FOR AGENCY USE ONLY				
	Notes:			
JPA#				

# **APPLICANTS**

PLEASE PRINT OR TYPE ALL ANSWERS. If a question does not apply to your project, please print N/A (not applicable) in the space provided. If additional space is needed, attach extra 8 1/2 x 11 inch sheets of paper.

Check all that apply							
Pre-Construction Notification (PCN) NWP # RP # 05 (For NWPs & RP 05 ONLY - No DEQ-VWP permit writer will be assigned)	SPGP	DEQ Reapplication Existing permit number:	Receiving federal funds Agency providing funding: 				
Regional Permit 17 Checklist (RP-17)							

PREVIOUS ACTIONS RELATED TO THE PROPOSED WORK (Include all federal, state, and local pre application coordination, site visits, previous permits, or applications whether issued, withdrawn, or denied)								
Historical in	nformation for past permit submittals can <u>http</u>	be found online with VMRC - <u>ht</u> ://ccrm.vims.edu/perms/newpern	tps://webapps.mrc.virgii mits.html	<u>nia.gov/public/habitat/</u> - or VIMS -				
Agency	Action / Activity	Permit/Project number, including any non-reporting Nationwide permits previously used (e.g., NWP 13)	Date of Action	If denied, give reason for denial				
	See Section 1.2 and Table 9 in the attached application							

1. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR INFORMATION The applicant(s) is/are the legal entity to which the permit may be issued (see How to Apply at beginning of form). The applicant(s) can either be the property owner(s) or the person/people/company(ies) that intend(s) to undertake the activity. The agent is the person or company that is representing the applicant(s). If a company, please also provide the company name that is registered with the State Corporation Commission (SCC), or indicate no registration with the SCC.

Legal Name(s) of Applicant(s)			Agent (if applicable)				
Mountain Valley Pipeline, LLC			Tetra Tech, Inc.				
Mailing address			Mailing address				
2200 Energy Drive			661 Anderson Drive ,Foster Plaza 7, Suite 200				
City		State	ZIP Code	City		State	ZIP Code
Canonsburg		PA 15317 Pittsburgh PA			PA	15220	
Phone number w/area code	Fax			Phone number w/area code	Fax		
(724) 271-7600				(412) 921-7090			
Mobile	E-ma RCoo .com	il per@equ	uitransmidstream	Mobile	E-mail		
State Corporation Commission	Name a	nd ID nu	mber (if	State Corporation Commission Name and ID number (if			
<sup>applicable)</sup> Mountain Valley Pipeline, LLC T0586216			<sup>applicable)</sup> Tetra Tech, Inc. F0572851				
Certain permits or permit authorizations may be provided via permit via electronic mail, please provide an e-mail address l			electronic mail. If the applicant nere: RCooper@equitransmidst	t wis trea	shes to r m.com	eceive their	

Application Revised: October 2019

Property owner(s) legal name, i	f differe	nt from a	pplicant	Contractor, if known		
See Table 8	•		FF	NA		
Mailing address				Mailing address		
City		State	ZIP code	City	ZIP code	
Phone number w/area code	Fax	<u> </u>	<u> </u>	Phone number w/area code		
Mobile	E-ma	il		Mobile	E-mail	
State Corporation Commission applicable)	Name a	nd ID nu	mber (if	State Corporation Commission	ו Name ID nur	nber (if applicable)
2. PROJECT LOCATION INFO (Attach a copy of a detailed m boundary, so that it may be lo area if the SPGP box is check	RMATION nap, succession pocated f ked on I	ON ch as a L for inspe Page 7.)	JSGS topogra ection. Include	phic map or street map showing an arrow indicating the north d	the site locat irection. Inclu	ion and project de the drainage
Street Address (911 address it a	available	e)		City/County/ZIP Code	Tabla O	
See Section 1.4, Table 6, and Table 8						
Name of water body(ies) within See Table 1, Table 2, Table	project 3, and	boundari Table 7	es and drainag	e area (acres or square miles).		
Tributary(ies) to: Basin: <u>See Table 7</u> ( <i>Example: Basin: <u>James River</u></i>	r Sub	3ub-basir - <i>basin: <u>Λ</u></i>	n: <u>See Table 7</u> <i>Aiddle James F</i>	<u>River)</u>		
Special Standards (based on D	EQ Wat	er Qualit	y Standards 9∖	AC25-260 et seq.): See Section	4.2 in attach	ed application
Project type (check one)		<u>X</u>	Single user Multi-user ( Surface wat	(private, non-commercial, residenti community, commercial, industrial, ter withdrawal	al) government)	
Latitude and longitude at center (Example: 37.33164/-77.68200	r of proje )	ect site (c	lecimal degree	s): See Section 1.4	/	
USGS topographic map name:	See Fi	gure 3				
8-digit USGS Hydrologic Unit C If known, indicate the 10-digit a 	ode (Hl nd 12-d	JC) for ye igit USG	our project site S HUCs (see <u>h</u> i 	(See <u>http://cfpub.epa.gov/surf/loca</u> ttp://consapps.dcr.virginia.gov/htdo	<u>ite/index.cfm</u> ) <u>cs/maps/HUE</u>	See Table 7 xplorer.htm) :
Name of your project ( <i>Example</i>	: Water	Creek dr	rivewav crossin	α) Mountain Valley Pipeline Pro	oject	

|--|

Total size of the project area (in acres): 2,143 acres in Virginia

2. PROJECT LOCATION INFORMATION (Continued)	
Provide driving directions to your site, giving distances from the be	est and nearest visible landmarks or major intersections:
See Section 1.4 and Section 1.8 in the attached application	
Does your project site cross boundaries of two or more localities (	i.e. cities/counties/towns)?
If so, name those localities: See Table 6	
3. DESCRIPTION OF THE PROJECT, PROJECT PRIMARY A	ND SECONDARY <u>PURPOSES</u> , PROJECT <u>NEED</u> , INTENDED
<ul> <li>USE(S), AND ALTERNATIVES CONSIDERED (Attach additional additionadditional additional additional additional a</li></ul>	ional sheets if necessary) r expansion of an existing land use and/or proposed future use of
residual land.	
<ul> <li>Describe the physical alteration of surface waters, including the and hydraulic dredging, when applicable, and <u>whether or not</u></li> </ul>	he use of pilings (#, materials), vibratory hammers, explosives, <u>tree clearing will occur</u> (include the area in square feet and time of
<ul> <li>year).</li> <li>Include a description of alternatives considered and measure</li> </ul>	s taken to avoid or minimize impacts to surface waters, including
wetlands, to the maximum extent practicable. Include factors	such as, but not limited to, alternative construction technologies,
<ul> <li>alternative project layout and design, alternative locations, loc</li> <li>For utility crossings, include both alternative routes and altern</li> </ul>	cal land use regulations, and existing infrastructure
For surface water withdrawals, public surface water supply with the surface water supply water supersece water supply water supply water supply water supply water	ithdrawals, or projects that will alter in stream flows, include the
water supply issues that form the basis of the proposed proje	ct.
See Section 1.2 and Section 1.4 for Project description and	location.
See Section 2 for Project purpose, need, and uses.	
See Section 3 for the Project's alternative analysis.	
See Section 5 and Table 15 for information on wetland and	waterbody crossing methods and a description of impact
avoidance, minimization, and compensation.	
Date of proposed commencement of work (MM/DD/XXXX)	Date of proposed completion of work (MM/DD/XXXX)
Upon approval	12/31/2021
Are you submitting this application at the direction of any state,	Has any work commenced or has any portion of the project for
local, or federal agency? <u>Yes</u> <u>X</u> No	which you are seeking a permit been completed? _XYesNo
If you answered "yes" to either question above, give details stating	g when the work was completed and/or when it commenced, who
performed the work, and which agency (if any) directed you to sub	omit this application. In addition, you will need to clearly
See Section 1.2 Table 10 Table 11 and Figure 2	project arawings.
See Section 1.2, Table 10, Table 11, and Figure 2	
Are you aware of any unresolved violations of environmental law of	or litigation involving the property? X YesNo
(II yes, piease explain)	
No unresolved violations of environmental law.	
See Section 1.2 for litigation involving the property	у.

