revises the definition of “waterworks” for clarification purposes.

Zoning Ordinance Amendment Text (proposed changes in bold italics with strikethroughs where necessary):

FARM DISTILLERIES

3-A-1 Agricultural-Open Space-Conservation District -- AOC

- 3-A-1-a Permitted Uses and Structures
1. Principal Uses and Structures
 - f. Wineries, Farm
 - g. Breweries, Farm
 - h. Distilleries, Farm***

3-A-2 Forestal-Open Space-Conservation District -- FOC

- 3-A-2-a Permitted Uses and Structures (FOC District)
1. Principal Uses and Structures
 - f. Wineries, Farm
 - g. Breweries, Farm
 - h. Distilleries, Farm***

3-C Supplementary Regulations

3-C-2-pp Distilleries, Farm

1. **Permitted Activities.** *A Farm Distillery may include the following activities:*
 - a. *The production and harvesting of agricultural products and the manufacturing of alcoholic beverages other than wine or beer;*
 - b. *The on-premises sale, tasting, or consumption of alcoholic beverages other than wine or beer during regular business hours in accordance with a contract between a distiller and the Alcoholic Beverage Control Board pursuant to the provisions of Subsection D of Code of Virginia §4.1-119;*
 - c. *The sale and shipment of alcoholic beverages other than wine or beer to licensed wholesalers and out-of-state purchasers in accordance with Title 4.1, regulations of the Alcoholic Beverage Control Board, and Federal law;*
 - d. *The storage and warehousing of alcoholic beverages other than wine or beer in accordance with Title 4.1, regulations of the Alcoholic Beverage Control Board, and Federal law; or*
 - e. *The sale of items related to alcoholic beverages other than wine or beer that are incidental to the sale of such alcoholic beverages.*
2. **Zoning Approval for Farm Distilleries.** *Prior to commencing operations, the owner of a farm distillery shall obtain zoning approval from the Department of Planning and a business license from the Commissioner of Revenue. As a prerequisite for zoning approval, the owner shall provide copies of approved private well and onsite septic system permits issued by the Virginia Department of Health for both domestic and process operations.*
3. **Special Events Conducted at Farm Distilleries.** *The owner or occupant of the property shall obtain such permit as required by Clarke County Code Chapter 57 (unless exempt under the provisions of §57.3.2) for an activity/event that is not primarily the on-premises sale, tasting, or consumption of alcoholic beverages other than wine or beer during regular business hours within the normal course of business of the farm distillery, but which constitutes a Special Event as defined in §57.2.*

9-B Definitions

DISTILLERY, FARM: *An establishment that produces alcoholic beverages other than wine or beer and is licensed as a limited distiller by the Commonwealth of Virginia.*

WATERWORKS REGULATIONS

Zoning Ordinance Amendment Text (proposed changes in bold italics with strikethroughs where necessary):

§3-A-1-e, Installation of Waterworks or Sewerage System & Treatment Works

No use in this District commencing operation after ~~July 1~~, 1997 shall result in the installation of Waterworks or Sewerage System & Treatment Works. ***The prohibition on Waterworks usage shall not apply to farm breweries, farm wineries, and farm distilleries allowed as permitted uses by §3-A-1-a-1.***

§3-A-2-e, Installation of Waterworks or Sewerage System & Treatment Works

No use in this District commencing operation after July 1, 1997 shall result in the installation of Waterworks or Sewerage System & Treatment Works. ***The prohibition on Waterworks usage shall not apply to farm breweries, farm wineries, and farm distilleries allowed as permitted uses by §3-A-2-a-1.***

9-B Definitions

§9-B-193 Waterworks

A system that serves piped water for drinking or domestic use ***for:***

- a. the public; ***or***
- b. at least 15 connections; or
- c. an average of 25 individuals for at least 60 days out of the year, ~~***and.***~~

A waterworks shall include all structures, equipment, and appurtenances used in the storage, collection, purification, treatment, and distribution of pure water (except the piping and fixtures inside the building where such water is delivered).

