Summary of Public Comments to State Water Control Board
Adequacy of NWP 12 to Ensure Compliance with State Standards

Prepared by

Wild Virginia
Dominion Pipeline Monitoring Coalition (DPMC)

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Executive Summary

Members of the public submitted comments in response to a notice issued by order of the State Water Control Board (Board) to gather information about the sufficiency of a federal permit to ensure that Virginia water quality standards would be met for waterbody crossing activities by the Mountain Valley Pipeline (MVP) and the Atlantic Coast Pipeline (ACP). The Dominion Pipeline Monitoring Coalition (DPMC) acquired documents from the Virginia Department of Environmental Quality (DEQ), in response to a request for copies of all comments that had been received during the period that lasted from April 30, 2018 through June 15, 2018. Wild Virginia has posted these comments online, so that they are accessible to all members of the public and the Board for review.[1]

This document describes those comments in general and provides a large body of specific information about dozens of particular waterbodies and as well as broad issues that were addressed for multiple sites. Links to the online documents are embedded within the text, so that readers can look at the comments themselves, rather than merely rely on our descriptions. We believe that any claim that a summary document can adequately inform the Board about the substance of the comments is unsupportable. We do not make that claim. We have done the most complete and honest job we could in the nearly four weeks since we acquired the entire body of records.

We believe this document and the linked comments themselves can give the Board the information it needs to take decisive action at the scheduled August 21 Board meeting. We continue to be confused as to why DEQ has yet to produce its own summary, as of the time this report is released. The Department has had the entire body of comments for more than two months (and many of the comments were in DEQ's possession much earlier than June 15, because a large number of them were submitted before the initial 30-day comment period elapsed).

Of course, we will welcome the chance to review DEQ's summary and comment on it. However, we were recently told by a DEQ official that new comments will not be accepted at the Board meeting and that any written comments must have been submitted 10 days before that meeting. This approach is clearly not designed to allow full and effective public participation and the Board should not accept it. DEQ's failure to issue its summary in a reasonable period of time deprives citizens of any chance to reply, if the 10-day limit is enforced. We've been told further that citizens will not have the chance to speak at the upcoming Board meeting about these issues. This differs from the normal case, where the public is given an opportunity to review and comment upon the staff's response to comments. We believe these decisions negate the principle of transparent and open government and that it is an outrageous approach for public servants to follow. We ask the Board to reject DEQ's rulings and allow for public comments on August 21.

[1] Note that the comments were first made available online on July 20, 2018 in files representing the various transmittals DPMC received from DEQ. We have now organized the comments in various folders and sub-folders that better describe their contents and allow for greater ease in finding and using the documents. DEQ has not made the comments available to the public at the time of this report.

Overall, more than 17,000 comments were presented in submittals. Of that total number, we counted only about 800 that contained unique comments. We have placed these opinions and comments in two categories:

Those which assert that the Board should require individual reviews of some or all waterbody crossings for either or both pipelines and those who believe such new reviews should not be undertaken. We use the labels NWP Insufficient and NWP Sufficient in this document. Some of the commenters merely stated that they support or oppose one or both of the pipelines and did not specifically address the necessity of a new state review to meet Virginia's responsibilities under the Clean Water Act and state law. We counted those who said they oppose the pipelines in the NWP Insufficient group and those who said they support them in the NWP Sufficient group.

We counted the comments in each category as follows:

	NWP Insufficient	NWP Sufficient	Totals
Total Comments	9,141	8,318	17,459
Unique Comments (total)	695	120	815
Unique Comments (specific)	161	6	167
Individuals	(138)	(3)	(141)
Organizations	(23)	(3)	(26)

A discussion of the basis for these numbers is included below. It should be noted that the number of comments is not the same as the number of different parties who submitted comments. In many cases, individuals made multiple submissions - in numerous instances people submitted many more than two form emails or letters; one person submitted twelve separate comments through a selection of different form emails.