#### 4. PROJECT COSTS

Approximate cost of the entire project, including materials and labor:  $\frac{>1,100,000,000}{=}$ Approximate cost of only the portion of the project affecting state waters (channelward of mean low water in tidal areas and below ordinary high water mark in nontidal areas):  $\frac{>500,000}{=}$ 

5. PUBLIC NOTIFICATION (Attach additional sheets if necessary) Complete information for all property owners adjacent to the project site and across the waterway, if the waterway is less than 500 feet in width. If your project is located within a cove, you will need to provide names and mailing addresses for all property owners within the cove. If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line. Per Army Regulation (AR 25-51) outgoing correspondence must be addressed to a person or business. Failure to provide this information may result in a delay in the processing of your application by VMRC.								
Property owner's name	Mailing address	City	State ZIP code					
See Table 8								
Name of newspaper having general circulation in the area of the project:     See Section 6.0       Address and phone number (including area code) of								
newspaper See Section 6.0								
Have adjacent property owners	been notified with forms in Appendix A	A?Yes XNo (attach copi	es of distributed forms	3)				
	NGERED SPECIES INFORMATION							
6. THREATENED AND ENDANGERED SPECIES INFORMATION								
Please provide any information concerning the potential for your project to impact state and/or federally threatened and endangered species (listed or proposed). Attach correspondence from agencies and/or reference materials that address potential impacts, such as database search results or confirmed waters and wetlands delineation/jurisdictional determination. Include information when applicable regarding the location of the project in Endangered Species Act-designated or -critical habitats. Contact information for the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Virginia Dept. of Game and Inland Fisheries, and the Virginia Dept. of Conservation and Recreation-Division of Natural Heritage can be found on page 4 of this package.								

#### 7. HISTORIC RESOURCES INFORMATION

Note: Historic properties include but are not limited to archeological sites, battlefields, Civil War earthworks, graveyards, buildings, bridges, canals, etc. Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the USACE from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the USACE, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.

Are any historic properties located within or adjacent to the project site?	Х	Yes	No	Uncertain
If Yes, please provide a map showing the location of the historic property	with	in or a	djacent to the pro	oject site.

Are there any buildings or structures 50 years old or older located on the project site?	X Yes	No	Uncertain
If Yes, please provide a map showing the location of these buildings or structures on the	he project site	<del>)</del> .	

Is your project located within a historic district? X Yes No Uncertain

If Yes, please indicate which district: <u>See Section 1.9.3</u> and Section 4.4.6

7. HISTORIC RESOUR	CES INFORMATION (Continued)
Has a survey to locate a No	archeological sites and/or historic structures been carried out on the property? Uncertain
If Yes, please provide th	ne following information: Date of Survey:See Section 1.9.3 and Section 4.4.6
Name of firm:	Tetra Tech, Inc., New South Associates
Is there a report on file	with the Virginia Department of Historic Resources? $\stackrel{X}{-\!\!-\!\!-}$ Yes NoUncertain
Title of Cultura	I Resources Management (CRM) report:See Section 1.9.3 and Section 4.4.6
Was any histor	ric property located? X Yes No Uncertain

### 8. WETLANDS, WATERS, AND DUNES/BEACHES IMPACT INFORMATION

Report each impact site in a separate column. If needed, attach additional sheets using a similar table format. Please ensure that the associated project drawings clearly depict the location and footprint of each numbered impact site. For dredging, mining, and excavating projects, use Section 17.

	Impact site number 1	Impact site number 2	Impact site number 3	Impact site number 4	Impact site number 5
Impact description (use all that apply): F=fill EX=excavation S=Structure T=tidal NT=non-tidal TE=temporary PE=permanent PR=perennial IN=intermittent SB=subaqueous bottom DB=dune/beach IS=hydrologically isolated V=vegetated NV=non-vegetated MC=Mechanized Clearing of PFO ( <i>Example: F, NT, PE, V</i> )	See Table B-1 and Table B-2 within Attachment B				
Latitude / Longitude (in decimal degrees)					
Wetland/waters impact area (square feet / acres)					
Dune/beach impact area (square feet)					
Stream dimensions at impact site (length and average width in linear feet, and area in square feet)					
Volume of fill below Mean High Water or Ordinary High Water (cubic yards)					

8. WETLANDS/WATERS	IMPACT INFORMAT	ION (Continued)			
Cowardin classification of impacted wetland/water or geomorphological classification of stream Example wetland: PFO; Example stream: 'C' channel and if tidal, whether vegetated or non-vegetated wetlands per Section 28.2- 1300 of the Code of Virginia	See Table B-1 and Table B-2 within Attachment B				
Average stream flow at site (flow rate under normal rainfall conditions in cubic feet per second) and method of deriving it (gage, estimate, etc.)					
Contributing drainage area in acres or square miles (VMRC cannot complete review without this information)					
DEQ classification of impacted resource(s): Estuarine Class II Non-tidal waters Class III Mountainous zone waters Class IV Stockable trout waters Class V Natural trout waters Class VI Wetlands Class VII https://law.lis.virginia.gov	sos also submit as	nart of this section	a wetland and wat	ors boundary dolin	eation man-
see (3) in the Footnotes s	ection in the form in	structions.			

For DEQ permitting purposes, also submit as part of this section a written disclosure of all wetlands, open water, or streams that are located within the proposed project or compensation areas that are also under a deed restriction, conservation easement, restrictive covenant, or other land-use protective instrument.

#### 9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRACTOR CERTIFICATIONS

#### READ ALL OF THE FOLLOWING CAREFULLY BEFORE SIGNING

<u>PRIVACY ACT STATEMENT</u>: The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the Joint Permit Application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary, but it may not be possible to evaluate the permit application or to issue a permit if the information requested is not provided.

<u>CERTIFICATION</u>: I am hereby applying for permits typically issued by the DEQ, VMRC, USACE, and/or Local Wetlands Boards for the activities I have described herein. I agree to allow the duly authorized representatives of any regulatory or advisory agency to enter upon the premises of the project site at reasonable times to inspect and photograph site conditions, both in reviewing a proposal to issue a permit and after permit issuance to determine compliance with the permit.

