STAFFORD Virginia

Board of Supervisors

Infrastructure Committee Meeting
AGENDA

March 5, 2019 – 2:00 pm
Conference Room A/B/C, Second Floor

Committee Members: Mark Dudenhefer, Meg Bohmke and Cindy Shelton

	Agenda Item
1.	Election of Chairman
2.	Transportation – a. Discuss I-395/95 Commuter Choice Program Grants
3.	Changes to County's Ordinance on drain fields
4.	Smart Scale Round 3, update
	Next IC meeting is scheduled for April 2, 2019

InfraAgenda/03052019

I-395 / I-95 Commuter Choice Program

March 5, 2019

- This is a program that stems from the on-going HOV to HOT conversion on I-395 project; there is a 68-year agreement between TransUrban and the Commonwealth for TransUrban to provide $15M per year for projects that benefits toll payers using I-395.

- Eligible applicants are those within the Northern Virginia Transportation Commission (NVTC) and Potomac and Rappahannock Transportation Committee (PRTC) jurisdictions as well as transit agencies operating within these jurisdictions, i.e. FRED Transit and PRTC's OmniRide.

- Eligible projects would be new or enhanced local bus service, new or enhanced commuter bus service, Park and Ride lot(s) and access, roadway improvements (corridor management and ITS), and Transportation System Management (TSM) / Transportation Demand Management (TDM).

- The program goals are to move more people, reduce congestion, increase travel options, enhance transportation connectivity, and improve transit service.

- There is an application and evaluation process that starts in April 2019 with NVTC/PRTC Commission approval as well as CTB approval set to occur by October 2019.

- For this first round of projects, the program is looking to fund "shovel-ready" projects by Toll Day One for the I-395 Express Lanes project which is expected to open late October 2019.

- Staff is recommending submitting applications for projects like the new FRED Transit service from Staffordboro Park and Ride lot to the Quantico VRE Station and potentially a new OmniRide Commuter bus service from the Staffordboro Park and Ride lot to various locations in northern Virginia and downtown D.C.

Project Name: Sewage Disposal Systems Adjacent to Publicly-Owned Surface Water Supplies – Proposed Ordinance

Current Situation

- Sec. 25-165 of County Code regulates the "Type, Capacity and Location, Etc." of on-site sewage disposal systems.
- The County's publicly-owned surface water supplies are subject to various types of contamination from surface water run-off and groundwater sources.
- On-site sewage disposal systems present a significant potential source of contamination and the most common and effective methods to address such potential are to either provide public sewer or increase the setbacks of such systems from wells and/or surface water supplies.

Proposed End State

- Require increased setbacks for on-site sewage disposal systems to provide additional protection to publicly-owned surface water supplies.
- Proposed Ordinance would establish a setback of 200 feet and such distance is consistent with requirements of similar ordinances throughout Virginia.
- Ordinance Amendment to provide such increased setbacks would apply only to the sewage disposal systems and related components and would not otherwise affect the uses permitted on a given parcel of land.

Request for the Board of Supervisors

- Refer the proposed ordinance to the Utilities Commission for consideration following public hearing with the Commission providing a recommendation to the Board on the proposed ordinance.

Benefits to the County

- Ability to provide additional protection of publicly-owned surface water supplies from potential sources of ground and surface water contamination from on-site sewage disposal systems and related components.

Stafford County
Board of Supervisors Meeting
Agenda Item Report
Meeting Date: March 5, 2019
NEW BUSINESS

Subject:	
PUBLIC WORKS (UTILITIES); REFER TO THE UTILITIES COMMISSION AN AMENDMENT TO STAFFORD COUNTY CODE SEC. 25-165, "TYPE, CAPACITY AND LOCATION, ETC." REGARDING ON-SITE SEWAGE SYSTEMS Proposed Resolution R19-81 **BACKGROUND SUMMARY:** Utilities Commission referral.	
Recommended Action:	
Approve proposed Resolution R19-81, which refers to the Utilities Commission proposed Ordinance O19-26 to amend County Code Sec. 25-165, "Type, Capacity and Location, Etc." regarding on-site sewage disposal systems.	
Committee/Commission Recommendation:	
N/A	
Fiscal Impact:	**District:**
N/A	
Overview:	
Proposed Resolution R19-81 refers proposed Ordinance O19-26 to the Utilities Commission to consider amending County Code Section 25-165, "Type, capacity, location, etc." to add new sub-section (8) requiring all components of newly constructed on-site sewage disposal systems to be located a minimum of two hundred (200) horizontal feet from the maximum pool level of any publicly-owned surface water supply (reservoirs). The amendment as proposed would not affect the ability to construct new systems for existing lots or to make repairs or replacements of existing systems that experience failures within the 200' setback.	
Discussion/Analysis:	
Proposed Ordinance O19-26 would reduce sources of contamination to publicly-owned surface water supplies (reservoirs) by increasing the separation distance of on-site sewage disposals systems. Proposed Ordinance O19-26 would apply only to those lots approved after the effective date of any ordinance approval. Lots approved prior to this date would remain subject to prior Pre and Post Bay	

Act setback requirements of 50' and 100' respectively and would be encouraged, but not required to install sewage disposal systems outside of the proposed setback of 200' from publicly-owned surface water supplies (reservoirs). Additionally, the proposed ordinance would not affect repairs or replacements to existing systems that experience failures.

The 200' setback is well established as a reasonable buffering distance between reservoirs and onsite septic systems. Attachments 3 through 5 reference similar setbacks found in Newport News (200'), Spotsylvania (250') and York County (700'). Further, the EPA guidance on setbacks (attachment 6) recommends a 200' setback as an appropriate requirement around reservoirs.

Attachments:

1. Attachment 1 - Proposed Resolution R19-81
2. Attachment 2 - Proposed Ordinance O19-26
3. Attachment 3 - County of York, Overlay District
4. Attachment 4 - Newport News Code
5. Attachment 5 - Spotsylvania Code
6. Attachment 6 - Model Ordinance
7. Attachment 7 - Sewage Disposal Systems Presentation

Summary/Conclusion:

Proposed Resolution R19-81 refers to the Utilities Commission proposed Ordinance 019-26 to amend County Code Section 25-165, "Type, Capacity and Location, Etc." regarding on-site sewage disposal systems. The Utilities Commission will hold a public hearing and provide its recommendation back to the Board.

