

**ZONING AND SUBDIVISION ORDINANCE TEXT AMENDMENT (TA-22-05)  
Waterworks and Sewerage System and Treatment Works Regulations  
November 22, 2022 Board of Supervisors Meeting – SCHEDULE PUBLIC HEARING  
STAFF REPORT – Department of Planning**

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The purpose of this staff report is to provide information to the Planning Commission and Board of Supervisors to assist them in reviewing this proposed ordinance amendment. It may be useful to members of the general public interested in this proposed amendment.  
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**Description:**

Proposed text amendment to amend Code of Clarke County Chapter 200, Zoning Ordinance (Article I) Sections 7.4.5 (Waterworks and Sewerage System and Treatment Works), 7.5 (RR District Design Standards and Development Regulations), and 7.2.3B (Public Water and Public Sewer Systems); and Subdivision Ordinance (Article II) Sections 4.5.4A (Public Utilities) and 4.5.6 (Private Wells and Onsite Sewage Disposal Systems). The purpose is to remove the prohibition on the use of a waterworks or a sewerage system and treatment works for uses in the Agricultural-Open Space-Conservation (AOC) and Forestal-Open Space-Conservation (FOC) Districts. Additional changes include:

- Prohibiting uses and new subdivisions from being served by public water and public sewer without approval by the Board of Supervisors;
- Clarifying that private wells and onsite sewage disposal systems shall be designed in accordance with Chapter 184 (Wells), Chapter 143 (Septic Systems), Virginia Department of Health regulations, and any other applicable regulations; and
- Requiring all public water distribution and public sewer collection systems to be designed to meet or exceed the regulations and specifications of the Clarke County Sanitary Authority and/or any other applicable federal, state, or local agency.

**Requested Action:**

Schedule Public Hearing for the December 20, 2022 Board of Supervisors meeting.

**Staff Analysis:**

Zoning Ordinance Section 7.4.5 (“Waterworks and Sewerage System and Treatment Works”) prohibits uses in the AOC and FOC District that began after July 1, 1997 from using a “waterworks” or a “sewerage system and treatment works.” The original purpose for evaluating Section 7.4.5 was to determine whether this prohibition would apply to the potential future extension of public water and public sewer from Frederick County to AOC-zoned properties in the Double Tollgate area. The evaluation was expanded to determine whether the section conflicts with certain AOC and FOC District uses that operate a “waterworks” per Virginia Department of Health (VDH) requirements, as well as the need for the section in light of recent updates to the County’s Septic Ordinance (County Code Chapter 143). Below is background information on Section 7.4.5 and an analysis of each issue addressed in the development of this text amendment.

## **Background**

A waterworks is defined in Section 7.4.5 as:

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

- *The public, or*
- *At least 15 connections, or*
- *An average of 25 individuals for at least 60 days out of the year.*

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

A sewerage system is defined as:

*Pipelines or conduits, pumping stations, and force mains and all other construction, devices and appliances appurtenant thereto, used for the collection and conveyance of sewage to a treatment works or point of ultimate disposal.*

A treatment works is defined as:

*Any device or system used in the storage, treatment, disposal or reclamation of sewage or combinations of sewage and industrial wastes, including, but not limited to, pumping, power and other equipment and appurtenances, septic tanks and any works (including land) as components of a mass drainfield, that are or will be:*

- *An integral part of the treatment process or*
- *Used for ultimate disposal or residues or effluent resulting from such treatment.*

*This term does not include subsurface drainfields smaller than mass drainfields. A mass drainfield is a subsurface drainfield that has loading rates in excess of 1,200 gallons per day for any acre and consists of more than 2,000 linear feet of percolation piping.*

These regulations were added to the Zoning Ordinance in 1997 however there is limited background information in the form of staff reports or discussion in meeting minutes regarding the specific reasons for developing the regulations. Some likely reasons based on the County's land use philosophy include:

1. To prevent AOC and FOC uses from connecting to public water and public sewer.
2. To limit the scope of some AOC and FOC uses by capping the volume of usage for a private well and by capping the maximum size of an onsite sewage disposal system that can be installed – including preventing the use of “mass drainfields.”
3. To prevent the development of new privately-owned/operated water systems (such as the private system that serves Shenandoah Retreat) and new privately-owned/operated sewage treatment systems for AOC and FOC uses.