The vast majority of comments submitted came in the form of letters, emails, or postcards that had the same or almost identical language and nearly five thousand people commented by signing a petition.[2] In some of those form letters, emails, or postcards, the standard language was supplemented or slightly changed but those additions or changes did not add specific facts or substantive reasoning that addresses the questions the Board posed. We show the basic wording of each of those form letters, emails, and postcards as well as the wording of the in section IV., so that all can see their contents.

The remainder of this report is organized in the following sections:

[2] Based on DEQ's public statements estimating that around 13,000 comments were submitted, we suspect the Department has discounted the petition signatures as separate expressions by citizens. This approach is unsupportable. If form documents that express no unique opinions and provide no unique information are to be counted individually, then petition signatures must be treated the same way.

I. Overall Body of Comments and Organization of the Online Records
II. Specific Waterbodies Addressed by Groups and Individual Commenters
III. Overarching Substantive Issues
IV. Contents of Form Letters, Emails, Postcards, and the Petition
V. Legal Analyses

The comments that address the question the Board is confronting are overwhelmingly in support of individual reviews of waterbody crossings under Virginia's authority. These submittals often include maps, photographs, and independent data to supplement and challenge the characterizations and findings the Corps made about specific waterbodies and crossing points. Those supplied by landowners and other individuals who use and often treasure particular aquatic resources are evidence of an extraordinary depth of knowledge and exhaustive investigations by many of these individuals. In addition, there are many analyses and opinions offered by experts in the fields of hydrology, biology, pollution controls for construction projects, and other topics. Both local knowledge and expert comments must be given extra weight.

Detailed comments from parties in the NWP 12 Sufficient category are reviews of the overall regulatory structure and requirements applied by the Corps, DEQ, and the Federal Energy Regulatory Commission (FERC) and a small number of specific discussions of individual waterbody crossings by those who oppose further Board action. While the process descriptions are useful and appropriate, these comments barely address Virginia's water quality standards (WQS) and do not show a nexus between those other requirements and the level of proof needed ensure WQS will be met. They omit altogether any discussion of the many waterbody crossings left off of the Corps lists and basic components of the WQS, such as the requirement to fully protect *all* designated and existing uses and to enforce antidegradation provisions, are not acknowledged or analyzed.

Finally, DEQ has failed to offer any specific information about the effectiveness of NWP 12 to ensure WQS conformance in the thousands of cases where it was used in Virginia. Many of the comments bragged of this stellar record but they also failed to provide any water quality assessments, data, or inspection records to prove their assertions. In fact, we know from records requests of DEQ that the Department has neither sought to gather credible evidence on the water quality impacts of NWP 12-compliant projects nor reviewed such records supplied by any other party. This failure by DEQ is explained in a separate report included with comments discussed herein.

This pipeline review process has turned the usual course of individual permit reviews on its head. Where generally the agency produces a detailed fact sheet to explain its reasoning for a proposed action, DEQ has not done so here. Where the public can make comments based on that agency record of analysis, here we had no such basis for comments - we were required to develop our own body of data and analysis. The public has met that challenge in a very impressive manner. The very information that should have been gathered by the Corps and DEQ has been supplied in many areas by the public.

I. Overall Body of Comments and Organization of the Online Records

As stated above, the vast majority of the comments received were form letters, emails, etc. We've presented the text of those forms in an Appendix and discuss them in section IV. below. The submittals themselves can be read using links provided there. Aside from these form documents, we counted more than 800 that contained relatively unique messages that did not mirror, completely or in large part, the exact wording that had been submitted by multiple other parties.

We further had to make judgements as to whether these relatively unique messages addressed the questions for which the Board sought answers, through information about particular waterbody crossings or waterbodies affected by individual or combined crossings. If the comment named specific crossing points (whether listed on the tables DEQ provided or not) and discussed particular features of the affected waterbodies and/or the reviews that had been conducted by the Corps or DEQ, then we concluded that comment could meet the needs the Board expressed. In many cases we did not find this kind of information. There were thousands of form comments and many individual comments that listed certain crossings and waterbodies but included no information that contributed to any understanding of those sites. For those who oppose new reviews, these generally consisted of statements that crossings would be made by dry cut or drilling methods and assertions that, therefore, water quality protection was ensured.