ZONING AND SUBDIVISION ORDINANCE TEXT AMENDMENT (TA-16-04)
Amend Stormwater Management Regulations
(Adopted by the Board of Supervisors on January 17, 2017)

Proposed amendment text is included in the tables below. Changes are shown in red italics with strikethroughs where necessary:

ZONING ORDINANCE

Section	Title	Current	Proposed
3-A-8-g-5-b-3	BC District, Additional Regulations, Site Plan	b.Site plans shall include provisions for: (1) adequate public facilities, (2) development phasing, (3) stormwater management facilities to address the ultimate development coverage within the district, (4) lighting and signing, (5) building placement and lot configuration, and (6) other special site features and land use considerations deemed necessary to serve the district.	b.Site plans shall include provisions for: (1) adequate public facilities, (2) development phasing, (3) stormwater management facilities <i>that comply with State stormwater management regulations to address the ultimate development coverage within the district</i> , (4) lighting and signing, (5) building placement and lot configuration, and (6) other special site features and land use considerations deemed necessary to serve the district.
3-A-9-g-5-b-3	B District, Additional Regulations, Site Plan	b.Site plans shall include provisions for: (1) adequate public facilities, (2) development phasing, (3) stormwater management facilities to address the ultimate development coverage within the district, (4) lighting and signing, (5) building placement and lot configuration, and (6) other special site features and land use considerations deemed necessary to serve the district.	b.Site plans shall include provisions for: (1) adequate public facilities, (2) development phasing, (3) stormwater management facilities <i>that comply with State stormwater management regulations to address the ultimate development coverage within the district</i> , (4) lighting and signing, (5) building placement and lot configuration, and (6) other special site features and land use considerations deemed necessary to serve the district.
3-A-10-g-4-e	BP District, Site Plans and Special Use Permits	e. Site plans for development in BP Business Park Districts shall include provisions for (a) adequate public facilities, (b) development phasing, (c) stormwater management facilities to address the ultimate development coverage within the district, (d) lighting and signing, and (e) other special site features and land use considerations deemed necessary to serve the industrial district.	e. Site plans for development in BP Business Park Districts shall include provisions for (a) adequate public facilities, (b) development phasing, (c) stormwater management facilities <i>that comply with State stormwater management regulations to address the ultimate development coverage within the district</i> , (d) lighting and signing, and (e) other special site features and land use considerations deemed necessary to serve the industrial district.

3-E-1-e	Design Criteria for Utilities and Facilities in Flood Plain Districts	3. All storm drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The proposed system shall insure drainage away from buildings and on-site waste disposal sites. The County may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.	3. All stormwater drainage facilities shall <i>comply with State stormwater management regulations be designed to convey the flow of surface waters without damage to persons or property. The proposed system shall insure drainage away from buildings and on-site waste disposal sites. The County may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge of excess runoff onto adjacent properties.</i>
4-F	Drainage-Stormwater Management	When required by the Planning Commission or the Virginia Department of Transportation, drainage systems shall be provided by means of culverts, ditches, catch basins, cross drains, curbs and gutters, and any other facilities that are necessary to provide adequate drainage and disposal of surface and storm waters from or across all streets and adjoining properties. Appropriate drainage easements shall also be provided as required by the Planning Commission, Board of Supervisors, and/or the Virginia Department of Highways and Transportation.	When required by the Planning Commission or the Virginia Department of Transportation <i>or by State stormwater management regulations, drainage stormwater management</i> systems shall be provided by means of culverts, ditches, catch basins, cross drains, curbs and gutters, and any other facilities that are necessary to provide adequate drainage and disposal management of surface and storm waters from or across all streets and adjoining properties. <i>Stormwater management features shall comply with State stormwater management regulations.</i> Appropriate drainage easements shall also be provided as required by the Planning Commission, Board of Supervisors, and/or the Virginia Department of Highways and Transportation.

6-G-16	Site Development Plans; Contents	Provision for the adequate disposition of natural and storm water indicating the location, sizes, types, and grades of ditches, catch basins, detention ponds (showing 10-year and 100-year elevations), and pipes and connections to existing drainage systems. Plans shall be in accordance with the Berryville Stormwater System Master Plan.	<i>For projects located in the Berryville Annexation Area, P</i> provision for the adequate disposition of natural and storm water indicating the location, sizes, types, and grades of ditches, catch basins, detention ponds (showing 10-year and 100-year elevations), and pipes and connections to existing drainage systems. Plans shall be in accordance with the Berryville Stormwater System Master Plan.
6-H-8	Site Development Plans; Improvements and Minimum Standards; Stormwater Management	Stormwater management facilities shall be provided in conjunction with land development activities, which require the submission of a Site Plan. An evaluation shall be performed for each proposed land development project in accord with Clarke County Code Chapter 154. Stormwater Management.	Stormwater management facilities shall be provided in conjunction with land development activities, which require the submission of a Site Plan. <i>All stormwater management facilities shall comply with State stormwater management regulations. A copy of the permit or approval letter from the State stormwater management program authority shall be provided as a condition of final site plan approval. An evaluation shall be performed for each proposed land development project in accord with Clarke County Code Chapter 154. Stormwater Management.</i>
6-H-15-e-4	Site Development Plans; Sinkhole and Karst Features; Requirements and Restrictions	Stormwater runoff shall be addressed as outlined in the Chesapeake Stormwater Network (CSN) Technical Bulletin No.1 “Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed” Version 2.	Stormwater runoff <i>management facilities shall comply with State stormwater management regulations for Karst Terrain be addressed as outlined in the Chesapeake Stormwater Network (CSN) Technical Bulletin No.1 “Stormwater Design Guidelines for Karst Terrain in the Chesapeake Bay Watershed” Version 2.</i>