Reviewed By:

Rysheda McClendon, County Attorney (Legal Review Only)
Thomas C. Foley, County Administrator

R19-81

PROPOSED

BOARD OF SUPERVISORS
COUNTY OF STAFFORD
STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 5th day of March, 2019:

MEMBERS:	VOTE:
Gary F. Snellings, Chairman	
L. Mark Dudenhefer, Vice Chairman	
Meg Bohmke	
Jack R. Cavalier	
Thomas C. Coen	
Wendy E. Maurer	
Cindy C. Shelton	

On motion of , seconded by , which carried by a vote of , the following was adopted:

A RESOLUTION REFFERRING TO THE UTILITIES COMMISSION AN ORDINANCE TO CONSIDER AMENDING AND REORDAINING STAFFORD COUNTY CODE SEC. 25-165, "TYPE, CAPACITY, LOCATION, ETC." REGARDING ON-SITE SEWAGE DISPOSAL SYSTEMS

WHEREAS, the County Code Sec. 25-165 "Type, capacity, location, etc.," specifies conditions for the construction of on-site sewage disposal systems; and

WHEREAS, the Board has concerns about the impact of on-site sewage disposal systems that are in close proximity to public water supply reservoirs; and

WHEREAS, the Board desires to refer amendments to the County Code to the Utilities Commission, to hold a public hearing and provide its recommendation to the Board;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 5th day of March, 2019, that the proposed amendment to Stafford County Code Sec. 25-165 "Type, capacity, location, etc.," pursuant to proposed Ordinance O19-26, be and it hereby is referred to the Utilities Commission for review, to hold public hearings, and provide its recommendation to the Board within 60 days from the date of this Resolution.

TCF:MJS:JT:cab

O19-26

PROPOSED

BOARD OF SUPERVISORS
COUNTY OF STAFFORD
STAFFORD, VIRGINIA

ORDINANCE

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the day of , 2019:

MEMBERS:	VOTE:
Gary F. Snellings, Chairman	
L. Mark Dudenhefer, Vice Chairman	
Meg Bohmke	
Jack R. Cavalier	
Thomas C. Coen	
Wendy E. Maurer	
Cindy C. Shelton	

On motion of , seconded by , which carried by a vote of , the following was adopted:

AN ORDINANCE TO AMEND AND REORDAIN STAFFORD COUNTY CODE SEC. 25-165, "TYPE, CAPACITY, LOCATION, ETC.," REGARDING ON-SITE SEWAGE DISPOSAL SYSTEMS

WHEREAS, the County Code Sec. 25-126 "Type, capacity and location, etc.," specifies conditions for the construction of on-site sewage disposal systems that serve more than three dwellings; and

WHEREAS, the Board has concerns about the impact of on-site sewage disposal systems that are in close proximity to public water supply reservoirs; and

WHEREAS, the Board carefully considered the recommendations of the Utilities Commission and staff, and the testimony, if any, received at the public hearing; and

WHEREAS, the Board finds that public necessity, convenience, health, safety, general welfare, and good engineering practices require adoption of such an ordinance;

NOW, THEREFORE, BE IT ORDAINED by the Stafford County Board of Supervisors on this the day of , 2019, that Stafford County Code Sec. 25-165, "Type, capacity, location, etc.," be and it hereby is amended and reordained as follows, with all other portions remaining unchanged:

Sec. 25-165.- Type, capacity, location, etc.

(b) Minimum standards for private on-site sewage disposal systems on all lots shall be as follows:

(8) No septic tank, pump chamber, drainfield and any other component of an on-site sewage disposal system shall be located within two hundred (200) horizontal feet of the maximum pool level of any publicly-owned surface water supply, such as a reservoir. This provision shall apply to lots recorded after the adoption of ordinance O19-26.

TCF:jdt:tlf

CODE OF THE COUNTY OF YORK, VIRGINIA

Chapter 24.1

ZONING

ARTICLE III. DISTRICTS

DIVISION 7. OVERLAY DISTRICTS

Sec. 24.1-376. WMP-Watershed management and protection area overlay district.

(a) Statement of intent. In accordance with the objectives of the comprehensive plan, the Watershed Management and Protection Area Overlay regulations are intended to ensure the protection of watersheds surrounding current or potential public water supply reservoirs. The establishment of these regulations is intended to prevent the causes of degradation of the water supply reservoir as a result of the operation or the accidental malfunctioning of the use of land or its appurtenances within the drainage area of such water sources.

(b) Applicability. The special provisions established in this section shall apply to the following areas:

(1) Areas designated on the Watershed management and protection area overlay district map, dated May 15, 1991, and made a part of this chapter by reference. (See Map III-2 in Appendix A)

(2) Such other areas as may be determined by the zoning administrator through drainage, groundwater and soils analyses conducted by the department of environmental and development services to be essential to protection of such existing or potential reservoirs from the effects of pollution or sedimentation.

(c) For the purposes of this section, the following terms shall have the following meanings:

Bulk storage. Storage equal to or exceeding 660 gallons [2500L] in a single above-ground container

Development. Any construction, external repair, land disturbing activity, grading, road building, pipe laying, or other activity resulting in a change in the physical character of any parcel or land.

Reservoir. Any impoundment of surface waters designed to provide drinking water to the public.

Tributary stream. Any perennial or intermittent stream, including any lake, pond or other body of water formed therefrom, flowing either directly or indirectly into any reservoir. Intermittent streams shall be those identified as such on the most recently published United States Geological Survey Quadrangle Map, or the Soil Conservation Service Soil Survey of James City and York Counties and the City of Williamsburg, Virginia, or as determined and verified upon field investigation approved by the zoning administrator.

Watershed. Any area lying within the drainage basin of any reservoir.