In addition, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9. APPLICANT, AGENT, PROPERTY OWNER, AND CONTRA	CTOR CERTIFICATIONS (Continued)	
Is/Are the Applicant(s) and Owner(s) the same? Yes 🖌 No		
Legal name & title of Applicant	Second applicant's legal name & title, if applic	cable
Robert J. Cooper - SVP, MVP Engineering and Construction	N/A	
Applicant's signature Robert J. Com	Second applicant's signature	
Date 2/19/2021	Date	
Property owner's legal name, if different from Applicant	Second property owner's legal name, if applic	able
See Table 8	See Table 8	
Property owner's signature, if different from Applicant	Second property owner's signature	
Date	Date	
CERTIFICATION OF AUTHORIZATION TO ALLOW AGENT(	S) TO ACT ON APPLICANT'S(S') BEHALF (II	F APPLICABLE)
Mountain Valley Pipeline, LLC (and) N/A		
APPLICANT'S LEGAL NAME(S) – complete the second bi	ank if more than one Applicant	
Henry Schumacher	, N/A	
hereby certify that I (we) have authorized	(and) complete the second blank if more than one Age	ent
to act on my (our) behalf and take all actions necessary to the prostandard and special conditions attached. I (we) hereby certify the to the best of my (our) knowledge.	cessing, issuance, and acceptance of this perm at the information submitted in this application is	nit and any and all s true and accurate
Applicant's signature Robert J. Com	Second applicant's signature, if applicable N/A	
Date 2/19/2021	Date N/A	
Agent's signature and title Angel Sr. Ecologist	Second agent's signature and title, if applicab N/A	le
Date	Date	
CONTRACTOR ACKNOWLE	DGEMENT (IF APPLICABLE)	
I (Jan N/A	-n N/A	
APPLICANT'S LEGAL NAME(S) – complete the second bi	a) ank if more than one Applicant	,
N/A	N/A	
have contracted CONTRACTOR'S NAME(S) – complete the second	(and)	
	N/A	
to perform the work described in this Joint Permit Application, sign	ned and dated	·
I (we) will read and abide by all conditions as set forth in all federa understand that failure to follow the conditions of the permits may statutes and that we will be liable for any civil and/or criminal pena In addition, I (we) agree to make available a copy of any permit to permit compliance. If I (we) fail to provide the applicable permit u the option of stopping our operation until it has been determined t compliance with all of the terms and conditions.	al, state, and local permits as required for this p constitute a violation of applicable federal, state alties imposed by these statutes. any regulatory representative visiting the proje pon request, I (we) understand that the represe hat we have a properly signed and executed pe	roject. I (we) e, and local ct site to ensure intative will have ermit and are in full
Contractor's name or name of firm (printed/typed)	Contractor's or firm's mailing address	
N/A	N/A	
Contractor's signature and title	Contractor's license number	Date
N/A	N/A	N/A
Applicant's signature	Second applicant's signature, if applicable	
N/A	N/A	
Date	Date	
N/A	N/A	



#### END OF GENERAL INFORMATION

#### The following sections are activity-specific. Fill out only the sections that apply to your particular project.

#### 10. PRIVATE PIERS, MARGINAL WHARVES, AND UNCOVERED BOAT LIFTS

Regional Permit 17 (RP-17), authorizes the installation and/or construction of open-pile piers, mooring structures/devices, fender piles, covered boathouses/boatslips, boatlifts, osprey pilings/platforms, accessory pier structures, and certain devices associated with shellfish gardening, for private use, subject to strict compliance with all conditions and limitations further set out in the RP-17 enclosure located at <a href="http://www.nao.usace.army.mil/Missions/Regulatory/RBregional/">http://www.nao.usace.army.mil/Missions/Regulatory/RBregional/</a>. In addition to the information required in this JPA, prospective permittees seeking authorization under RP-17 must complete and submit the 'Regional Permit 17 Checklist' with their JPA. A copy of the 'Regional Permit 17 Checklist' is found in Appendix B of this application package. If the prospective permittee answers "yes" (or "N/A", where applicable) to all of the questions on the 'Regional Permit 17 Checklist', the permittee is in compliance with RP-17 and will not receive any other written authorization from the Corps but may not proceed with construction until they have obtained all necessary state and local permits. *Note: If the prospective permittee answers "no" to any of the questions on the 'Regional Permit 17 Checklist' then their proposed structure(s) does not meet the terms and conditions of RP-17 and written authorization from the Corps is required before commencement of any work.* 

If the prospective permittee answers "no" to any of the questions on the 'Regional Permit 17 Checklist' then their proposed structure(s) does not meet the terms and conditions of RP-17 and written authorization from the Corps is required before commencement of any work. In those circumstances, the following information must be included in the application and/or on the drawings in order for the application to be considered complete:

- The applicant **MUST** provide written justification/need for the encroachment if the proposed structure(s) will extend greater than one- fourth of the distance across the waterway measured from either mean high water to mean high water (including all channelward wetlands) or ordinary high water to ordinary high water (including all channelward wetlands). The measurement should be based on the narrowest distance across the waterway regardless of the orientation of the proposed structure(s).
- 2. The applicant **MUST** provide written justification/need if the proposed structure(s) is greater than five (5) feet wide or there will be less than four (4) feet elevation between the decking and the vegetated wetlands substrate.
- 3. The Corps MAY require depth soundings across the waterway at increments designated by the Corps project manager. Inclusion of depth sounding data in the original JPA submittal is highly recommended in order to expedite permit evaluation. Depth soundings are typically taken at 10-foot increments for waterways less than 200 feet wide and 20-foot increments for waterways greater than 200 feet wide. Please include the date and time the measurements were taken, whether the data was collected at mean low water (MLW) or MHW, and how the soundings were taken (e.g., tape, range finder, etc.).

Number of vessels to be at the pier or wharf: N/A	moored	Do you have an If yes, will it be r	existing pier on your prope emoved?YesNo	rty?YesNo	
		Is your lot platte	d to the mean low water sh	oreline? Yes No	
In the spaces provided be moored	elow, give	the type (e.g., sa	il, power, skiff, etc.), size, a	nd registration number of t	he vessel(s) to be
TYPE		LENGTH	WIDTH	DRAFT	REGISTRATION #
N/A	N/A		N/A	N/A	N/A

#### 11. BOATHOUSES, GAZEBOS, COVERED BOAT LIFTS, AND OTHER ROOFED STRUCTURES OVER WATERWAYS

Number of vessels to be	moored at the proposed str	ucture:	Will the side Area covere	es of the structure be enclosed by the roof structure	sed?YesNo square feet
In the spaces provided be moored	elow, give the type (e.g., sa	il, power, skiff	, etc.), size, a	nd registration number of t	he vessel(s) to be
TYPE	LENGTH	WIE	отн	DRAFT	REGISTRATION #
N/A	N/A	N/A		N/A	N/A

12. MARINAS AND CO	MMERCIAL, GOVERNME	NTAL, AND C	OMMUNITY	PIERS		
Have you obtained the Vi You will need to obtain the	irginia Department of Healt nis authorization or a varian	h's approval fo ce before a Vi	or sanitary fac MRC permit v	cilities?Yes _ vill be issued.	No	
Will petroleum products of If your answer is yes, ple	or other hazardous material ase attach your spill conting	s be stored or <i>gency plan.</i>	handled at th	ne facility?Ye	esNo	
Will the facility be equipp	ed to off-load sewage from	boats?	YesN	lo		
EXISTING: wet slips:	dry storage:	-	PROPOSE	D: wet slips:	_ dry storage:	
13. FREE STANDING M (not associated wit	MOORING PILES, OSPRE h piers)	Y NESTING P	OLES, MOO	RING BUOYS, AND	DOLPHINS	
Number of vessels to be	moored: <u>N/A</u>		Type and n N/A	umber of mooring(s)	proposed:	
In the spaces provided be moored	elow, give the type (e.g., sa	ail, power, skiff	, etc.), size, a	and registration num	ber of the vessel(s) to be	
TYPE	LENGTH	WIE	ОТН	DRAFT	REGISTRATIO	N #
N/A	N/A	N/A		N/A	N/A	
Give the name and comp needed): N/A	lete mailing address(es) of	the owner(s)	of the vessel(	s) if not owned by a	pplicant (attach extra shee	ts if
Do you plan to reach the If "no," explain how you ir N/A	mooring from your own up ntend to access the moorin	land property? g.	YYes	No		
14. BOAT RAMPS						
Will excavation be require plane of the ordinary high Section 17 for this excave Where will you dispose o	ed to construct the boat ran n water mark/mean high wa ation. f the excavated material?	np?Ye iter line or in w	sNo. /etlands?	If "yes," will any of th YesNo. If	ne excavation occur below "yes," you will need to fill o	the out
N/A						
What type of design and gravel bedding, etc.)? N/A	materials will be used to co	onstruct the rai	mp (open pile	edesign with salt trea	ated lumber, concrete slab	on
Location of nearest public N/A	c boat ramp		Driving dist	ance to that public ra	amp <u>N/A</u> mile	es
Will other structures be c If "yes," please fill out the	onstructed concurrent with appropriate sections of thi	the boat ramp s application a	installation? associated wit	YesN th those other activiti	o ies.	

