

Infrastructure Committee Meeting
AGENDA
April 2, 2019 - 1:30 PM
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Cindy Shelton

INFRASTRUCTURE COMMITTEE MEETING AGENDA

- | | | |
|----|--|--------------------------|
| 1. | CONSIDER VDOT FY2020 - FY2025 SECONDARY SIX YEAR PLAN | N/A |
| 2. | TRANSPORTATION GRANT UPDATES – RSTP/CMAQ AND I95/395
COMMUTER CHOICE PROGRAM | |
| 3. | CONSIDER REFERRAL TO THE UTILITIES COMMISSION AN AMENDMENT
TO STAFFORD COUNTY CODE SEC. 25-165, "TYPE, CAPACITY AND
LOCATION, ETC." REGARDING ON-SITE SEWAGE SYSTEMS | N/A |
| 4. | DISCUSSION: HISTORIC PORT OF FALMOUTH BEACH AND RIVER
FLOODING | George Washington |

Next IC meeting is scheduled for May 7, 2019

This agenda may be amended on the day of the meeting. Participation of all citizens is encouraged. For all individuals with special needs, please notify County Administration of any accommodations required at least 24 hours in advance of the meeting. The agenda and related materials may be found on the County's website at www.staffordcountyva.gov

Infrastructure Committee Meeting
AGENDA
April 2, 2019 - 1:30 PM
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Cindy Shelton
INFRASTRUCTURE COMMITTEE MEETING AGENDA

Subject:	
CONSIDER VDOT FY2020 - FY2025 SECONDARY SIX YEAR PLAN	
Recommended Action:	
Review and approval of proposed Secondary Six Year Plan (SSYP) funding to be forwarded to Board for consideration to authorize a Public Hearing.	
Committee/Commission Recommendation:	
N/A	
Strategic Plan:	
Fiscal Impact:	District:
\$520,065 SSYP funding is available to be assigned to Board priority transportation projects.	N/A
Overview:	
County staff recently met with local VDOT representatives to learn about expected FY2020 Secondary Six Year Plan funding for Stafford County. For FY2020, the County will receive \$520,065 in funding made up of a combination of Telefees and Unpaved Road funds. Staff has outlined utilizing these funds to continue funding for projects underway and to begin addressing new unpaved roads and secondary road safety issues.	
Discussion/Analysis:	
For FY2020, Stafford County will be receiving \$520,065 in funding for secondary road improvements. Staff has proposed to continue funding for projects that are currently underway and to begin addressing the remaining unpaved roads and secondary road safety issues. Staff has been able to allocate the entire \$520,065.	

In addition to FY2020 funds, staff has made recommendations for FY2021-FY2025 funding to accelerate the paving of Brent Point Road and to fund the paving of New Hope Church Road. This is in concurrence with R12-206, which expressed the Board's desire to prioritize unpaved roads. Staff also recommends adding a new category for wedge-widening where additional County funds may be placed for shoulder improvements along secondary roads.

Following committee input, staff will request Board authorization at the April 16th meeting for a joint public hearing with VDOT staff, with the public hearing tentatively scheduled for May 7th. The Board resolution is scheduled for delivery to VDOT by the end of May.

Attachments:

1. Attachment 1 VDOT SSYP FY2020-FY2025
2. Attachment 2 - FY20-25 SSYP Discussion
3. Attachment 3 - Draft FY20 SSYP
4. Attachment 4 - R12-206

Summary/Conclusion:

If the committee approves the recommendations as presented, staff will present a Resolution at the April 16th Board meeting to authorize a joint public hearing with VDOT to be held on the May 7th Board meeting to approve the FY2020 Secondary Six Year Plan (SSYP).