(d) Use regulations. Permitted uses, special permit uses, accessory uses, dimensional standards and special requirements shall be as established by the underlying zoning district, unless specifically modified by the requirements set forth herein.

The following uses shall be specifically prohibited within the WMP areas:

(1) Storage or production of hazardous wastes as defined in either or both of the following:

a. Superfund Amendment and Reauthorization Act of 1986; and

b. Identification and Listing of Hazardous Wastes, 40 C.F.R. §261 (1987).

(2) Land applications of industrial wastes.

(e) Special requirements.

(1) Except in the case of property proposed for construction of an individual single-family residential dwelling unit, any development proposal, including the subdivision of land, in WMP areas shall be accompanied by an impact study prepared in accordance with the requirements set forth in subsection (f) below.

(2) A two hundred foot (200') [60m] wide buffer strip shall be maintained along the edge of any tributary stream or reservoir. The required setback distance shall be measured from the centerline of such tributary stream and from the mean high water level of such reservoir. Such buffer strip shall be maintained in its natural state or shall be planted with an erosion resistant vegetative cover. In the case of tributary streams located upstream from a stormwater management facility designed to provide water quality protection, no buffer shall be required if such facility has been designed to accommodate and manage the quality of runoff from the subject site.

The zoning administrator may authorize a reduction in the two hundred foot (200') [60m] wide buffer down to an absolute minimum of fifty feet (50') [15m] upon presentation of an impact study, as defined herein, which provides documentation and justification, to the satisfaction of the zoning administrator, that even with the reduction, the same or a greater degree of water quality protection would be afforded as would be with the full-width buffer. In granting such authorization, the zoning administrator may require such additional erosion control and runoff control measures as deemed necessary.

Except as provided below, all development shall be located outside of the required buffer strip.

a. The buffer strip requirement shall not apply to development which is appurtenant to the production, supply, distribution or storage of water by a public water supplier.

b. Encroachment into or through the required buffer by roads, main-line utilities, or stormwater management structures may be permitted by the zoning administrator provided the following performance standards are met:

1. Road and main-line utility crossings will be limited to the shortest path possible and that which causes the least amount of land disturbance and alteration to the hydrology of the watershed.

2. Stormwater management facilities located within the buffer must be designed to be a part of a watershed stormwater management program.

3. No more land shall be disturbed than is necessary.

4. Indigenous vegetation shall be preserved to the maximum extent possible.

5. Wherever possible, disturbed areas shall be planted with trees and shrubs.

6. The post-development non-point source pollutant loading rate shall be no greater than ninety percent (90%) of the pre-development pollutant loading rate.

7. Non-essential elements of the road or utility project, as determined by the zoning administrator, shall be excluded from the buffer.

c. When the property where an encroachment is proposed is owned by the entity owning and operating the water supply reservoir being protected, and such entity specifically and in writing authorizes and approves the encroachment, it shall be allowed.

(3) In the case of permitted non-residential uses within the WMP areas, performance assurances shall be provided to guarantee that all runoff control and reservoir protection measures proposed in the impact study shall be constructed, operated and maintained so as to meet the performance criteria set forth in the study. The form of agreement and type of letter of credit or other surety shall be approved by the county attorney. The amount of the letter of credit or other surety and designated length of completion time shall be set by the zoning administrator.

(4) The following uses shall not be permitted within the buffer strip required above or within five hundred feet (500') [150m] of the required buffer strip:

a. septic tanks and drainfields;

b. feed lots or other livestock impoundments;

c. trash containers and dumpsters which are not under roof or which are located so that leachate from the receptacle could escape unfiltered and untreated;

d. fuel storage in excess of fifty (50) gallons [200L];

e. sanitary landfills;

f. activities involving the manufacture, bulk storage or any type of distribution of petroleum, chemical or asphalt products or any materials hazardous to a water supply (as defined in the Hazardous Materials Spills Emergency Handbook, American Waterworks Association, 1975, as revised) including specifically the following general classes of materials:

1. oil and oil products;

2. radioactive materials;

3. any material transported in large commercial quantities (such as in 55-gallon [200L] drums), which is a very soluble acid or base, causes abnormal growth of an organ or organism, or is highly biodegradable, exerting a severe oxygen demand;

4. biologically accumulative poisons;

5. the active ingredients of poisons that are or were ever registered in accordance with the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 USC 135 et seq.); or

6. substances highly lethal to mammalian or aquatic life.

(f) Impact study.

(1) The impact study shall be performed or reviewed by a registered professional engineer who shall certify that the study has been conducted in accordance with good engineering practices. The study shall address, at a minimum, the following topics:

a. Description of the proposed project including location and extent of impervious surfaces; on-site processes or storage of materials; the anticipated use of the land and buildings; description of the site including topographic, hydrologic, and vegetative features.

b. Characteristics of natural runoff on the site and projected runoff with the proposed project, including its rate, and chemical composition including phosphorus concentration, nitrogen concentration, suspended solids, and other chemical characteristics as deemed necessary by the zoning administrator to make an adequate assessment of water quality.

c. Measures proposed to be employed to reduce the rate of runoff and pollutant loading of runoff from the project area, both during construction and after.

d. Proposed runoff control and reservoir protection measures for the project and performance criteria proposed to assure an acceptable level and rate of runoff quality. Such measures shall be consistent with accepted best management practices and shall be designed with the objective of ensuring that the rate of surface water runoff from the site does not exceed pre-development conditions and that the quality of such runoff will not be less than pre-development conditions. Special emphasis shall be placed on the impacts of proposed encroachments into the required buffer.

e. Proposed methods for complete containment of a spill or leaching of any materials stored on the property which would or could cause contamination of drinking water sources.

f. Where the developer of property which is subject to the terms of this overlay district desires to utilize existing or planned off-site stormwater quality management facilities, the developer shall provide a written certification to the zoning administrator that the owner of the off-site facilities will accept the runoff and be responsible for its treatment to a level of treatment acceptable to the county and consistent with the requirements of this chapter.