15. TIDAL/NONTIDAL SHORELINE STABILIZATION STRUCTU BACKFILL, RIPRAP REVETMENTS AND ASSOCIATED BACK BREAKWATERS, ETC.) Information on non structural, vegetative available at <u>http://ccrm.vims.edu/coastal_zone/living_shorelines/in</u>	RES (INCLUDING BULKHEADS AND ASSOCIATED FILL, MARSH TOE STABILIZATION, GROINS, JETTIES, AND e alternatives (i.e., Living Shoreline) for shoreline stabilization is dex.html.
Is any portion of the project maintenance or replacement of an exil If yes, give length of existing structure: $\underline{N/A}$ linear feet	sting and currently serviceable structure?YesNo
If your maintenance project entails replacement of a bulkhead, is i channelward of the existing bulkhead? <u>N/A</u> Yes <u>No</u> No If n	t possible to construct the replacement bulkhead within 2 feet ot, please explain below:
Length of proposed structure, including returns: <u>N/A</u>	_linear feet
Average channelward encroachment of the structure from Mean high water/ordinary high water mark: <u>N/A</u> feet	Maximum channelward encroachment of the structure from Mean high water/ordinary high water mark: <u>N/A</u> feet
Mean low water: <u>N/A</u> feet	Mean low water: <u>N/A</u> feet
<i>Maximum</i> channelward encroachment form the back edge of the Dune <u>N/A</u> feet	<i>Maximum</i> channelward encroachment from the back edge of the Beach <u>N/A</u> feet
Describe the type of construction including all materials to be usedNo	l (including all fittings). Will filter cloth be used?Yes
N/A	
What is the source of the backfill material? <u>N/A</u>	
What is the composition of the backfill material? <u>N/A</u>	
If rock is to be used, give the average volume of material to be use What is the volume of material to be placed below the plane of orc yards	ed for every linear foot of construction: <u>N/A</u> cubic yards linary high water mark/mean high water? <u>N/A</u> cubic
For projects involving stone:         Average weight of core material (bottom layers):       N/A       po         Average weight of armor material (top layers):       N/A       po	unds per stone(Class) unds per stone(Class)
Are there similar shoreline stabilization structures in the vicinity of If so, describe the type(s) and location(s) of the structure(s): N/A	your project site?YesNo
If you are building a groin or jetty, will the channelward end of the structure be marked to show a hazard to navigation? YesNo	Has your project been reviewed by the Shoreline Erosion Advisory Service (SEAS)?YesNo If yes, please attach a copy of their comments.
Source of material and composition (percentage sand, silt, clay): <u>N/A</u>	Volume of material: <u>N/A</u> cubic yards
Area to be covered <u>N/A</u> square feet channelward of mean	low water <u>N/A</u> square feet channelward of mean high water
<u>N/A</u> square feet landward of mean low	water <u>N/A</u> square feet channelward of mean high water
Mode of transportation of material to the project site (truck, pipelin N/A	e, etc.):

## 16. BEACH NOURISHMENT (Continued)

Describe the type(s) of vegetation proposed for stabilization and the proposed planting plan, including schedule, spacing, monitoring, etc. Attach additional sheets if necessary. N/A

# 17. DREDGING, MINING, AND EXCAVATING

	FILL O	UT THE FOL	LOWING TAE	BLE FOR DRE	EDGING PRO	JECTS		
		NEW d	redging			MAINTENAN	ICE dredging	I
	Hydı	raulic	Mechanica draglir	l (clamshell, ne, etc.)	Hydr	raulic	Mechanical draglin	l (clamshell, ie, etc.)
	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet	Cubic yards	Square feet
Vegetated wetlands	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Non-vegetated wetlands								
Subaqueous land								
Totals								
Is this a one-time dredgin ( initial cycle in cu. y	g event?	Yes No	b If "no", how cles in cu. yds	/ many dredgi s.)	ng cycles are	anticipated:	N/A	
Composition of material ( Provide documentation (i. free of toxics, provide doc	percentage sa .e., laboratory cumentation o	and, silt, clay, results or and f proper dispo	rock): alytical report osal (i.e., bill c	s) that <i>dredge</i> of lading from	ed material fro commercial s	m on-site are upplier or disp	as is free of to posal site).	xics. If not
N/A								
Please include a dredged retained to prevent its ent sectional drawings of the	material mar ry into surfac dewatering a	nagement plar e waters or wo rea and assoc	n that include: etlands. If on ciated outfall.	s specifics on -site dewateri	how the dred ng is propose	ged material v d, please incl	will be handled ude plan view	d and and cross-
N/A								
Will the dredged material If yes, please explain: N/A	be used for a	ny commercia	al purpose or	beneficial use	?Yes	No		
If this is a maintenance d Permit number of original	redging projec permit: <u>N/A</u>	ct, what was t	he date that ti	he dredging w t is important i	as last perfor	med? <u>N/A</u> h a copy of th	e original peri	nit.)

#### 17. DREDGING, MINING, AND EXCAVATING (Continued)

<i>For mining projects:</i> On separate sheets of paper, explain the opduration (i.e., April through September), and volume (in cubic yard handling methods of mined material, including the dimensions of t material and the need (or no need) for a liner or impermeable material and water; 3) how equipment will access the mine site; and 4) segments that are currently on the effective Section 303(d) Total http://www.deq.virginia.gov/Programs/Water/WaterQualityInformatication/limit/conditions imposed by an approved TMDL (see, "Whttp://www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx to deter	eration plans, including: 1) the frequency (e.g., every six weeks), ds) to be removed per operation; 2) the temporary storage and the containment berm used for upland disposal of dredged terial to prevent the leaching of any identified contaminants into verification that dredging: a) will not occur in water body Maximum Daily Load (TMDL) priority list <u>(available at tionTMDLs/TMDL/TMDLDevelopment/TMDLProgramPriorities.asp</u> airment; and c) will be consistent with any waste load Vhat's in my backyard" or subsequent spatial files at ermine the extent of TMDL watersheds and impairment segments).
Have you applied for a permit from the Virginia Department of Mir Existing permit number: Date permit is	nes, Minerals and Energy?YesNo If Yes: ssued:
Contributing drainage area:square miles	Average stream flow at site (flow rate under normal rainfall conditions):cfs
18. FILL (not associated with backfilled shoreline structures) boathouses) IN WETLANDS OR WATERS, OR ON DUNES/BE Source and composition of fill material (percentage sand, silt, clay N/A	AND OTHER STRUCTURES (other than piers and EACHES 9, rock):
Provide documentation (i.e., laboratory results or analytical report free of toxics, provide documentation of proper disposal (i.e., bill of Documentation is not necessary for fill material obtained from on-	s) that <i>fill</i> material from <i>off-site</i> locations is free of toxics. If not of lading from commercial supplier or disposal site). site areas.
Explain the purpose of the filling activity and the type of structure $N/A$	to be constructed over the filled area (if any):
Describe any structure that will be placed in wetlands/waters or or N/A	n a beach dune and its purpose:
Will the structure be placed on pilings? Yes No	Total area occupied by any structure.       N/A     Square Feet
How far will the structure be placed channelward from the back edge of the dune? $\underline{^{NA}}$ feet	How far will the structure be placed channelward from the back edge of the beach? $^{\text{N/A}}$ feet
19. NONTIDAL STREAM CHANNEL MODIFICATIONS FOR RE PERMANENT RELOCATIONS	STORATION OR ENHANCMENT, or TEMPORARY OR
If proposed activities are being conducted for the purposes of con providing all information required by the most recent version of the District of the U.S. Army Corps of Engineers and the Virginia Dep questions below. Required information outlined by the methodolo	npensatory mitigation, please attach separate sheets of paper e stream assessment methodology approved by the Norfolk artment of Environmental Quality, in lieu of completing the gy can be found at:

http://www.nao.usace.army.mil/Missions/Regulatory/UnifiedStreamMethodology.aspx or http://www.deg.virginia.gov/Programs/Water/WetlandsStreams/Mitigation.aspx.

For all projects proposing stream restoration provide a completed Natural Channel Design Review Checklist and Selected Morphological Characteristics form. These forms and the associated manual can be located at: <a href="https://www.fws.gov/chesapeakebay/StreamReports/NCD%20Review%20Checklist/Natural%20Channel%20Design%20Checklist%20Doc%20V2%20Final%2011-4-11.pdf">https://www.fws.gov/chesapeakebay/StreamReports/NCD%20Review%20Checklist/Natural%20Channel%20Design%20Checklist%20Doc%20V2%20Final%2011-4-11.pdf</a>

Has the stream restoration project been designed by a local, state, or federal agency? \_\_\_\_ Yes \_\_\_\_ No. If yes, please include the name of the agency here: N/A \_\_\_\_\_.

Is the agency also providing funding for this project? \_\_\_\_\_ Yes \_\_\_\_\_ No

Stream dimensions at impact site (length and average width in linear feet, and area in square feet): L: <u>N/A</u> (feet) AW: <u>N/A</u> (feet) Area: <u>N/A</u> (square feet)

Contributing drainage area: <u>N/A</u> acres or <u>N/A</u> square miles

19. NONTIDAL STREAM CHANNEL MODIFICATIONS FO PERMANENT RELOCATIONS (Continued) 19. NONTIDA ENHANCMENT, or TEMPORARY OR PERMANENT RELO MODIFICATIONS FOR RESTORATION OR ENHANCMEN	AL STREAM CHANNEL MODIFICATIONS FOR RESTORATION OR OCATIONS (Continued)19. NONTIDAL STREAM CHANNEL NT, or TEMPORARY OR PERMANENT RELOCATIONS (Continued)
Existing average stream flow at site (flow rate under normal rainfall conditions):cfs	Proposed average stream flow at site after modifications (flow rate under normal rainfall conditions):cfs
Explain, in detail, the method to be used to stabilize the bar	iks:
N/A	
Explain the composition of the existing stream bed (percent	CODDIE, FOCK, SAND, ECC.):
N/A	
Will low-flow channels be maintained in the modified stream	n channel? Yes No.
Describe how:	
N/A	
Will any structure(s) be placed in the stream to create riffles If yes, please explain: N/A	;, pools, meanders, etc.?YesNo
20. UTILITY CROSSINGS	
Type of crossing: overhead X transhed X dir	rectionally drilled
Method of clearing corridor of vegetation (check all that app	ly): M mechanized land clearing that disturbs the soil surface
Cutting vegetation above the soil surface	
Describe the materials to be used in the installation of the u slurries used during direction-drilling, etc.) and a sequence methods used for in-stream and dry crossings).	tility line (including gravel bedding for trenched installations, bentonite of events to detail how the installation will be accomplished (including
See Section 1.3, Attachment H, and Attachment J	
Will the proposed utility provide empty conduits for any add	itional utilities that may propose to co-locate at a later date? Yes
<u>X</u> No.	
For overhead crossings over navigable waterways (includin	g all tidal waterways), please indicate the height of other overhead
crossings or bridges over the waterway relative to mean hig	h water, mean low water, or ordinary high water mark:
N/A	
Nominal system voltage, if project involves power lines: <u>N/</u>	<u>A</u>
Total number of electrical circuits: <u>N/A</u>	_

Will there be If so, describ give that loc	e an excess of excavated material? be the method that will be undertake ation:	Yes X en to dispose of	No , and transport,	the material to its	bermane	ent dispos	sal location an
Will any exc If so, will the	ess material be stockpiled in wetlar stockpiled material be placed on fi	ds? <u>x</u> Yes ter fabric or sor	me other type of	impervious surfac	e? <u>x</u>	_Yes _	No
Will perman If yes, will th	ent access roads be placed through ${ t e}$ roads be (check one) ${ t \Box}$ at grad	i wetlands/strea e ⊠ above gra	ams? <u>X</u> Yes ade?	No			
Will the utilit	y line through wetlands/waters be o what is the maximum width? 10	ontinually main feet	tained (e.g. via r	nowing or herbicid	e)? <u>X</u>	_Yes	No

Have you conducted hydraulic studies to verify the adequacy of the culverts? \_\_\_\_Yes X\_\_\_No If so, please attach a copy of the hydraulic study/report.

Virginia Department of Transportation (VDOT) standards require that the backwater for a 100 year storm not exceed 1 foot for all road, culvert, and bridge projects within FEMA-designated floodplains. Virginia Department of Environmental Quality (DEQ) requires pipes and culverts 24 inches or less in diameter to be countersunk three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches to be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity is determined based on the reduced capacity due to the countersunk position.

Will the culverts be countersunk below the stream bottom? X Yes No. If no, explain:

Where possible, existing culverts will be used. Culvert enhancement/installation will follow best management practices. See Sections 1.3.2 and 4.2.7.

If the project entails a bridged crossing and there are similar crossings in the area, what is the vertical distance above mean high water, mean low water, or ordinary high water mark of those similar structures? <u>N/A</u> feet above <u>N/A</u> For all bridges proposed over navigable waterways (including all tidal water bodies), you will be required to contact the U.S. Coast Guard to determine if a permit is required of their agency.

On separate sheets of paper, describe the materials to be used, the method of construction (including the use of cofferdams), the sequence of construction events, and if bedrock conditions may be encountered. Include cross-sections and profile plans of the culvert crossings including wing walls or rip rap. See Attachment H and J and Section 1.3

# 22. IMPOUNDMENTS, DAMS, AND STORMWATER MANAGEMENT FACILITIES

If the impoundment or dam is a component of a water withdrawal project, also complete Sections 24 through 26.

Will the proposed impoundment, dam, or stormwater management facility be used for agricultural purposes (e.g., in the operation of a farm)? For DEQ permitting purposes, a farm is considered to be a property or operation that produces goods for market. \_\_\_\_\_Yes \_\_\_\_No

What type of materials will be used in the construction (earth, concrete, rock, etc.)? N/A

What is the source of these materials? N/A

Provide the dimensions of proposed impoundment, dam, or stormwater management facility, including the height and width of all structures.