Reviewed By:

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Secondary System
Stafford County
Construction Program
Estimated Allocations

Fund	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	Total
CTB Formula - Unpaved State	\$39,422	\$0	\$0	\$0	\$0	\$0	\$39,422
TeleFee	\$480,643	\$480,643	\$480,643	\$480,643	\$480,643	\$480,643	\$2,883,858
District Grant - Unpaved	\$0	\$55,351	\$32,766	\$42,439	\$44,185	\$44,185	\$218,926
Total	\$520,065	\$535,994	\$513,409	\$523,082	\$524,828	\$524,828	\$3,142,206

Board Approval Date:

Residency Administrator

Date

County Administrator

Date

FY 2020 Secondary Six Year Plan (SSYP)

- Each year, the Board adopts a Secondary Six Year Plan (SSYP) funding strategy following a joint public hearing with District VDOT staff
- County staff has met with our local VDOT representatives to prepare a draft funding plan for consideration.
- Funding is provided by the distribution of Telefees (charges to communication companies for the use of VDOT right-of-way for location of communication cables), along with state funding for paving unpaved state roads. Expected FY2020 funding is provided below:

Telefees	\$480,643
Unpaved Road Funds	<u>\$ 39,422</u>
TOTAL	\$520,065

- For the next fiscal year, FY2020, staff is proposing to continue funding for projects underway and to begin addressing new unpaved roads and secondary road safety issues as noted below:
 - Provide \$34,178 for the Poplar Road Curve Improvement Project
 - Provide \$252,488 for the Courthouse Road Widening Project
 - Provide \$39,422 towards the hard surfacing of Brent Point Road
 - \$46,021 is applied to fund shoulder wedge improvements where needed
 - Provide \$32,611 for qualifying neighborhood traffic study initiatives
 - Provide \$115,345 for Countywide Engineering Services & Survey
 - Total FY2020 funds allocated is \$520,065
- Other recommendations for future SSYP funding are as follows:
 - Accelerate the paving of Brent Point Road by reallocating unspent FY2019 Misc. Paving onto the Brent Point Road project
 - Begin funding a new unpaved road – New Hope Church Road
 - Utilize any cost savings on the Juggins Road and Poplar Road projects towards the paving of Monroe Farm Road
 - Begin applying additional County funding for shoulder wedge/trench widening improvements along secondary roads where needed

- Maintain funding for re-paving of the state maintained section of Raven Road to provide improved access to Crow's Nest (Legacy Funding)
 - Continue funding for qualifying neighborhood traffic safety initiatives
 - Continue funding for Countywide Engineering Services & Survey and Right Of Way
- The draft FY2020 SSYP is attached showing suggested funding through FY2025
- Following committee input, staff will request Board authorization at the April 16th meeting for a joint public hearing with VDOT staff, with the public hearing tentatively scheduled for May 7th
- The Board resolution is scheduled for delivery to the VDOT Fredericksburg District Office by the end of May

STAFFORD COUNTY -- SSYP / FY-2020 THRU FY 2025

UPC#	100622	POPLAR ROAD <i>From: 0.08 Miles North West of Intersection of Route 616 & Route 627</i> <i>To: 0.27 Miles South of Intersection of Route 616 & Route 627</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
1	\$2,020,000		\$1,985,822	\$34,178	\$0	\$0	\$0	\$0	\$0	\$2,020,000
UPC#	4632	RTE 630 - WIDEN TO 4 LANES <i>From: 0.10 Miles West of Route 628</i> <i>To: 0.22 Miles West of Route 732</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
2	\$35,966,920		\$35,404,849	\$252,488	\$309,583	\$0	\$0	\$0	\$0	\$35,966,920
UPC#	108667	RAVEN ROAD <i>From: 0.4 Miles South of End of State Maintenance</i> <i>To: Brooke Road (south intersection)</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
3	\$89,545		\$89,545	\$0	\$0	\$0	\$0	\$0	\$0	\$89,545
UPC#	108668	RAVEN ROAD PHASE 2 <i>From: 0.31 Miles South of Brooke Road</i> <i>To: Brooke Road (north intersection)</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
4	\$31,939		\$31,939	\$0	\$0	\$0	\$0	\$0	\$0	\$31,939
UPC#	XXXXXX	NEW HOPE CHURCH ROAD <i>From: Camp Selden Road</i> <i>To: End of State Maintenance</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
5	\$370,000		\$0	\$0	\$55,351	\$102,091	\$69,325	\$69,325	\$0	\$296,092
UPC#	110792	BRENT POINT ROAD <i>From: Intersection of 635 Decatur Rd</i> <i>To: Intersection of 633 Arkendale Rd</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
6	\$378,800		\$339,378	\$39,422	\$0	\$0	\$0	\$0	\$0	\$378,800
UPC#	XXXXXX	WEDGE/TRENCH WIDENING <i>Provides a pavement shoulder wedge to make a road safer to drive</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
7	\$100,000		\$100,000**	\$0	\$0	\$0	\$0	\$0	\$0	\$0
UPC#	110028	MISC PAVING <i>Resurfacing existing subdivision roads</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
8	\$0		\$78,935	\$46,021	\$60,530	\$161,909	\$201,878	\$145,996	\$120,160	\$915,429
UPC#	99749	COUNTYWIDE TRAFFIC SERVICES <i>Services include neighborhood traffic calming and cut through measures, speed & traffic studies, & signage improvements</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
9	\$0		\$186,344	\$32,611	\$25,000	\$44,500	\$30,000	\$30,000	\$120,160	\$468,615
UPC#	99968	COUNTYWIDE ENGINEERING SERVICES & SURVEY <i>Services include neighborhood traffic calming and cut through measures, speed & traffic studies, & signage improvements</i>								
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
10	\$0		\$48,629	\$115,345	\$60,530	\$161,909	\$201,879	\$215,322	\$120,162	\$923,776