(2) Such study shall be submitted to the zoning administrator for review and approval concurrent with the submission of applications for review and approval of site or subdivision plans or applications for land disturbing or erosion and sediment control permits. A copy of the impact study shall also be forwarded to the agency which owns or manages the subject watershed for review and comments.

NEWPORT NEWS

Sec. 42-81. - Requirements for development.

(a) *Runoff control permit.* Except as herein expressly provided, it shall be illegal to engage in any development otherwise permitted by law in the watershed of any reservoir until a runoff control permit is issued by the city's runoff control official. It shall thereafter be illegal for anyone to willfully fail to conform to the provisions of said permit in carrying out such development or in operating and maintaining the activities or improvements so developed. Nothing herein shall be construed to prohibit the approval of any subdivision plat where no physical development is to be carried out within any watershed.

(1) Any person applying for a runoff control permit shall submit an application to the runoff control official that includes a runoff control plan prepared by a registered professional engineer with specifications for the temporary and permanent control of surface water runoff sufficient in detail to meet the requirements of this article regarding the quantity and quality of surface runoff. If the runoff control official determines that the natural drainage system is sufficient to contain and decontaminate the runoff created by the development, and that the drainage system is under the control of the applicant and unavailable for future development, a permit may be granted without a specific runoff control plan or further review by staff.

(2) The runoff control official shall review the plans and specifications to ensure that the quality and quantity of surface water runoff will not be detrimental to the water quality of the reservoir. Plans should provide for a diversion/retention system that is equal to or more effective than wet ponds (outlined in the Design Criteria Manual) in containing and removing potential pollutants. Plans should also provide for the complete containment of a spill of any materials stored on the property and long-term maintenance of the system.

(3) In the event that the runoff control official shall determine that the plans and specifications are insufficient in any respect, the runoff control official shall promptly notify the applicant to correct the deficiencies. In addition, the runoff control official may require the submission of such additional data as may be reasonably necessary to carry out a thorough review of the application.

(4) In the event that the plans and specifications submitted are found to be adequate, the runoff control official may require, prior to issuing a permit, a bond with surety or other security satisfactory to the runoff control official sufficient for and conditioned upon completion of the controls specified in such plans and specifications, in the manner and within the time prescribed in such permit.

(5) Failure of the city to act on any permit application within sixty (60) days after all the necessary information has been properly filed with the runoff control official shall constitute approval of the application. The city shall be deemed to have acted whenever written notice of conditional approval, rejection or modification shall have been mailed by the runoff control official to the applicant at the address shown on the application.

(6) In the event of any change in any plan for development, the developer shall submit to the runoff control official any additional data, plans and specifications as may be reasonably necessary to ensure the control of the quantity and quality of any additional surface water runoff occasioned by such change. The procedure for submission of such additional data shall conform to the original application procedure.

(7) Whenever any development is proposed to be carried out by any person, other than the owner of the land, the responsibility for complying with this article and with all conditions imposed pursuant hereto, including, but not limited to, the maintenance, repair and replacement of any temporary or permanent runoff control measure, shall remain on the property owner.

(8) In the event that a developer wishes to utilize a city-owned and maintained diversion/retention system to ensure that the quality and quantity of surface water runoff will not be detrimental to the water quality of the reservoir, the developer shall submit such request to the runoff control official with plans, specifications and calculations of sufficient detail for the runoff control official to determine if this is a feasible option. The runoff control official will approve or deny the request. Should approval be granted, the developer shall be responsible for a pro rata share of design, construction, maintenance

costs and any required bond with surety or other security required by city, and shall enter into an agreement with the city for use of the diversion/retention system consistent with the department's best management practice cost sharing policy.

(b) *Exceptions to permit requirements.* Notwithstanding the provisions of subsection (a) hereof, no runoff control permit shall be required for any of the following activities:

(1) The installation, repair, replacement, enlargement or modification of any water supply intended to serve a total of not more than two (2) dwelling units; and

(2) The interior repair, remodeling or reconstruction of any existing structure.

(c) *Existing uses.* Any exterior modification to a use whether renovation, expansion or reconstruction, which results in an increase in impervious surface, requires a runoff control permit.

(d) *Septic tanks and drain fields.* Notwithstanding the city council's long-term goal to prohibit the installation of new septic tanks and drainage fields in the reservoir protection area, the council nevertheless promulgates the following regulations to permit such new installations in the reservoir protection area in accordance with the conditions prescribed below:

(1) New septic tanks and drainage fields may be installed in acreage or lots of record existing prior to September 13, 1988; provided that in no case shall such installation require use of the buffer zone described in paragraph (f) below; and provided further that the required health department approval is first obtained.

(2) From and after September 13, 1988, septic tanks and drainage fields may be installed in lots of newly created subdivisions provided that such lots are one (1) acre or larger in size; provided that in no case shall such installation require use of the buffer zone described in paragraph (f) below; and provided further that the required health department approval is first obtained.

(3) Properties in which septic systems are installed pursuant to this section must connect to the Newport News public sewer system when such public system is reasonably available. For the purposes of this section, the term "reasonably available" shall mean that a public sewer line to which connections are permitted is within one hundred (100) feet in length in a straight line or one hundred twenty-five (125) feet in length if a connection must be installed which circumvents an obstacle of a permanent nature. The distances are measured from the property line closest to the public sewer line to the public sewer line.

(e) *Prohibited uses.* Notwithstanding the provisions of subsections (b)(1) and (2) hereof, it shall be illegal to do the following activities unless the activity is accessory to a utility and it can be proven to the satisfaction of the runoff control official that adequate measures can be taken to achieve the same degree of water quality with the acceptable best management practices (outlined in the Design Criteria Manual):

(1) Activities involving the manufacture, bulk storage, or any type of distribution of petroleum, chemical, asphalt products, or any hazardous substances as defined in Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and substances designated under section 311(b)(2)(A) of the Clean Water Act (Federal Water Pollution Control Act Amendments of 1972, as amended in 1977).

(2) Installing a new septic tank and drain field unless otherwise permitted by this article. This does not preclude the maintenance of existing septic tanks or drain fields.