It should be noted that the State’s definition of waterworks applied by VDH differs from the Zoning Ordinance definition in that a waterworks is a system that serves water for “human consumption” rather than only for “the public.” Some examples of existing AOC and FOC uses on private property that are currently permitted for a “waterworks” by VDH include:

- Berryville Moose Lodge
- Calcagnini Contemplative Center/Georgetown University
- Grafton School
- Keystone Baptist Church
- L’Auberge Provencale
- Northern Virginia Lions Youth Camp
- Shenandoah Retreat (private water system)
- River Park (private water system)
- Watermelon Park

The definitions used by the State for sewerage system and treatment works also differ from the Zoning Ordinance definition with the main difference being the exclusion of language regarding mass drainfields. The State’s definition for a “mass sewage disposal system (“mass drainfield”) also does not include Section 7.4.5’s language that the system also consists of more than 2,000 linear feet of percolation piping.

### **Issues for Discussion**

Below is a summary of the issues evaluated by the Planning Commission’s Ordinance Committee and Staff which resulted in the development of this text amendment.

### **Application of Waterworks Regulations**

As noted above, Section 7.4.5 currently prohibits AOC and FOC uses from operating a waterworks that provides water for drinking and domestic purposes to:

1. The public, OR
2. At least 15 connections, OR
3. An average of 25 individuals for at least 60 days out of the year

This presents a challenge to developing some AOC and FOC uses that propose a public service component in which water is provided – most commonly some form of meal service. The Zoning Ordinance was amended in 2016 specifically to exclude farm wineries, farm breweries, and farm distilleries from the waterworks prohibition as this would make some operations infeasible. There are additional AOC/FOC uses that could be impacted by this prohibition because they may also provide water to customers, participants, or employees. These uses include:

- Home occupation bed-and-breakfast
- Wholesale or retail sale of agricultural products
- Community services facility (special use)
- Minor commercial public assembly (special use)
- Country inn (special use)

- Day care center (special use)
- Campground (special use)
- Churches and other places of worship (special use)
- Community center (special use)
- Private club (special use)
- Summer camp (special use)
- Retail business (special use)

To address this concern, Section 7.4.5 is proposed to be amended to remove the waterworks prohibition for AOC and FOC uses and instead allow VDH to regulate waterworks operations through their permitting processes. New language would be added to require such uses to maintain waterworks approval with VDH in good standing for the life of the use. Failure to do so can be grounds for revocation of zoning approval.

The current language is not clear in regards to shared private water systems as a waterworks serving a community such as the existing systems in Shenandoah Retreat and River Park subdivisions. While it is clear that a waterworks cannot serve water to the public, it also states that a waterworks cannot serve 15 or more connections. One could make the argument that a small subdivision can be served by a private water system by virtue of having less than 15 lots, by not providing water to the public, and by not serving an average of 25 people for at least 60 days out of the year.

To remedy this concern, new language is added to the Subdivision Ordinance to prohibit new AOC and FOC subdivisions from utilizing a private water system constituting a waterworks. Language is also included to ensure that this regulation does not prevent new homes on existing lots from connecting to existing private water systems such as in Shenandoah Retreat and River Park, subject to VDH approval. Similar language is included to prevent new AOC and FOC subdivisions from using a private sewerage system and treatment works.

As an additional amendment, language is added to link to the Well Ordinance (County Code Chapter 184) which governs the construction and use of new wells.

#### Application of Sewerage System and Treatment Works Regulations

In December 2021, the Board of Supervisors adopted significant revisions to the County's onsite sewage disposal system regulations found in County Code Chapter 143. One new provision that was included is a prohibition on the use of mass drainfields throughout the County (Section 143-3D). Previously, the only reference to prohibiting use of mass drainfields was in Section 7.4.5 and its earlier iterations. Chapter 143 also applies the State's definition of "mass sewage disposal system" which does not include reference to the "more than 2,000 linear feet of percolation piping" language in Section 7.4.5.

With the inclusion of this new language in County Code Chapter 143, the current sewerage system and treatment works language in Section 7.4.5 is redundant so it is proposed to be removed in favor of defaulting to the requirements of Chapter 143. New language is added to require all onsite sewage disposal systems to comply with the requirements of Chapter 143. This

change would provide clarification by consolidating all onsite sewage disposal system regulations in Chapter 143 and would link the two ordinances with the new reference.