STAFFORD COUNTY -- SSYP / FY-2020 THRU FY 2025

UPC#		100241 COUNTYWIDE RIGHT OF WAY								
Use when impractical to open a project: Attorney Fees & Acquisition Cost										
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
11	\$0		\$150,705	\$0	\$25,000	\$43,000	\$20,000	\$20,000	\$120,161	\$378,866

UPC#		-3348	FUTURE UNPAVED FUNDS							
Reconstruction without added capacity										
PRIORITY	ESTIMATE	Fund Source	Previous	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	TOTAL
12	\$0		\$0	\$0	\$0	\$0	\$0	\$44,185	\$44,185	\$88,370
				\$520,065	\$480,643	\$411,318	\$453,757	\$455,503	\$524,828	

** \$100,000 To be used to wedge/trench widen Andrew Chapel Road

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, Stafford County Administration Center, Stafford, Virginia, on the 3rd day of July, 2012:

<u>MEMBERS:</u>	<u>VOTE:</u>
Susan B. Stimpson, Chairman	Yes
Cord A. Sterling, Vice Chairman	Yes
Jack R. Cavalier	Yes
Paul V. Milde III	Yes
Ty A. Schieber	Yes
Gary F. Snellings	Yes
Robert "Bob" Thomas, Jr.	Yes

On motion of Mr. Cavalier, seconded by Mr. Snellings, which carried by a vote of 7 to 0, the following was adopted:

A RESOLUTION EXPRESSING THE BOARD'S INTENT TO PAVE
THE REMAINING UNPAVED ROADS IN STAFFORD COUNTY THAT
ARE INCLUDED IN THE SECONDARY SYSTEM OF STATE HIGHWAYS

WHEREAS, the Board supports paving of all state secondary roads in the County; and

WHEREAS, there are fourteen (14) roads in the County that are part of the Secondary System of State Highways that are not paved; and

WHEREAS, four (4) of these roads are included in the adopted Secondary Road Six Year Plan (SSYP) to be paved; and

WHEREAS, the Board would like to express its commitment to the paving of the unpaved roads that are a part of the Secondary System of State Highways; and

WHEREAS, the Board will not pave these roads at the expense of completing higher transportation priorities or when the residents along these roads oppose paving them;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 3rd day of July, 2012, that the Board intends to pave the remaining unpaved County roads that are in the Secondary System of State Highways as funding allows and when the residents along these roads support paving the roads.

A Copy, teste:

A handwritten signature in blue ink, appearing to read "Anthony J. Romanello", written over a horizontal line.

Anthony J. Romanello, ICMA-CM
County Administrator

AJR:MTS:tbn

Infrastructure Committee Meeting
AGENDA
April 2, 2019 - 1:30 PM
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Cindy Shelton
INFRASTRUCTURE COMMITTEE MEETING AGENDA

Subject:

Transportation Grant Updates – RSTP/CMAQ and I95/395 Commuter Choice Program

Recommended Action:

County staff recommends the submittal of two applications for the I-395/I-95 Commuter Choice Program. One application would be for the new route of FRED Transit service from the Staffordboro Park and Ride lot to the Quantico VRE Station and the second application would be to supplement funding of the Leeland Road Turn Lane Project.