N/A

Storage capacity* of impoundment: <u>N/A</u> acre-feet	Surface area** of impoundment: <u>N/A</u> acres
*should be given for the normal pool of recreational or farm ponds, or	**should be given for the normal pool of recreational or farm ponds, or
design pool for stormwater management ponds or reservoirs (the	design pool for stormwater management ponds or reservoirs (the
elevation the pond will be at for the design storm, e.g., 10-year, 24-hour	elevation the pond will be at for the design storm, e.g., 10-year, 24-hour
storm)	storm)

Is the proposed project excluded from the Virginia Dam Safety Regulations?YesNoUncertain If not excluded, does your proposed project comply with the Virginia Dam Safety Regulations?YesNoUncertain Does the proposed design include a vegetation management area per §10.1-609.2?YesNoUncertain if your answer to these questions is no or uncertain, you should contact the Virginia Department of Conservation and Recreation's Dam Safety Program at (804) 371-6095, or reference the regulations on the Web at http://www.dcr.virginia.gov/dam_safety_and_floodplains/index.shtml For stormwater management and flood control facilities: Design storm event: NIAyear storm Retention time: NIAhours Current average flow (flow rate under normal rainfall conditions): NIAcfs Method used to derive average flow: NIA Proposed peak outflow for the design storm provided above: NIAcfs Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?YesNo Will the impoundment structure be designed to pass a minimum flow at all times?YesNo Will the drainage area upstream of the proposed impoundment? N/Asquare feet What is the drainage area upstream of the proposed impoundment? N/Asquare feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet Wha
If not excluded, does your proposed project comply with the Virginia Dam Safety Regulations?YesNoUncertain Does the proposed design include a vegetation management area per §10.1-609.2?YesNoUncertain If your answer to these questions is no or uncertain, you should contact the Virginia Department of Conservation and Recreation's Dam Safety Program at (804) 371-6095, or reference the regulations on the Web at thip/lwww.dor.virginia gov/dam safety and floodplains/index.shtml For stormwater management and flood control facilities: Design storm event: N/Ayear storm Retention time: N/Ahours Current average flow (flow rate under normal rainfall conditions): N/Acfs Method used to derive average flow: N/A Proposed peak outflow for the design storm provided above: N/Acfs Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?YesNo Will the impoundment structure be designed to pass a minimum flow at all times?YesNo If so, please give the minimum rate of flow: N/Acfs What is the drainage area upstream of the proposed impoundment? N/Asquare feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet Kre fish ladders being proposed to accommodate the passage of fish?YesNo
Does the proposed design include a vegetation management area per §10.1-609.2?YesNoUncertain       If your answer to these questions is no or uncertain, you should contact the Virginia Department of Conservation and Recreation's Dam Safety Program at (804) 371-60965, or reference the regulations on the Web at http://www.dcr.virginia.gov/dam_safety_and_floodplains/index.shtml         For stormwater management and flood control facilities:
For stormwater management and flood control facilities:         Design storm event:       N/A       year storm       Retention time:       N/A       hours         Current average flow (flow rate under normal rainfall conditions):       N/A
Design storm event:       N/A      year storm       Retention time:       N/A      hours         Current average flow (flow rate under normal rainfall conditions):       N/A      cfs         Method used to derive average flow:       N/A      cfs         Proposed peak outflow for the design storm provided above:       N/A      cfs         Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?YesNo         Will the impoundment structure be designed to pass a minimum flow at all times?YesNo      No         If so, please give the minimum rate of flow:       N/A      cfs         What is the drainage area upstream of the proposed impoundment?       N/A      square feet         What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?      square feet         What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?
Current average flow (flow rate under normal rainfall conditions): <u>N/A</u> cfs Method used to derive average flow: <u>N/A</u> cfs Proposed peak outflow for the design storm provided above: <u>N/A</u> cfs Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook? <u>YesNo</u> Will the impoundment structure be designed to pass a minimum flow at all times? <u>YesNo</u> If so, please give the minimum rate of flow: <u>N/A</u> cfs What is the drainage area upstream of the proposed impoundment? <u>N/A</u> square miles How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
Method used to derive average flow:       N/A         Proposed peak outflow for the design storm provided above:       N/A      cfs         Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?      YesNo         Will the impoundment structure be designed to pass a minimum flow at all times?      YesNo         Will the impoundment structure be designed to pass a minimum flow at all times?      YesNo         If so, please give the minimum rate of flow:       N/A      cfs         What is the drainage area upstream of the proposed impoundment?       N/A      square feet         What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?
Proposed peak outflow for the design storm provided above: N/Acfs Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?YesNo Will the impoundment structure be designed to pass a minimum flow at all times?YesNo If so, please give the minimum rate of flow: N/Acfs What is the drainage area upstream of the proposed impoundment? N/Asquare miles How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
Has the facility been designed as an Enhanced Extended Detention Basin or an Extended Detention Basin in accordance with the         Minimum Standard 3.07 of the Virginia Stormwater Management Handbook, Volume I (published by the Virginia Department of         Conservation and Recreation, 1999), or in accordance with the latest version of this handbook?YesNo         Will the impoundment structure be designed to pass a minimum flow at all times?YesNo         If so, please give the minimum rate of flow: N/Acfs         What is the drainage area upstream of the proposed impoundment? N/Asquare miles         How much of your proposed impoundment structure will be located on the stream bed?square feet         What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet         What is the <i>area and length</i> of streambed that will be excavated and/or back-flooded by the impoundment?square feet         Inear feet         Are fish ladders being proposed to accommodate the passage of fish?YesNo
Will the impoundment structure be designed to pass a minimum flow at all times?YesNo   If so, please give the minimum rate of flow: <a href="https://www.will.com/N/Acfs">N/Asquare miles</a> What is the drainage area upstream of the proposed impoundment? <a href="https://www.will.com/N/Asquare miles">N/Asquare miles</a> How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment?square feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
If so, please give the minimum rate of flow: <u>N/A</u> cfs What is the drainage area upstream of the proposed impoundment? <u>N/A</u> square miles How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the <i>area and length</i> of streambed that will be excavated and/or back-flooded by the impoundment?square feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
What is the drainage area upstream of the proposed impoundment? <u>N/A</u> square miles How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the <i>area and length</i> of streambed that will be excavated and/or back-flooded by the impoundment?square feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
How much of your proposed impoundment structure will be located on the stream bed?square feet What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet square feet What is the <i>area and length</i> of streambed that will be excavated and/or back-flooded by the impoundment?square feet linear feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
What is the area of vegetated wetlands that will be excavated and/or back-flooded by the impoundment?square feet What is the <i>area and length</i> of streambed that will be excavated and/or back-flooded by the impoundment?square feetlinear feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
What is the area and length of streambed that will be excavated and/or back-flooded by the impoundment? square feet linear feet linear feet Are fish ladders being proposed to accommodate the passage of fish?YesNo
Are fish ladders being proposed to accommodate the passage of fish?YesNo
23. OUTFALLS NOT ASSOCIATED WITH PROPOSED WATER WITHDRAWAL ACTIVITIES
Type and size of pipe(s): <u>WA-See Section 4.1.4</u>
Daily rate of discharge: <u>N/A - See Section 4.1.4</u> mgd
If the discharge will be thermally-altered, provide the maximum temperature: <u>N/A - See Section 4.1.4</u>
Contributing drainage area: $\frac{N/A - See Section 4.1.4}{See Section 4.1.4}$ square miles Average daily stream flow at site: $\frac{N/A - See Section 4.1.4}{See Section 4.1.4}$ cfs
Have you received a Virginia Discharge Elimination System (VPDES) permit for the proposed project? Yes No.
Have you received a Virginia Discharge Elimination System (VPDES) permit for the proposed project? Yes No. If yes, please provide the VPDES permit number: <u>N/A - See Section 4.1.4</u> .