(f) *Buffer zones.* It shall be illegal for any permitted development to occur within two hundred (200) horizontal feet from the center of any perennial stream or from the edge of any city reservoir and within one hundred (100) horizontal feet from the center of any intermittent stream. Crossing of perennial or intermittent streams, by roads, utilities and the like should be limited to the least impactive portion of the stream as verified by the department. Where such crossings are necessary for the development of the site and required by other city regulations, the standards for construction as outlined in the Design Criteria Manual shall apply.

(g) *Waiver option.* The buffer requirement may be reduced to no less than fifty (50) feet when it can be proven to the satisfaction of the runoff control official that the reduction would achieve the same degree of water

quality with acceptable best management practices (outlined in the Design Criteria Manual) as with the two hundred- or one hundred-foot buffer. If it is determined a significant hardship exists after the maximum allowable waiver is granted, then the runoff control official may grant, after consultation with the director, an additional parcel waiver. This waiver will only be granted in the case of a proven hardship and would allow single-family development (one detached single-family structure with such accessory structures as are permitted in the city's zoning ordinance) on one-acre minimum lots or lots of record when parcel size is less than one (1) acre and would allow a buffer reduction to a minimum of twenty-five (25) feet. A detail of an acceptable best management practice appears in the Design Criteria Manual.

Under no circumstances will the following uses be permitted within either buffer area:

(1) Septic tanks and drain fields.

(2) Trash containers and dumpsters.

(3) Feed lots or other livestock impoundments.

(4) Any prohibited use as defined in subsection (e) of this section.

(5) Fuel storage in excess of fifty (50) gallons.

(6) No sewage pumping stations or sewage lines unless standards are met as defined in the Design Criteria Manual.

(h) *Reservoir protection appeals committee.* The reservoir protection appeals committee shall be responsible for reviewing and determining either to uphold or overturn decisions rendered by the runoff control official when appealed by a runoff control permit applicant. The reservoir protection appeals committee will also advise the city council on property acquisition for reservoir protection. The responsibilities of the reservoir protection appeals committee are as follows:

(1) Review of the runoff control official's denial of the runoff control permit applicant's request for full or partial "waiver of buffer" as outlined in subsection (g) of this section when review is requested by the applicant;

(2) Review of rejection of an application for a runoff control permit by the runoff control official when requested by the applicant; and

(3) Review of requests by property owners to have the city purchase partial or whole parcels which are claimed to be a severe hardship consistent with the department's reservoir protection property acquisition policy when requested by the property owner. Recommendations will be made to the city council regarding the purchase of property requests.

(Ord. No. 6233-06, § 1)

SPOTSYLVANIA

DIVISION 5. - RESERVOIR PROTECTION OVERLAY DISTRICT

Sec. 23-7.5.1. - Purpose and intent.

(a) Reservoir protection overlay districts are created for the purpose of protecting and promoting the public health, safety and welfare by preserving existing and potential public drinking water supply reservoir sites and protecting them from the danger of water pollution. Regulations within such districts are established to prevent water quality degradation due to pollutant runoff from septic fields, construction-sites, lawns or material storage areas and to reduce sediment loadings that shorten reservoir life.

(b) This district shall be in addition to and shall overlay all other zoning districts where it is applied, so that any parcel of land lying in such an overlay district shall also lie in one (1) or more of the other zoning districts provided for by this chapter. The effect is to create a new district which has the characteristics and limitations of the underlying district, together with the characteristics and limitations of the overlying district.

(Ord. No. 23-66, 10-24-95)

Sec. 23-7.5.2. - Applicability.

This division shall apply to all land designated by the board of supervisors to be within reservoir protection overlay districts. The land so designated shall be marked on the official zoning maps.

(Ord. No. 23-66, 10-24-95)

Sec. 23-7.5.3. - Definitions.

As used in this division, the following words and terms shall have the meanings respectively ascribed:

Buffer strip or *buffer area* means those land areas within a designated distance of a reservoir site or perennial stream or river which shall be maintained with ground cover vegetation, preferably naturally occurring vegetation. Only in circumstances where other than naturally occurring vegetation clearly provides for better water quality protection, may it be utilized, after prior county approval as ground cover vegetation.

Contiguous to a reservoir site means touching the county property line at sites owned by the county. Contiguous also means touching the designated mean acquisition elevation line of potential reservoir sites.

Feed lot means a place in which animal livestock (excluding fowl) are fed, raised or held prior to slaughter or sale.

Mean high water line means the line designated by the county as the average elevation of the flood pool of existing or potential reservoirs. Such line shall be marked on the official zoning map.

Perennial stream or *river* means those streams or rivers designated as perennial streams or rivers on the most recently published United States Geological Survey Quadrangle Map.

Proximity area means that land area within two thousand (2,000) feet of the mean high water line of a reservoir.

(Ord. No. 23-66, 10-24-95)

Sec. 23-7.5.4. - Standards.

Regulations, permitted uses, and conditional uses shall be as specified in the underlying zoning district, except as modified by this section.

(1) *Lot area requirements:* The minimum lot size for any residential use where such lot is contiguous to a reservoir site shall be as follows:

a. Five (5) acres for lots to be served by private septic systems.

b. Two (2) acres for lots to be served by public sewer.

(2) *Lot dimension requirement:* Lots shall have a minimum dimension of two hundred (200) feet along the mean high water line or county acquisition line, where applicable.

(3) *Buffer area requirements:*

a. Adjacent to a reservoir site. A buffer area shall be maintained adjacent to the mean high water line and shall be no less than one hundred fifty (150) feet in width.

b. Adjacent to perennial streams and rivers. A buffer area shall be maintained adjacent to any perennial stream or river and shall be no less then seventy-five (75) feet in width.

(4) *Prohibited uses:* The following uses shall be prohibited within the specified portions of reservoir protection overlay districts.

a. Throughout the district:

1. Storage or production of hazardous waste as defined in applicable state or federal regulations.

2. Transmission pipelines for liquefied natural gas, liquid petroleum products, slurry coal, or any other solids or liquids, except water lines, sewer lines and storm sewers.