Committee/Commission Recommendation:

Fiscal Impact:

N/A

District:

N/A

Overview:

FAMPO requested new applications for CMAQ/RSTP funding by February 26, 2019, and the County submitted two applications, requesting funding for the Garrisonville Road STARS Study and for roadway improvements at the Route 1 and Layhill Road intersection. The County also requested that CMAQ/RSTP funds continue to be applied to the Route 1 & Enon Road project.

These new funding allocations are for FY2020 through FY2026 with the majority of the funding coming in the out years, FY2024- FY2026. The FY2020 to FY2026 allocation results will be presented at the April FAMPO meeting.

The I-395/I-95 Commuter Choice Program utilizes a \$15M/year funding program than TransUrban is providing for projects that benefit toll payers on the I-395 HOT Lanes. Eligible projects include new or enhanced bus service, new or enhanced commuter bus service, Park & Ride lots and access, roadway improvements (corridor management and ITS), and Transportation System Management (TSM)/Transportation Demand Management (TDM).

The application process for this program begins in April with NVTC/PRTC Commission and CTB approval in October 2019. For this first round, the program is looking to fund "shovel-ready" projects by Toll Day One. Staff is recommending to apply for funding for the new FRED bus route to Quantico and apply for additional funding for Leeland Road Turn Lane Project.

Discussion/Analysis:

The County submitted two new applications to FAMPO for CMAQ/RSTP funding. These projects are the Garrisonville Road STARS study and roadway improvements at the intersection of Route 1 and Layhill Road. Staff also requested that FAMPO continue to apply funding to the Route 1 and Enon Road project.

Staff has learned that 7 new projects were submitted to FAMPO with a requested cost of \$18.3 million. Program wise, \$53.3 million worth of projects are competing for \$11.9 million worth of funding.

FAMPO has released the results of the rescored existing and newly submitted projects and the County will have CMAQ/RSTP funds applied to the Garrisonville Road STARS Study and continued funding on the Route 1 and Enon Road Intersection project.

The goals of the I-395/I-95 Commuter Choice Program are to move more people, reduce congestion, increase travel options, enhance transportation connectivity, and improve transit service.

Based on conversations with NVTC, staff is recommending submittal of an application for funding of the new route of FRED Transit service from the Staffordboro Park and Ride lot to the Quantico VRE Station, which could save both FAMPO and the County from having to contribute funds to this new service. Additionally, staff recommends submittal of an application to supplement funding of the Leeland Road Turn Lane Project which proposes a center turn lane to be constructed between Deacon Road and Walnut Drive. This project would be an addition to a VDOT administered project for pedestrian/bicycle trails along the same route and is HSIP funded. The estimated cost of the turn lane project is significant and would require at least \$4M to fully fund and is not likely to be "shovel ready" by Toll Day One plus 120 days which is required by the scoring requirements.

Attachments:

1. Attachment 1 FAMPO RSTP-CMAQ Scoring Results
2. Resolution R19-60 Approving RSTP CMAW Request

Summary/Conclusion:

County staff submitted 2 new applications for FAMPO CMAQ/RSTP funds and requested continued funding for the Route 1 and Enon Road Intersection project.

These funding allocations are for FY2020-FY2026 with the majority of the funding coming in the out years, FY2024 - FY2026.

FAMPO has released the results of the re-scored existing and newly submitted projects and the County

will receive CMAQ/RSTP funding for the Garrisonville Road STARS Study and continued funding for the Route 1 and Enon Road Intersection project.

County staff recommends the submittal of two applications for the I-395/I-95 Commuter Choice Program.

Strategic Priorities:

Reviewed By:

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Rescored Projects

Project Description	Score
VRE Station Multimodal Access Improvements	90
Garrisonville Road STARS Study (from US Route 1 to Onville Road)	76
US 1 & Market Street Turn Lane Improvements	71
Harrison Road & Salem Church Intersection Improvement	64
US 1 & Enon Rd Intersection and Roadway Improvements	52
Gateway Blvd Extension*	50
Mills Drive & Germanna Point/Hospital Blvd Turn Lane Improvements	46
Mine Rd Widening	46
US Route 1 - Layhill Road Intersection and Roadway Improvements	45
GWRC Leased Parking Spaces	36
U.S. Route 1 Improvements at Powhatan Street/Augustine Avenue	25