The following sections are typically related to surface water withdrawal activities; Federal Energy Regulatory Commission license projects; or impacts likely to require instream flow limits. Examples of such projects include, but are not limited to, reservoirs, irrigation projects, power generation facilities, and public water supply facilities that may or may not have associated features, such as dams, intake pipes, outfall structures, berms, etc.

If completing these sections, enter "N/A" in any section that does not apply to the project.

# 24. INTAKES, OUTFALLS, AND WATER CONTROL STRUCTURES (INCLUDING ALL PROPOSED WATER WITHDRAWAL ACTIVITIES)

For intakes:	For outfalls:		
Type and size of pipe(s): $N/A - See Section 4.1.4$ Type and size of pump(s): $N/A - See Section 4.1.4$ Average and Maximum daily rate of withdrawal: $N/A - See Section 4.1.4$ and $N/A - See Section 4.1.4$ mgd Velocity of withdrawal: $N/A - See Section 4.1.4$ fps Screen mesh size: $N/A - See Section 4.1.4$ inches / $N/A - See Section 4.1.4$ mm If other sizing units, please specify: N/A - See Section 4.1.4 Contributing drainage area at withdrawal point(s): N/A - See Section 4.1.4 square miles	Type, size, and hydraulic capacity (under normal conditions) of pipe(s): <u>N/A - See Section 4.1.4</u> ,, and <u>N/A - See Section 4.1.4</u> Daily rate of discharge: <u>N/A - See Section 4.1.4</u> mgd If the discharge will be thermally-altered, provide the maximum temperature: <u>N/A - See Section 4.1.4</u> Contributing drainage area at discharge point(s): <u>N/A - See Section 4.1.4</u> square miles Average daily stream flow at discharge point(s) (flow rate under normal rainfall conditions): <u>N/A - See Section 4.1.4</u> cfe		
Average daily stream flow at withdrawal point(s) (flow rate under normal rainfall conditions): <u>N/A - See Section 4.1.4</u> cfs Method(s) used to derive average daily stream flow	Method(s) used to derive average daily stream flow		
N/A - See Section 4.1.4 Average annual stream flow at withdrawal point(s): <u>N/A - See Section 4.1.4</u> cfs Latitude and longitude of withdrawal point(s) (degrees, minutes, seconds): <u>N/A - See Section 4.1.4</u>	Latitude and longitude of discharge point(s) (degrees, minutes, seconds): <u>N/A - See Section 4.1.4</u>		
For intakes and dams, use the table below to provide the <u>median</u> monthly stream flows in cubic feet per second (cfs) at the water intake or dam site (not at the stream gage; if there is not a gage at the intake or dam site, you will need to interpolate flows to the intake or dam site based upon the most closely related watershed in which there is an operational stream gage monitored by the United States Geologic Survey (USGS)). Median flow is the value at which half of the measurements are above and half of the measurements are below. Median is also sometimes referred to as the '50% exceedence flow'. The median flow generally must be calculated from USGS historical data. Please do not provide <i>mean (average)</i> flow.			

Month	Median flow (cfs)	Month	Median flow (cfs)
January	N/A - See Section 4.1.4	July	N/A - See Section 4.1.4
February		August	
March		September	
April		October	
Мау		November	
June		December	

Describe the stream flow gages used LISCS stream flow gage	24. INTAKES, OUTFALLS, AND WATER CONTROL STRUCTURES (Continued)			
Describe the stream flow gages used, USGS stream flow gage site number and site name (e.g., USGS 01671100 Little River near Doswell, VA), the type of calculations used (such as drainage area correction factors), and the period of record that was used to calculate the median flows provided in the table above. Generally, the period of record should span a minimum of 30 years				
N/A - See Section 4.1.4				
For interbasin transfer of water resources proposed from eithe Sandy River, or Tennessee River basins to another river basin	er the Chowan River, New River, Potomac River, Roanoke River, Big n, provide the following information:			
Destination location (discharge point) of the transfer:	N1/A			
8-digit USGS Hydrologic Unit Code (HUĆ) (See http://cfpub.e	pa.gov/surf/locate/index.cfm):N/A If			
known, indicate the 10-digit and 12-digit USGS HUCs (see htt	p://consapps.dcr.virginia.gov/htdocs/maps/HUExplorer.htm):			
N/A - See Section 4.1.4	N/A - See Section 4.1.4			
Latitude and Longitude:/	•			
Provide any available historical low-flows at the intake or dam	site			
N/A				
Describe how the proposed withdrawal at the intake or dam sit	te will impact stream flows in terms of rates, volumes, frequency, etc.			
N/A				
Describe how the withdrawal of water will vary over time. For	example, will the withdrawal vary by the time of year, by the time of			
Describe how the withdrawal of water will vary over time. For day, or by the time of week? Examples of projects that should	example, will the withdrawal vary by the time of year, by the time of describe variable withdrawals include, but are not limited to: power			
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#### 24. INTAKES, OUTFALLS, AND WATER CONTROL STRUCTURES (Continued)

Provide the amount of water that will be lost due to consumptive use. For the purpose of this application, consumptive use means the withdrawal of surface waters without recycling of said waters to their source or basin of origin. Examples of consumptive uses are water that is evaporated in cooling towers or by other means in power plants; irrigation water (all types); residential water use that takes place outside of the home; and residential water use both inside and outside of homes for residences served by septic systems. Projects that propose a transfer of water from one river basin to another and/or localities that sell water to other jurisdictions, should document the portion of the withdrawal that is not returned to the originating watershed.

Proposed monthly consumptive volume (million gallons):  $\ensuremath{\mathsf{N/A}}$ 

Attach a map showing the *location* of the withdrawal and of the return of flow, and provide the *amount* of the return flow (million gallons).

For withdrawals proposed on an impoundment, provide a description of flow or release control structures. Include type of structure, rate of flow, size, capacity, invert elevation of outfall pipes referenced to the normal pool elevation, and the mechanism used to control release. Provide a description of available water storage facilities. Include the volume, depth, normal pool elevation, unusable storage volume and dimensions. If applicable, stage-storage relationship at the impounding structure (the volume of water in the impoundment at varying stages of water depth) and volume or rate of withdrawals from the storage facility. N/A

#### 25. WATER WITHDRAWAL USE(S), NEED, AND ALTERNATIVES (Attach additional sheets if needed.)

Describe the proposed use(s) and need for the surface water and information on how demand for surface water was determined. *Golf courses* must provide documentation to justify the amount of water withdrawal, such as the amount of acreage under irrigation, the acreage of fairways versus greens, type of turf grass, evapotranspiration, and irrigation efficiency. *Agricultural* users must supply documentation justifying their requested withdrawal amount, such as type of crop, livestock, or other agriculture animal, number of animals, watering needs, acres irrigated, inches of water applied, and frequency of application. *Other users* of withdrawals for purposes other than those described above must provide sufficient documentation to justify the requested withdrawal amounts.

N/A

#### 25. WATER WITHDRAWAL USE(S), NEED, AND ALTERNATIVES (Continued)

Provide the following information at the water intake or dam site. Specify the units of measurement (e.g., million gallons per day, gallons per minute, cubic feet per second, etc.).			
Proposed maximum instantaneous withdrawal			
Proposed average daily withdrawal			
Proposed maximum daily withdrawal			
Proposed maximum monthly withdrawal			
Proposed maximum annual withdrawal			

Describe how the above withdrawals were calculated, including the relevant assumptions made in that calculation and the documentation or resources used to support the calculations, such as population projections, population growth rates, per-capita use, new uses, changes to service areas, and if applicable, evapotranspiration data and irrigation data.