**SUBDIVISION
ORDINANCE**

Section	Title	Current	Proposed
4-G-2-b-3	Action on Preliminary Plat	Has adequate drainage. In making this determination, it shall consider whether or not the surface or subsurface water retention and/or runoff is such that it constitutes a danger to the structural integrity of proposed dwelling units or other proposed on site structures, and whether or not proposed site grading and development will create harmful or damaging effects from erosion and siltation on downhill or downstream land.	<i>Complies with all State stormwater management regulations. Has adequate drainage. In making this determination, it shall consider whether or not the surface or subsurface water retention and/or runoff is such that it constitutes a danger to the structural integrity of proposed dwelling units or other proposed on site structures, and whether or not proposed site grading and development will create harmful or damaging effects from erosion and siltation on downhill or downstream land.</i>
4-H-1-a	Submission of Plans and Profiles	Five copies of the complete Construction Plans and Profiles, including storm sewer design computations and storm water inlet computations.	Five copies of the complete Construction Plans and Profiles, including storm sewer design computations and storm water inlet computations. <i>Where applicable, a copy of the permit or approval letter from the State stormwater management program authority shall be provided as a condition of record plat approval.</i>
8-I	Drainage	Subdivisions shall be protected from flood hazard and inundation by storm water, springs, and other surface waters. The design and construction of drainage facilities shall be such that all water courses traversing the subdivision and water emanating from outside and/or within the subdivision will be carried through and off the subdivision without creating an adverse drainage condition to roadway, residential sites, or residences to be installed within the tract, and without any injury to roadways, residential sites, residences, structures, farmland, or open space abutting or in the vicinity of the tract. Stormwater Management shall be designed as described in the Clarke County Code Chapter 154.	Subdivisions shall be protected from flood hazard and inundation by storm water, springs, and other surface waters. The design and construction of drainage facilities shall be such that all water courses traversing the subdivision and water emanating from outside and/or within the subdivision will be carried through and off the subdivision without creating an adverse drainage condition to roadway, residential sites, or residences to be installed within the tract, and without any injury to roadways, residential sites, residences, structures, farmland, or open space abutting or in the vicinity of the tract. Stormwater Management shall be designed as <i>required by State stormwater management regulations described in the Clarke County Code Chapter 154.</i>

8-J-2-c-15	Design Standards (private access easements)	storm drain culverts shall meet VDOT standards; and	<i>stormwater management features, including storm drain culverts, shall meet VDOT standards and State stormwater management regulations, if applicable ; and</i>
11-A-6	Improvements; <i>Drainage Stormwater Management</i>	When required by the Planning Commission or the Virginia Department of Transportation, drainage systems shall be provided by means of culverts, ditches, catch basins, cross drains, curbs and gutters, and any other facilities that are necessary to provide adequate drainage and disposal of surface and storm waters from or across all streets and adjoining properties. Appropriate drainage easements shall also be provided as required by the Planning Commission, Board of Supervisors, and/or the Virginia Department of Highways and Transportation.	When required by the Planning Commission or the Virginia Department of Transportation <i>or by State stormwater management regulations, drainage stormwater management</i> systems shall be provided by means of culverts, ditches, catch basins, cross drains, curbs and gutters, and any other facilities that are necessary to provide adequate drainage and disposal <i>management</i> of surface and storm waters from or across all streets and adjoining properties. <i>Stormwater management features shall comply with State stormwater management regulations.</i> Appropriate drainage easements shall also be provided as required by the Planning Commission, Board of Supervisors, and/or the Virginia Department of Highways and Transportation.