3. Feed lots for more than fifty (50) animals.

4. Land application of biosolids.

b. Within proximity areas:

1. On-site sewerage system drainfield or reserve drainfield spaces or septic tanks located within two hundred fifty (250) feet of the mean high water lines; provided, however such drainfields and septic tanks for lots approved prior to August 14, 1990 shall be permitted in the proximate area to the minimum extent necessary, as determined by the zoning administrator, to accommodate a reasonable use of the property. Drainfields shall also be permitted within two hundred fifty (250) feet of the mean high water line of Hunting Run Reservoir where the County of Spotsylvania is the immediate predecessor in interest of the property where the drainfield is located and the County of Spotsylvania acquired ownership of the property prior to January 1, 2007.

2. Feed lots.

3. Bulk storage of petroleum or asphalt products.

4. Sanitary landfills.

5. Storage or production of hazardous materials as defined by applicable state or federal regulations, except (1) storage of those materials typically associated with residential use (e.g., fuel oil, gasoline, yard and garden fertilizer), and (2) storage of those materials typically associated with agricultural or forestry operations, provided that

the storage of materials in bulk greater than five hundred (500) gallons shall be surrounded by a spill containment structure adequate to retain the entire contents being stored.

6. Sewage pumping stations.

c. Within buffer areas:

1. Construction of buildings other than gazebos, picnic shelters or similar structures without restroom facilities.

2. Trash containers and/or dumpsters except for small (less than fifty (50) gallons) containers associated with buildings allowed in the paragraph above.

3. Sewer transmission lines and sewage pumping stations.

4. On-site sewerage system drainfield or reserve drainfield spaces or septic tanks; provided, however, such drainfields and septic tanks for lots approved prior to August 14, 1990, shall be permitted within the buffer area to the minimum extent necessary, as determined by the zoning administrator, to accommodate a reasonable use of the property.

5. Any use which removes vegetative ground cover except for substitution of alternate ground cover which provides equal or better water quality protection after obtaining prior written county approval.

d. Below mean high water line:

1. Subdivision of land for residential purposes.

2. Any development requiring a land disturbing permit.

3. Any construction of buildings.

(5) *Perennial streams and rivers:* Crossings of perennial streams and rivers by roads or utilities shall be limited to the least impacted position of the stream or river above the mean high water line. Plans for such crossings shall be submitted to the department of code compliance and no permits shall be issued for such crossings prior to the review and approval of the plans.

(6) *Land disturbing activity:* Before the issuance of a land disturbing activity permit for any activity that will disturb more than two thousand five hundred (2,500) square feet of land, excluding agricultural operations, a site plan for the control of erosion and sediment runoff shall be submitted to and approved by the Department of Code Compliance.

(7) *Subdivision plats:* All subdivision plats shall contain the location of buffer area boundaries, proximity area boundaries, the mean high water line and the county acquisition lines.

(Ord. No. 23-66, 10-24-95; Ord. No. 23-95, 9-25-01; Ord. No. 23-117, 3-27-07)

Sec. 23-7.5.5. - Sewage disposal.

(a) No septic tanks or septic tank drainfield shall be allowed within one hundred (100) feet of the floodwater easement of the reservoir or on less than one and one-fourth (1¼) acres of land, if within two hundred (200) feet of the flood easement.

(b) No sewage lift station shall be allowed within eight hundred (800) feet of any floodwater easement without having a tank or seepproof lagoon with a storage capacity sufficient to hold all sewage

coming into such lift station for a twelve-hour period. No sewage lift stations, holding tanks or lagoons are allowed in the flood easement area.

(c) Pit privies are prohibited within one thousand five hundred (1,500) feet of the reservoir.

(Code 1980, § 17-61(e), (f), (g); Ord. No. 22-26, 9-25-07)

Editor's note — Former § 22-232.

Sec. 23-7.5.6. - Underground storage of liquid fuels.

There shall be no storage of liquid fuels in underground containers exceeding five hundred fifty (550) gallons in capacity within one hundred (100) feet of any flood easement area.

(Code 1980, § 17-61(i); Ord. No. 22-26, 9-25-07)

Editor's note— Former § 22-238.

Model Surface Water Ordinance

(A). **Statement of intent.**

The Reservoir Protection Overlay Zone (RPOZ) regulations are intended to ensure the adequate protection of current or potential public water supply reservoirs. The establishment of these regulations is intended to protect public health, insure the availability of safe drinking water, and prevent the degradation of the water supply in the reservoir through the regulation of land uses and development within the reservoir drainage area.

(B). **Applicability.**

The special provisions established in this section shall apply to proposed projects identified as possible contaminating activities within areas designated as Reservoir Protection Overlay Zones. These areas may be identified through drainage, groundwater and soils analyses and are considered to be essential to protection of existing or potential reservoirs from the effects of point and non-point source pollution or sedimentation.

The boundaries of the Reservoir Protection Overlay Zone shall be delineated using the most current and best available location data and must be shown on all master zoning map(s) kept on file. The boundaries should be of sufficient size to guarantee the appropriate level of treatment for stormwater runoff from new and existing projects that can contribute to the contamination of public water supplies. These zones may be modified as necessary by the _____ (local governmental authority) as new assessment data becomes available.

➲ *The boundaries of the Reservoir Protection Overlay Zone should be adequate to ensure that pollutants of concern are removed from runoff before entering the reservoir. Local officials may consider using a watershed approach to delineating the boundaries to ensure that all surface water/groundwater/recharge areas for the water supply are protected. A tiered zone approach to the overlay size, much like that done with wellhead protection zones to protect public well recharge areas has been used in some parts of the country. Please see the Greensboro, NC water supply watershed district is an example of this approach.*

(C). **Definitions.**

For the purposes of this section, the following terms shall have the following meanings:

Development. Any construction, external repair, land disturbing activity, grading, road building, pipe laying, or other activity resulting in a change in the physical character of any parcel or land.