*Partial Funding likely

 = Funding Cutoff

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 19th day of February, 2019:

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

On motion of Ms. Bohmke, seconded by Mr. Coen, which carried by a vote of 7 to 0, the following was adopted:

ENDORSE THE SUBMISSION OF REQUEST FORMS FOR COUNTY
PROJECTS FOR FEDERAL CONGESTION MITIGATION AND AIR
QUALITY AND REGIONAL SURFACE TRANSPORTATION
PROGRAM FUNDING

WHEREAS, the Board desires to take advantage of all available regional funding for transportation improvements in the County; and

WHEREAS, the County is eligible to receive federal Congestion Mitigation and Air Quality (CMAQ) Program funds and federal Regional Surface Transportation Program (RSTP) funds; and

WHEREAS, the Fredericksburg Area Metropolitan Planning Organization (FAMPO) is calling for submission of new CMAQ/RTSP projects, which will be screened, and if screened through, would be scored and ranked according to the Project Prioritization Methodology per federal planning guidance; and

WHEREAS, the Virginia Department of Transportation (VDOT) and FAMPO will recommend new, if ranked high enough to receive federal funding, and existing CMAQ/RSTP projects to the Commonwealth Transportation Board (CTB) for funding in this region; and


WHEREAS, approximately \$10,000,000 in CMAQ/RSTP funding will be allocated to qualifying projects in the Fredericksburg District for FY2020 to FY2026, with most of the funding for the out years – FY2024 to FY2026; and

WHEREAS, staff is proposing to submit request forms for a Garrisonville Road STARS study (from US Route 1 to Onville Road), improvements to Enon Road/US Route 1 Intersection, and improvements to US Route 1/Layhill Road intersection as well as along Layhill Road until its intersection with Forbes Street;

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the 19th day of February, 2019, that the Board be and it hereby does authorize staff to submit request forms on the above mentioned Stafford County projects as candidate projects to be considered and to compete for federal Congestion Mitigation and Air Quality (CMAQ)/ Regional Surface Transportation Program (RSTP) funding within the Fredericksburg District; and

BE IT STILL FURTHER RESOLVED, that the County Administrator, or his designee, shall forward a certified copy of this Resolution to the Fredericksburg Area Metropolitan Planning Organization (FAMPO) Administrator.

A Copy, teste:



Thomas C. Foley
County Administrator

TCF:JDT:bhc:cjh

Infrastructure Committee Meeting
AGENDA
April 2, 2019 - 1:30 PM
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Cindy Shelton
INFRASTRUCTURE COMMITTEE MEETING AGENDA

Subject:

CONSIDER REFERRAL TO THE UTILITIES COMMISSION AN AMENDMENT TO STAFFORD COUNTY CODE SEC. 25-165, "TYPE, CAPACITY AND LOCATION, ETC." REGARDING ON-SITE SEWAGE SYSTEMS

Recommended Action:

Approve forwarding the proposed Resolution R19-81 to the Board to refer proposed Ordinance 019-26 to the Utilities Commission to consider an amendment to County Code Sec. 25-165, "Type, Capacity and Location, Etc." regarding on-site sewage disposal systems.

Committee/Commission Recommendation:

This item was on the March 5, 2019 Infrastructure Committee agenda; however, time constraints did not allow for a full review. Therefore no recommendation was considered.

Fiscal Impact:

N/A

District:

N/A

Overview:

Proposed Resolution R19-81 refers proposed Ordinance 019-26 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 019-26 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 019-26 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.

This item was considered by the Infrastructure Committee at its March 5, 2019 meeting; however, due to time constraints at the meeting there was no recommendation.

Attachments:

1. Attachment 1 Proposed Resolution R19-81 - UC Referral
2. Attachment 2 - Proposed Ordinance 019-26
3. Attachment 3 - York Model Ordinance
4. Attachment 4 - Newport News Code
5. Attachment 5 - Spotsylvania Code
6. Attachment 6 - Model Ordinance

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.

Strategic Priorities:

Reviewed By:

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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 2nd day of April, 2019:

MEMBERS:

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

VOTE:

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 2nd day of April, 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.

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 impactful 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 than 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 seeproof 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.