#### Public Water and Public Sewer Serving AOC and FOC-zoned Lots

One remaining issue for consideration is that if the prohibition on waterworks and sewerage system and treatment works usage in the AOC and FOC Districts is removed, how can extension of public water and public sewer to lots in these districts be controlled. Committee members were concerned that a County property owner with a lot bordering a jurisdictional boundary could obtain public utilities from the adjacent locality through a private deal without County approval. While other bodies of law require governing body approval for a different jurisdiction to extend public utility service into their district, it is important to ensure that this is also reflected in the Zoning and Subdivision Ordinances.

To address this issue, new language is added to prohibit AOC and FOC-zoned properties from being served by public water or public sewer provided by another governing body or entity with approval by the Board of Supervisors. This would include public water and public sewer provided by the Clarke County Sanitary Authority, Town of Berryville, or by an adjacent locality such as Frederick County. There are a few examples in the County of AOC-zoned properties with public water and/or public sewer service, the most notable being properties along West Main Street west of Town of Berryville limits and public water service to properties on Possum Hollow Road where private well issues had to be remedied with water from the Town of Berryville. The proposed language would allow future extensions to AOC or FOC-zoned properties subject to Board of Supervisors approval.

#### Summary of Proposed Text Amendment:

Below is a summary of the proposed text amendment language for both the Zoning and Subdivision Ordinances as recommended by the Ordinances Committee and Staff. The draft text amendment language is included at the end of this report.

#### **Amend Zoning Ordinance Section 7.4.5, Waterworks and Sewerage System and Treatment Works**

- To reflect replacement of current regulations with references to the Well and Septic Ordinances and to new proposed rules regarding public water and public sewage system usage, the title of this section would be changed to “Use of Private Wells and Onsite Sewage Disposal Systems; Use of Public Water and Public Sewer.”
- All current language regarding the prohibition on the use of a waterworks or sewerage system and treatment works for uses in the AOC and FOC Districts commencing operation after July 1, 1997 would be deleted. This includes the County’s definitions of “waterworks” and “sewerage system and treatment works” which both differ from the State’s definitions of these terms.
- A new Subsection A would be added to state that private wells and onsite sewage disposal systems shall be designed in accordance with the Septic Ordinance (Chapter 143), the Well Ordinance (Chapter 184), the regulations of the Virginia Department of

Health, and any other applicable regulations. This would establish necessary cross-references between the Zoning Ordinance and these County Code sections.

- A new Subsection B would be added to state that no use in the AOC or FOC Districts shall be served by public water or public sewer provided by the Town of Berryville, Clarke County Sanitary Authority, or other local governmental entity without approval by the Clarke County Board of Supervisors. This addresses the Ordinance Committee's concern that a landowner could work out a private deal with an adjoining jurisdiction to provide public water and/or public sewer to their property.
- A new Subsection C would be added to state that uses in the AOC and FOC Districts that are required to obtain a permit from the Virginia Department of Health (VDH) to operate a waterworks shall maintain the permit in good standing for the life of the use as a condition of zoning approval.

### **Amend Zoning Ordinance Section 7.5, RR District Design Standards and Development Regulations**

- A new Section 7.5.2 would be added titled "Use of Private Wells and Onsite Sewage Disposal Systems; Use of Public Water and Public Sewer." This section would contain the same language being added to Section 7.4.5. A new Subsection A would establish cross-references to the Septic and Well Ordinances for the RR District that currently do not exist. A new Subsection B would prevent RR-zoned properties from being served by public water and public sewer without approval by the Board of Supervisors. A new Subsection C would be added to state that uses in the RR District that are required to obtain a permit from the Virginia Department of Health (VDH) to operate a waterworks shall maintain the permit in good standing for the life of the use as a condition of zoning approval.

### **Amend Zoning Ordinance Section 7.2.3B, Public Water and Public Sewer Systems**

- A new Subsection 1 would be added to state that no use shall be served by a public water or public sewer system that is not owned and/or operated by a governmental entity authorized to provide such utility service by the Clarke County Board of Supervisors. Similar to language added to the regulations for the AOC, FOC, and RR Districts, this would extend the requirement to all uses requiring a site development plan.
- New language would be added to the current section (renumbered as Subsection 2) to state that all public water and public sewer systems shall be designed to meet or exceed the regulations and specifications of the Clarke County Sanitary Authority and/or any other applicable federal, state, or local agency. This would clarify that all public water and public sewer systems shall be designed to meet the criteria of the local government entities that would be operating and maintaining them. It would include the Town of Berryville and Frederick County for any public water and public sewer systems that they may operate in the County.