Potential Contaminating Activity. Activities identified as having the potential to discharge contaminants to surface or groundwaters.

Reservoir. Any impoundment of surface waters designed to provide drinking water to the public.

Tributary stream. Any perennial or intermittent stream, including any lake, pond or other body of water formed therefrom, flowing either directly or indirectly into any

reservoir.

Watershed. Any area lying within the drainage basin of any reservoir.

(D). **Use regulations.**

Within the Reservoir Protection Overlay Zone, the permitted uses, special permit uses, accessory uses, dimensional standards and special requirements established by the underlying zoning district shall apply, unless specifically modified by the requirements of this ordinance.

The following uses shall be specifically prohibited within the RPOZ areas:

(1) Storage or production of hazardous materials as defined in either or both of the following:

a. Superfund Amendment and Reauthorization Act of 1986; and
b. Identification and Listing of Hazardous Wastes, 40 C.F.R. §261 (1987).

(2) Disposal of hazardous materials or solid wastes

(3) Treatment of hazardous material, except rehabilitation programs authorized by a government agency to treat hazardous material present at a site prior to the adoption of this ordinance.

(4) Dry-cleaning, dyeing, printing, photo processing and any other business that stores, uses, or disposes of hazardous material, unless all facilities and equipment are designed and operated to prevent the release or discharge of hazardous materials and have undergone an inspection to certify they are in compliance within hazardous material regulations.

(5) Disposal of septage or septic sludge

(6) Automobile service stations

(7) Junkyards

(8) Other uses as specified by the _____ (local government authority) as potential contaminating activities

(E). **Review requirements for Development in the Reservoir Protection Overlay Zone**

(1) A copy of any new application for a building permit, zoning permit, area variance, use variance, zoning amendment, or other land development proposal, including the subdivision of land, occurring wholly or partly in a Reservoir Protection Overlay Zone area shall be submitted to the _____ (local governmental authority) and shall be accompanied by an impact study prepared in accordance with the requirements set forth in subsection (f) below.

(2) Applications for development within the Reservoir Protection Overlay Zone will be evaluated by the _____ (local governmental authority) to ensure that:

(a). Non-point source pollution is prevented to the maximum extent possible, by taking into account site conditions such as slope, soil type and erosivity, and vegetative cover.

(b). Management practices are in place sufficient to remove or neutralize those pollutants that present a potential impact to the reservoir

(c). Grading and removal of vegetation at a development site is minimized and erosion and sediment control measures are in place and properly installed.

(d). All sewage disposal systems will be monitored, inspected and maintained on a regular basis to ensure proper functioning. If two or more dwelling units share a common sewage treatment system, a perpetual maintenance agreement shall be required by the ___ _____ (local governmental authority)

(e). Businesses involved in potential contaminating activities within the Reservoir Protection Overlay Zone but which have received a special use permit must submit a spill control plan for approval. This plan shall include the following elements:

(1). Disclosure statements describing the types, quantities, and storage locations of all contaminants that will be part of the proposed project.
(2). Contaminant handling and spill prevention techniques
(3). Spill reporting procedures, including a list of affected agencies to be contacted in the event of a spill
(4). Spill recovery plans, including a list of available equipment
(5). Spill clean-up and disposal plans

(3). Existing land uses located within the Reservoir Protection Overlay Zone and identified as potential contaminating activities by the _____ (local governmental authority) shall comply with the requirements of Section E, Subsection (2 (e)) listed above

(F). **Impact study.**

(1) An impact study shall be performed or reviewed by a registered professional engineer and shall include, at a minimum, the following information:

a. Description of the proposed project including location and extent of impervious surfaces; on-site processes or storage of materials; the anticipated use of the land and buildings; description of the site including topographic, hydrologic, and vegetative features.

b. Characteristics of natural runoff on the site and projected runoff with the proposed project, including its rate and chemical characteristics deemed necessary to make an adequate assessment of water quality.

c. Measures proposed to be employed to reduce the rate of runoff and pollutant loading of runoff from the project area, both during construction and after.

d. Proposed runoff control and reservoir protection measures for the site. These measures shall be designed with the goal of ensuring that the rate of surface water runoff from the

site does not exceed pre-development conditions and that the quality of such runoff will not be less than pre-development conditions. Special emphasis shall be placed on the impacts of proposed encroachments into the required buffer.

e. Where the developer of property subject to the terms of this overlay district seeks to utilize existing or planned off-site stormwater quality management facilities, the developer shall provide a written certification that the owner of the off-site facilities will accept the runoff and be responsible for its adequate treatment to a level acceptable to the _____ (local governmental authority).

(2) Such study shall be submitted to the _____ (local governmental authority) for review and approval concurrent with the submission of applications for review and approval of site or subdivision plans or applications for land disturbing or erosion and sediment control permits. A copy of the impact study shall also be forwarded to those agencies identified as interested parties which are responsible for managing the reservoir watershed for review and comments.

(G). **Buffer Requirements**

➲ Stream and shore buffer widths vary from twenty feet to up to 200 feet in ordinances throughout the United States. Since this ordinance is for reservoirs that supply public drinking water, the larger buffer width of 200 feet would be more appropriate.

➲ There is a much more detailed stream buffer ordinance located at this website. Local communities may wish to consult this ordinance to establish an individual stream buffer ordinance

A _____ foot (___') wide buffer strip shall be maintained along the edge of all public water supply reservoirs and any tributary stream discharging into these reservoirs. The required setback distance shall be measured from the centerline of such tributary stream and from the mean high water level of such reservoir. The buffer strip shall be maintained in its natural state to the maximum extent possible, and shall be planted with an erosion resistant vegetative cover in those areas that have been disturbed. In the case of tributary streams located upstream from a stormwater management facility designed to provide water quality protection, no buffer shall be required if such facility has been designed to accommodate and manage the quality of runoff from the subject site.