Infrastructure Committee Meeting
AGENDA
April 2, 2019 - 1:30 PM
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Cindy Shelton
INFRASTRUCTURE COMMITTEE MEETING AGENDA

Subject:	
DISCUSSION: Historic Port of Falmouth Beach and River Flooding	
Recommended Action:	
This item is a discussion to determine if there is Committee consensus on the future of the Falmouth beach.	
Committee/Commission Recommendation:	
Direction on future maintenance and/or restoration of the beach.	
Fiscal Impact:	District:
To be determined at a future date	George Washington
Overview:	
Flooding of the Rappahannock River at the Historic Port of Falmouth has historically been an issue. The purpose of this discussion is for the Infrastructure Committee to take a broader look at this issue. Should this area continue to be maintained and operated as a beach or could this area be restored to nature with trees and plantings, while still providing trails to and in front of the Rappahannock River?	
Discussion/Analysis:	
<p>In June of 2018 a flood occurred on the Rappahannock River that crested at approximately 25 feet. This flood left tree and other debris from upstream strewn throughout the Historic Port of Falmouth Park (HPOF) and River Road. Emergency Management; the Sheriff's Office; VDOT; Parks, Recreation and Community Facilities; Public Works/Public Utilities; and the R-Board quickly developed a plan and cooperatively cleaned debris from River Road.</p> <p>In July and August of 2018 Emergency Management; the Sheriff's Office; Parks, Recreation and Community Facilities; Public Works/Public Utilities; and the R-Board removed the debris from the Belmont-Ferry Farm Trail, the Historic Port of Falmouth Parking Lot, and a portion of the Beach at HPOF. The beach was opened in late August.</p>	

Research on other options for cleanup of the remaining debris was undertaken. Options researched included gathering and burning the debris, gathering and chipping the debris into mulch or allowing the debris to remain. During this period, Emergency Management was able to coordinate a volunteer organization specializing in storm disaster recovery, called Team Rubicon, to come and assist with work to clear debris from HPOF. Team Rubicon had no cost associated with their effort and agreed to come to Stafford March 30-31, 2019. The only cost would be pulling debris to a central location to enable Team Rubicon to access the debris quickly and easily. Emergency Management; Parks, Recreation and Community Facilities; Public Works/Public Utilities; and the R-Board worked together to pull the debris to a central area near the parking lot March 8-9.

Team Rubicon is due to arrive on March 30-31. Pending the completion of this exercise, it will need to be determined if additional work is needed to remove the cleared debris from the site. This could result in additional costs.

Supervisor Coen held a Community River Roundtable on February 27, 2019.

At this meeting, citizens provided feedback and ideas related to the Rappahannock River flooding and the impacts on HPOF. Feedback was received on potential ways to communicate flooding conditions and potential ways to mitigate flooding.

In 2014, this topic was researched and discussed. Options included improved lighting at the HPOF parking lot, adding fencing along the Belmont-Ferry Farm trail and the HPOF parking lot, creating a riparian buffer by planting trees and vegetation on approximately 33,500 square feet of the beach area, and dredging the tidal zone areas. None of these options received acceptance, and thus, none were implemented.

Attachments:

1. Falmouth Improvements 3-31-14
2. Falmouth Beach Project_031914 with fence & lighting

Summary/Conclusion:

Based on discussion at the March 19, 2019 Board of Supervisors' meeting, the following items need to be explored more fully and discussion by the committee would be helpful in establishing direction for staff regarding next steps:

- Should this area continue to be maintained and operated as a beach or could this area be restored to nature with trees and plantings, while still providing trails to and in front of the Rappahannock River? Usage of the park, how many of users are from Stafford County?
- Does this area cause unwanted events? Talk to the Sheriff's Office and Fire/Rescue Department to see if they have recurring issues associated with this portion of the River.
- What types of grants are available to restore the shoreline – how much?

- Are there options to keep a portion of the river open for recreational fishing or kayaking?
- Analysis of the recommendations from the Public Rappahannock River Roundtable.