Of the 815 "unique" comments we identified, we believe a total of 133 comments by individuals met the criteria described. An additional group of comments submitted by various organizations also provided the kinds of details the Board asked the public to supply. We have placed all organizational comments in a sub-folder on the web. We believe 27 of the organizations' comments supplied the kinds of details required to inform the Board's decision-making process.

The comments accessible in the folder Public Comments on NWP 12 Sufficiency are organized into seven sub-folders. The names, descriptions, and links for these are as follows:

emails to ACP address - all - this folder contains documents that include the text and identifying information for each of the emails sent to the address "NWP12InfoOnACP@deq.virginia.gov." We have provided the document in three file formats, Numbers for Mac (.numbers), Excel (.xls), and Adobe Acrobat (.pdf). The first two are spreadsheet formats and allow sorting and arranging the records, which some readers may find useful in their reviews.

We copied the text and sender information for selected individual emails shown on these documents onto Word documents that are contained in other folders in the database. For some, we did this to combine the text of the email with attachments that had been submitted by the same commenter but were found elsewhere in the set of data. This allows the narrative from these emails to be viewed alongside other information found in the attachments. For other emails from these lists, we created the Word documents simply to make sure these substantive individual and organizational comments could be located easily without searching in the collection of over 7,000 emails shown in the documents in this folder.

emails to MVP address - forms - this title is self-explanatory. The form emails sent to NWP12InfoOnMVP@deq.virginia.gov are contained in three folders.

form letters and postcards and petition - this folder includes five folders and one separate document.

individuals ACP specific waterbodies - the documents and sub-folders in this folder were placed here because we believed they contained the type of specific information needed to answer the Board's questions. The folder contains 72 sets of comments.

individuals general - this folder contains what seemed to be unique (non-form) comments but which did not include the kind of specifics we believe to be pertinent to the effectiveness of NWP 12 to uphold WQS.

individuals MVP specific waterbodies - this folder includes 63 sets of comments containing identified crossings and waterbodies and discussion of pertinent issues.

organizations - we placed a wide range of organizational comments in this folder and divided them into categories. Some provide specific information to inform the Board's decisions, others are more general in nature.

In section II. below, we describe particular waterbodies addressed by parties, where we mention specific features discussed in the comments and reference their locations online, where the Board and the public can read the detailed comments and view the exhibits that accompany those narratives. Of course, we could not represent every issue or even every party that weighed in on each waterbody. We specifically looked for any information that differed with or seemed to contradict that which we were including from other sources. We found almost no instances where this was the case.

In section III., we discuss a number of overarching issues that are pertinent to all or some subset of the waterbodies MVP and ACP propose to cross. We reference specific comments that contain discussions on each topic and quote from some of those documents.

II. Waterbodies Discussed

The discussion below is organized under headings for particular waterbodies. Within each of those areas, there are generally multiple crossings cited - some included on the Corps' tables, some not. In addition to the surface water bodies, commenters address groundwater resources in these same areas. Groundwater is often directly and intimately connected to the surface waters and consideration of one cannot be arbitrarily divorced from the other. Yet that is exactly what the Corps does in its reviews.

The fact that groundwater bodies are not classified as "waters of the U.S." means they are not, by themselves, directly within the Corps jurisdiction. However, these resources do often directly affect and contribute pollutants to surface waters. Importantly, no matter how the Corps addresses groundwater resources, they are explicitly listed as "state waters," which Virginia has an obligation to protect and for which the Board adopted water quality standards. Those standards include both narrative and numeric criteria and an antidegradation policy. It must be noted that, as shown in some discussions for karst areas (e.g. Wild Va. and DPMC discussion of Dry Run), the groundwater flows may go way beyond the boundaries of the surface drainage.

In many of the particular waterbodies and watersheds addressed below, there are numerous comments that provide detailed information, both from individuals and organizations. We provide only a sampling of information from representative comments in each area and list the folders or documents for those parties who have addressed each area. Where possible, we provide direct quotes from the comments.