**Amend Subdivision Ordinance Section 4.5.4A, Public Utilities**

- A new Subsection 2 would be added stating that no new subdivision established after the adoption date of this text amendment shall be served by a waterworks (as defined by the Virginia Waterworks Regulations) or a sewerage system and treatment works (as defined by the Sewage Handling and Disposal Regulations, Virginia Administrative Code) that is not owned and/or operated by a governmental entity authorized to provide public water and public sewer service by the Clarke County Board of Supervisors. This new language would prohibit new subdivisions from using private shared water systems and onsite sewage disposal systems. It would also emphasize that no local government entity (such as the Town of Berryville or Frederick County) can provide public water or public sewer service to a new subdivision without prior approval by the Clarke County Board of Supervisors.

**Planning Commission Recommendation:**

Following a duly advertised Public Hearing on November 4, 2022, the Commission voted 9-0-2 (Hunt, King absent) to recommend adoption of the proposed text amendment.

**Staff Recommendation:**

Staff has no outstanding concerns with the adoption of this text amendment.

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**History:**

<b>May 6, 2022.</b>	<b>Presented to Commission’s Ordinances Committee for discussion.</b>
<b>September 2, 2022.</b>	<b>Ordinances Committee agreed by consensus to forward issue and Staff’s recommendations to the full Commission for discussion.</b>
<b>October 4, 2022.</b>	<b>Presented to the Planning Commission at their Work Session for initial discussion.</b>
<b>October 7, 2022.</b>	<b>Commission voted 9-0-2 (Staelin absent; Kreider ineligible) to initiate consideration of the text amendment and to schedule Public Hearing for the November 4 Business Meeting.</b>
<b>November 4, 2022.</b>	<b>Commission voted 9-0-2 (Hunt, King absent) to recommend adoption of the text amendment.</b>
<b>November 22, 2022.</b>	<b>Placed on the Board of Supervisors meeting agenda to schedule Public Hearing.</b>

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

## Zoning Ordinance

### 7.4 AOC AND FOC DISTRICT DESIGN STANDARDS AND DEVELOPMENT REGULATIONS

#### *7.4.5 Use of Private Wells and Onsite Sewage Disposal Systems; Use of Public Water and Public Sewer* ~~Waterworks and Sewerage System and Treatment Works~~

- A. *Private wells and onsite sewage disposal systems proposed for use shall be designed in accordance with Code of Clarke County Chapter 143 (Septic Ordinance) and Chapter 184 (Well Ordinance), the regulations of the Virginia Department of Health, and any other applicable regulations.*
- B. *No use in the AOC or FOC Districts shall be served by public water or public sewer provided by the Town of Berryville, Clarke County Sanitary Authority, or other local governmental entity without approval by the Clarke County Board of Supervisors.*
- C. *Uses in the AOC and FOC Districts that are required to obtain a permit from the Virginia Department of Health (VDH) to operate a waterworks (as defined by the Virginia Waterworks Regulations) shall maintain such permit in good standing for the life of the use as a condition of zoning approval.*
- ~~A. Installation of waterworks or sewerage system and treatment works. No use in the AOC or FOC Districts commencing operation after July 1, 1997 shall result in the installation of waterworks or sewerage system and treatment works. The prohibition on waterworks usage shall not apply to farm breweries, farm wineries, and farm distilleries allowed as permitted uses in Section 5.2 (Uses).~~
- ~~B. Definition of waterworks. A waterworks is a system that serves piped water for drinking or domestic use for:~~
- ~~• The public, or~~
  - ~~• At least 15 connections, or~~
  - ~~• An average of 25 individuals for at least 60 days out of the year.~~
- ~~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).~~
- ~~C. Definition of sewerage system and treatment works.~~



- ~~1. **Sewerage System.** Pipelines or conduits, pumping stations and force mains and all other construction, devices and appliances appurtenant thereto, used for the collection and conveyance of sewage to a treatment works or point of ultimate disposal, and~~
- ~~2. **Treatment Works.** Any device or system used in the storage, treatment, disposal or reclamation of sewage or combinations of sewage and industrial wastes, including, but not limited to, pumping, power and other equipment and appurtenances, septic tanks and any works (including land) as components of a mass drainfield, that are or will be~~
  - ~~• An integral part of the treatment process or~~
  - ~~• Used for ultimate disposal or residues or effluent resulting from such treatment.~~