Strategic Priorities:
Reviewed By:

This agenda may be amended on the day of the meeting. Participation of all citizens is encouraged. For all individuals with special needs, please notify County Administration of any accommodations required at least 24 hours in advance of the meeting. The agenda and related materials may be found on the County's website at www.staffordcountyva.gov

Falmouth Improvements

Trail and Parking Safety Improvements

Lighting Plan

The Falmouth area has parking at the Historic Port of Falmouth with a trail from the park through historic Falmouth, Brooks and Pratt Parks. The trail and parking areas do not currently have lighting. In order to improve safety for visitors to the area, staff has investigated the estimated costs to provide lighting along the trail from the parking lot to an area close to Amy's café, where lighting is available. The addition of lights along the trail will need to be approved by the Architectural Review Board (ARB).

In accordance with the County's trail lighting plan, lights would be spaced at approximately 100 feet along the trail and parking lot. Staff will propose an aluminum black powder coated pole which would match the historic feel of the area. If approved by the ARB the lighting would cost approximately \$140,000.

Additional Fencing

Staff also proposes to add fencing to increase the safety of the trail and parking area. The fencing would begin at the trail crossing on River Road, follow the path around the parking lot and continue west to King Street. The fencing, which would also need ARB approval, would match the existing split rail fencing along the trail. The fencing is estimated to cost \$25 per square foot for installation and will require archeological services during the installation of the fence posts.

The lighting and fencing are shown on the attached graphic.

River Restoration Plan

Riparian Buffer Area



In order to restore the Falmouth River shoreline to a more natural state, staff recommends vegetating approximately 33,500 square feet of riparian buffer, also known as the Critical Resource Protection Area (CRPA) adjacent to the river bank and tidal zone. Using the Riparian Buffer Modification & Mitigation Guidance Manual, Restoration/ Establishment Table B, buffer areas greater than ¼ acre require a minimum of 1,210 bare root seedlings or mature trees. This area has been a recreational area for some time; therefore, in order to prevent the accidental trampling of seedlings, staff suggests mature trees be planted in accordance with the table below. The plantings should be a mix of canopy and understory trees.

Mature Trees			
Plant Name	Quantity	Cost per Unit	Total
River Birch (<i>Canopy</i>)	40	\$200	\$8,000
Bald Cypress (<i>Canopy</i>)	40	\$200	\$8,000
Sycamore (<i>Canopy</i>)	40	\$200	\$8,000
Common Buttonbush (<i>understory</i>)	100	\$190	\$19,000
Silky Dogwood (<i>understory</i>)	100	\$190	\$19,000
Total Cost of 320 mature trees			\$62,000
<i>*Costs include delivery and installation. Mulching, soil amendments and staking are not included.</i>			

River Bank Area



To restore the river bank area, staff recommends stabilizing the 20± foot wide area between the tidal zone and riparian buffer using erosion control matting and live-stakes. The live-stakes will consist of water-tolerant trees and shrubs.

Live-Stakes			
Plant Name	Quantity	Cost per Bundle (50 units/bundle)	Total
Black Willow	650	\$22	\$286
Silky Dogwood	650	\$21	\$273
Common Buttonbush	750	\$21	\$315
Total Cost of 2,050 live-stakes for a 20± area			\$874
Erosion Control Matting			
Type	Quantity	Cost per Roll	Total
Jute Mesh	14 rolls	\$120/(4' X 225')	\$1,680

Tidal Zone



The tidal zone area is composed of sand and cobbles with no existing vegetation. This beach-like area is at the very top of the tidal influence on the Rappahannock where the river flow is more prominent than the tides. The high velocity flows in the flood-way and the amount of flooding make this a poor prospect for a successful living-shorelines project. One of the main requirements for a living-shoreline is that the site be in a low-energy area.

Dredging of the Tidal Zone Area

Dredging of the tidal zone area is not recommended by staff. There are many complications involved with dredging including a Joint Permit Application which must be submitted to Virginia Marine Resources Commission. This would require a plan prepared by an engineer showing the existing and proposed contours of the river bank, tidal wetlands, beach and sub-aqueous bottom. A wetlands delineation may be required as there appears to be wetlands on-site. The Joint Permit Application review would require coordination with a number of State and Federal agencies. Dredging this area could impact endangered species, restrictions due to fish spawning seasons and significant environmental impacts. The area is also prone to seasonal flooding, and the tidal zone cobble stone area would most likely reappear naturally.

The total cost for the river restoration is estimated to be approximately \$65,000.