A reduction in the required buffer width down to an absolute minimum of seventy-five feet (75') may be granted by the _____ (local governmental authority) upon presentation of an impact study that provides sufficient documentation and justification that even with the reduction, the same or a greater degree of water quality protection would be afforded as would be with the full-width buffer. In granting such a reduction, the _____ (local governmental authority) may require additional erosion control or runoff control measures as deemed necessary to protect reservoir water quality.

All development shall be located outside of the required buffer strip, except for the following:

a. The buffer strip requirement shall not apply to development which is appurtenant to the production, supply, distribution or storage of water by a public water supplier.

b. Encroachment into or through the required buffer by roads, main-line utilities, or stormwater management structures may be permitted provided the following performance standards are met:

1. Road and main-line utility crossings will be limited to the shortest path possible and that which causes the least amount of land disturbance and alteration to the hydrology of the watershed.

2. Any stormwater management facilities located within the buffer should be sited within the context of a larger watershed stormwater management program.

3. No more land shall be disturbed than is necessary.

4. Indigenous vegetation shall be preserved to the maximum extent possible.

5. Wherever possible, disturbed areas shall be planted with trees and shrubs.

c. When the property where an encroachment is proposed is owned by the entity owning and operating the water supply reservoir being protected, and such entity specifically and in writing authorizes and approves the encroachment, it shall be allowed.

(3) The following uses shall not be permitted within the buffer strip or within_____ feet (___') of the required buffer strip:

a. septic tanks and drainfields;

b. feed lots or other livestock impoundments;

c. trash containers and dumpsters which are not under roof or which are located so that leachate from the receptacle could escape unfiltered and untreated;

d. fuel storage in excess of fifty (50) gallons [200L];

e. sanitary landfills;

f. activities involving the manufacture, bulk storage or any type of distribution of petroleum, chemical or asphalt products or any materials hazardous to a water supply (as defined in the Hazardous Materials Spills Emergency Handbook, American Waterworks Association, 1975, as revised) including specifically the following general classes of materials:

1. oil and oil products;

2. radioactive materials;

3. any material transported in large commercial quantities that is a very soluble acid or base, highly biodegradable, or can create a severe oxygen demand;

4. biologically accumulative poisons;

5. the active ingredients of poisons that are or were ever registered in accordance with the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 USC 135 et seq.); or

6. substances highly lethal to mammalian or aquatic life.

Project Name: Sewage Disposal Systems Adjacent to Publicly-Owned Surface Water Supplies – Proposed Ordinance

Current Situation

- Sec. 25-165 of County Code regulates the "Type, Capacity and Location, Etc." of on-site sewage disposal systems.
- The County's publicly-owned surface water supplies are subject to various types of contamination from surface water run-off and groundwater sources.
- On-site sewage disposal systems present a significant potential source of contamination and the most common and effective methods to address such potential are to either provide public sewer or increase the setbacks of such systems from wells and/or surface water supplies.

Proposed End State

- Require increased setbacks for on-site sewage disposal systems to provide additional protection to publicly-owned surface water supplies.
- Proposed Ordinance would establish a setback of 200 feet and such distance is consistent with requirements of similar ordinances throughout Virginia.
- Ordinance Amendment to provide such increased setbacks would apply only to the sewage disposal systems and related components and would not otherwise affect the uses permitted on a given parcel of land.

Request for the Board of Supervisors

- Refer the proposed ordinance to the Utilities Commission for consideration following public hearing with the Commission providing a recommendation to the Board on the proposed ordinance.

Benefits to the County

- Ability to provide additional protection of publicly-owned surface water supplies from potential sources of ground and surface water contamination from on-site sewage disposal systems and related components.

Smart Scale Round 3 Update

March 5, 2019

- Staff has recently learned that FAMPO and VDOT are working on a scenario(s) to help fund three Smart Scale projects in the Fredericksburg District that did not score high enough to receive Smart Scale funding.

- These three projects are Route 1 / Enon Road Intersection and Roadway Improvements in Stafford County, I-95 Off-Ramp Improvement to Route 3 in the City of Fredericksburg, and Harrison Road and Salem Church Road in Spotsylvania County.

- How would this happen? Stafford County would first need to agree and support by Resolution that the ~ $5M in SmartScale funding awarded to the new commuter parking lot on Route 3 be removed and made available to help fund these three other projects.

- FAMPO and VDOT would then need to identify the remaining funding needed to fully fund the three projects beyond the $5M available from the Commuter lot. Possible sources of funding include FAMPO CMAQ/RSTP, additional Smart Scale funding, and additional State funding outside of SmartScale.

- As part of this regional agreement, the County is being asked to reinstate a previous $1.578M Revenue Sharing allocation on Route 1 / Enon Road project. The County would need to allocate $789,000 in Transportation Impact Fees to cover the required 50% local match. This Revenue Sharing allocation was previously removed from the project as part of the SmartScale application.

- The County has been requested to reduce the Smartscale project scope to end at Stafford Indians Lane instead of Beauregard Drive (Phase I). A reduction in scope will allow this project to move forward as a SmartScale candidate with future phases including improvements down to Beauregard Drive in the near future.

- Recent cost estimates have shown likely increases in the project costs. Staff is estimating the cost of Phase I to be $10.6M. With an additional $1.578M on this project, the total allocation is approximately $7.7M between Federal, State, and Local funds. There is a remaining amount of approximately $2.9M needed to full fund this project. This is the targeted amount to be funding with the potential SmartScale funding from the Commuter Lot project.

RSTP	$619,552
CMAQ	$3,872,017
Revenue Sharing	$789,000
Rev Sharing Local Match	$789,000 (additional above the proposed SmartScale app)
Fuels Tax	$50,000
Impact Fees	$1,500,000
SmartScale Funding Needed	$3,000,000
Total	$10.6 M

- The FAMPO Policy Committee will be considering a vote on this action at its March 18, 2019 meeting in order to provide a resolution to the CTB for their April 9-10th meeting. The Board will need to take action on a resolution to support the move in SmartScale funding and commit to the additional local match at the March 19th Board Meeting.
- Staff requests that the Infrastructure Committee consider recommending this to the full Board for action on March 19th either on the consent agenda, or as new business with action as Time Sensitive.