~~This term does not include subsurface drainfields smaller than mass drainfields. A mass drainfield is a subsurface drainfield that has loading rates in excess of 1,200 gallons per day for any acre and consists of more than 2,000 linear feet or percolation piping.~~

## **7.5 RR DISTRICT DESIGN STANDARDS AND DEVELOPMENT REGULATIONS**

### ***7.5.2 Use of Private Wells and Onsite Sewage Disposal Systems; Use of Public Water and Public Sewer***

- A. Private wells and onsite sewage disposal systems proposed for use shall be designed in accordance with Code of Clarke County Chapter 143 (Septic Ordinance) and Chapter 184 (Well Ordinance), the regulations of the Virginia Department of Health, and any other applicable regulations.***
- B. No use in the RR District shall be served by public water or public sewer provided by the Town of Berryville, Clarke County Sanitary Authority, or other local governmental entity without approval by the Clarke County Board of Supervisors.***
- C. Uses in the RR District that are required to obtain a permit from the Virginia Department of Health (VDH) to operate a waterworks (as defined by the Virginia Waterworks Regulations) shall maintain such permit in good standing for the life of the use as a condition of zoning approval.***

## **7.2 SITE DEVELOPMENT PLAN DESIGN STANDARDS AND DEVELOPMENT REGULATIONS**

### **7.2.3 Public Utilities; Use of Private Wells and Onsite Sewage Disposal Systems**

#### **B. Public Water and Public Sewer Systems.**

- 1. No use shall be served by a public water or public sewer system that is not owned and/or operated by a governmental entity authorized to provide such utility service by the Clarke County Board of Supervisors.***

2. All public water distribution and public sewer collection systems shall be designed to accommodate normal and peak demand loads. All such systems shall be designed to meet or exceed the *regulations and specifications of the Clarke County Sanitary authority and/or any other applicable federal, state, or local agency Berryville Area Water and Sewerage Program. Regulations of the Virginia Department of Health and other state agencies shall also be met, as applicable.*

## Subdivision Ordinance

### 4.5 SUBDIVISION AND CONSTRUCTION PLAN DESIGN STANDARDS

#### 4.5.4 Public Utilities and Utility Easements

##### A. Public Utilities.

1. Where public water and/or public sewer facilities are available or required by the Clarke County Zoning Ordinance or the Code of Clarke County, or may be reasonably required by the approval authority in the interest of the public health, safety and general welfare, the service shall be extended to all lots within a subdivision and shall meet *or exceed all the* regulations and specifications of the Clarke County Sanitary Authority and/or any other applicable federal, state, or local agency.
2. *No new subdivision approved after [INSERT ADOPTION DATE] shall be served by a waterworks (as defined by the Virginia Waterworks Regulations) or by a sewerage system and treatment works (as defined by the Sewage Handling and Disposal Regulations, Virginia Administrative Code) that is not owned and/or operated by a governmental entity authorized to provide public water or public sewer by the Clarke County Board of Supervisors.*

#### 4.5.6 Private Wells and Onsite Sewage Disposal Systems

##### B. Use of Private Wells.

1. *Private wells proposed to serve new lots shall be designed in accordance with Code of Clarke County Chapter 184 (Well Ordinance), the regulations of the Virginia Department of Health, and any other applicable regulations.*
2. If lots less than 40 acres in size are to be served by an individual onsite water well, the well site for each lot shall show the distance and bearing to one corner of the well from two property corners. The final plat shall indicate Health Department approval of such sites, pursuant to a certificate of approval signed by the Health Official evidencing conformity with VDH requirements with respect to individual on-site subsurface septic systems and potable water supply systems, as applicable.

**C. Use of Onsite Sewage Disposal Systems.**

- 1. *Onsite sewage disposal systems proposed to serve new lots shall be designed in accordance with Code of Clarke County Chapter 143 (Septic Ordinance), the regulations of the Virginia Department of Health, and any other applicable regulations.***
- 2.** If lots less than 40 acres in size are to be served by an individual onsite sewage disposal systems, the primary and reserve drain field areas for each lot so served shall show the distance and bearing to one corner of the drainfield from two property corners. The final plat shall indicate Health Department approval of such areas, pursuant to a certificate of approval signed by the Health Official evidencing conformity with VDH requirements with respect to individual on-site subsurface septic systems and potable water supply systems, as applicable.