N/A

For surface water withdrawals, public water supply withdrawals, and projects that will alter instream flows, provide information to establish the local water supply need. Attach additional sheets if needed.

EXISTING	PROJECTED
Existing supply sources, yields, and demands:	Projected demands over a minimum 30-year planning period:
N/A	N/A
Peak day withdrawal: <u>N/A</u> Average daily withdrawal: <u>N/A</u> Safe yield: <u>N/A</u>	Projected demands in local or regional water supply plan (9VAC25-780 et seq.) or demand for the project service area, if that is smaller in area: N/A
Lowest daily flow of record: N/A	
	IN/A
commercial, industrial, agricultural):	Projected demands by type of water use:
N/A	N/A
Existing water conservation measures and drought response plan, including what conditions trigger implementation: N/A	Projected demands without water conservation measures: N/A Projected demands with long-term water conservation measures:
	N/A
For surface water withdrawale other then public water supply.	ravide information or desumentation that demonstrates alternate
sources of water are available for the proposed project during ti	mes of reduced instream flow.
N/A	

#### 25. WATER WITHDRAWAL USE(S), NEED, AND ALTERNATIVES (Continued)

Provide information from the State Water Resources Plan

(http://www.deq.virginia.gov/Programs/Water/WaterSupplyWaterQuantity/WaterSupplyPlanning/StateWaterResourcesPlan.aspx) and the local or regional water supply plan that covers the area in which the proposed water withdrawal project is located (http://www.deq.virginia.gov/Portals/0/DEQ/Water/WaterSupplyPlanning/SWRP%20Final/App%20A%20Water%20Supply%20Plans %20and%20Participating%20Localities.pdf). Include information from the plan that pertains to projected demand, analysis of alternatives, and water conservation measures. Discuss any discrepancies between the water supply plan and the proposed project. For projects that propose a transfer of water resources from the Chowan River, New River, Potomac River, Roanoke River, Big Sandy River, or Tennessee River basins to another river basin, information should be provided from the water supply plans for both the source and receiving basins. Attach additional sheets if needed.

N/A

Provide an alternatives analysis for the proposed water withdrawal project, including the required range of alternatives to be analyzed; a narrative outlining the opportunities and status of regional efforts undertaken; and the criteria used to evaluate each alternative. The analysis must address all of the criteria contained in 9VAC25-360.

N/A

Describe any existing, flow-dependent beneficial uses along the affected stream reach. Include both instream and offstream uses. Describe the stream flow necessary to protect existing beneficial uses, how the proposed withdrawal will impact existing beneficial uses, and any measures proposed to mitigate any adverse impacts that may arise. For projects that propose a transfer of water resources from the Chowan River, New River, Potomac River, Roanoke River, Big Sandy River, or Tennessee River basins to another river basin, this analysis should include both the source and receiving basins. For the purposes of this application, beneficial instream uses include, but are not limited to, the protection of fish and wildlife habitat; maintenance of waste assimilation; recreation; navigation; and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic uses (including public water supply); agricultural uses; electric power generation; commercial uses; and industrial uses.

N/A

Describe the aquatic life known to be present along the affected stream reach. Describe aquatic life that may be impacted by the proposed water withdrawal. Include the species' habitat requirements. For projects that propose a transfer of water resources from either the Chowan River, New River, Potomac River, Roanoke River, Big Sandy River, or Tennessee River basins to another river basin, this analysis should include both the source and receiving basins.

N/A

#### 26. PUBLIC COMMENTS/ISSUES FOR MAJOR WATER WITHDRAWALS OR INTERBASIN TRANSFERS

For new or expanded surface water supply projects, use separate sheets of paper to summarize the steps taken to seek public input per 9VAC25-210-320, and identify the issues raised during the public information process.

For transfer of water resources proposed from either the Chowan River, New River, Potomac River, Roanoke River, Big Sandy River, or Tennessee River basins to another river basin, if public input was not required per 9VAC25-210-320, summarize on separate sheets of paper any coordination and/or notice provided to the public, local/state government, and interested parties in the affected river basins and identify any issues raised.

#### APPENDIX C

#### **Chesapeake Bay Preservation Act Information**

Please answer the following questions to determine if your project is subject to the requirements of the Bay Act Regulations:

- 1. Is your project located within Tidewater Virginia? <u>Yes</u> X No (See map on page 31) If the answer is "no", the Bay Act requirements do not apply; if "yes", then please continue to question #2.
- 2. Please indicate if the project proposes to impact any of the following Resource Protection Area (RPA) features:

\_\_\_\_\_Tidal wetlands,

\_\_\_\_\_ Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow,

- \_\_\_\_ Tidal shores,
- Other lands considered by the local government to meet the provisions of subsection A of 9VAC25-830-80 and to be necessary to protect the quality of state waters (contact the local government for specific information),
- A buffer area not less than 100 feet in width located adjacent to and landward of the components listed above, and along both sides of any water body with perennial flow.

If the answer to question #1 was "yes" and any of the features listed under question #2 will be impacted, compliance with the Chesapeake Bay Preservation Area Designation and Management Regulations is required. **The Chesapeake Bay Preservation Area Designation and Management Regulations** are enforced through locally adopted ordinances based on the Chesapeake Bay Preservation Act (CBPA) program. Compliance with state and local CBPA requirements mandates the submission of a *Water Quality Impact Assessment (WQIA)* for the review and approval of the local government. Contact the appropriate local government office to determine if a WQIA is required for the proposed activity(ies).

The individual localities, <u>not</u> the DEQ, USACE, or the Local Wetlands Boards, are responsible for enforcing the CBPA requirements and, therefore, local permits for land disturbance are not issued through this JPA process. **Approval of this wetlands permit does not constitute compliance with the CBPA regulations nor does it guarantee that the local government will grant approval for encroachments into the RPA that may result from this project.** 

#### Notes for all projects in RPAs

Development, redevelopment, construction, land disturbance, or placement of fill within the RPA features listed above requires the approval of the locality and may require an exception or variance from the local Bay Act ordinance. Please contact the appropriate local government to determine the types of development or land uses that are permitted within RPAs.

Pursuant to 9VAC25-830-110, *on-site delineation of the RPA is required for all projects in CBPAs*. Because USGS maps are not always indicative of actual "in-field" conditions, they may not be used to determine the site-specific boundaries of the RPA.

#### Notes for shoreline erosion control projects in RPAs

Re-establishment of woody vegetation in the buffer will be required by the locality to mitigate for the removal or disturbance of buffer vegetation associated with your proposed project. Please contact the local government to determine the mitigation requirements for impacts to the 100-foot RPA buffer.

Pursuant to 9VAC25-830-140 5 a (4) of the Virginia Administrative Code, shoreline erosion projects are a permitted modification to RPAs provided that the project is based on the "best technical advice" and complies with applicable permit conditions. In accordance with 9VAC25-830-140 1 of the Virginia Administrative Code, the locality will use the information provided in this Appendix, in the project drawings, in this permit application, and as required by the locality, to make a determination that:

- 1. Any proposed shoreline erosion control measure is necessary and consistent with the nature of the erosion occurring on the site, and the measures have employed the "best available technical advice"
- 2. Indigenous vegetation will be preserved to the maximum extent practicable
- 3. Proposed land disturbance has been minimized
- 4. Appropriate mitigation plantings will provide the required water quality functions of the buffer (9VAC25-830-140 3)
- 5. The project is consistent with the locality's comprehensive plan
- 6. Access to the project will be provided with the minimum disturbance necessary.