We have summarized and quoted from the comments to provide a sense of their contents and meaning as honestly as possible, whether we agree with their assertions or not. However, we acknowledge that such an effort is, by design, incomplete and we encourage readers to go directly to the comments themselves. We have not included any of the photographs and other exhibits and believe these are, in some cases, vital to an understanding of the commenters' messages. All of these factors have prompted us to make the comments as easily accessible as possible, so readers may use the links provided under each summary to find the comments under the document or folder names listed.

The comments are referenced in the form in which they are named in the online folders. For individuals, this generally includes the last name followed by a first name or initials. In some cases, the last name is plural, because the comments come from more than one individual in the same document or in separate documents.

Within the discussions of each waterbody featured below for each of the pipelines, the specific comments are almost all contributed by commenters who want the Board to require new reviews for waterbody crossings. To repeat findings presented in the table above:

	Individuals	Organizations
NWP Insufficient	138	23
NWP Sufficient	3	3
Totals	141	26

Numbers of comments themselves, especially when representing separate people or groups rather than repeated rote comments by the same individuals, are of value as indications of broader public sentiments. However, the numbers of substantive comments providing detailed information and analysis is much more important for this public involvement process.

Again though, numbers can never tell the whole story. What one finds by studying the group comments opposing new reviews is that only one of the three (Dawson and Assocs.) breaks out a set of specific waterbodies for study. This submittal includes detailed discussions of six ACP crossings. The other two "NWP 12 Sufficient" organizational comments, submitted by the pipeline companies (Dominion Energy and Mountain Valley Pipeline LLC), include listings of all crossings in Virginia and tallies of selected requirements included in NWP 12, Corps regional requirements, and other agency requirements.

In none of these three organizational comments we've designated "NWP Sufficient" do the parties discuss certain specifics of our WQS, such as maintenance of specific designated and existing uses, general or narrative criteria, of antidegradation requirements. None address major issues such as the chance for variances to be granted by agencies after all agency approvals are granted and when Virginia will no longer be able to affect those actions. The comments also fail to note the contrasts between the vague Corps commands (no more than "minimal impacts, compliance with specific provisions "where practicable, impacts only "temporary, etc.) and the definitive conditions required in WQS regulations (all existing and designated uses fully supported, prohibition on discharges of materials that cause turbidity and color, maintenance of high quality in Tier 3 waters and in Tier 2 waters except where there's a proven necessity to lower water quality for social or economic purposes).

Many of the individual comments in both categories ("NWP Insufficient" and "NWP Sufficient") do include mention of specific streams and/or crossing points. However, as is the case with form letters and emails that either favor of oppose new reviews, the references to particular waters is only accompanied by general statements about water quality protections. Comments of this nature are included in the folder individuals General but are not included as unique comments with specific information pertinent to the Board's questions, because they do not link particular uses and values of the waters referenced to specific pollution impacts or relate them directly to WQS.

Mountain Valley Pipeline

New River Basin

Kimballton Branch
(tributary to Stony Creek)

Kimballton Brach is listed by Trout Unlimited as a "high-priority wild trout stream" and considered a "stronghold population" predicted to be best able to withstand the warming climate and Kirk D has cited it as an important trout stream. The threat from the pipeline is especially great to trout streams because:

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

(Trout Unlimited)

In common with all other waterbodies and watersheds discussed below is the concern that the State of Virginia and other agencies will not be equipped to perform adequate inspections or take effective enforcement actions to prevent water quality damages, not just to document them after they have occurred. Many commenters have recounted the problems that have occurred through large areas of the MVP work area already, including in some detail those by SELC Appalmad, Shelton Jason, Werner B, and others.

Commenters

individuals MVP specific waterbodies
Kirk D

Conservation Groups
SELC Appalmad
Trout Unlimited

Stony Creek
(aka Big Stony Creek - tributary to New River)

Stony Creek is home to the candy darter, a fish that is proposed for federal listing under the endangered species act, as well as green floater mussels, and wild trout populations (Kirk D). Trout Unlimited has explained below the factors that cause special concern in regard to pipeline impacts to trout streams. Such concerns are just as important for the other sensitive and highly-valued species named.

Environments with intact riparian buffers of native plants shade the stream and protect the banks, riparian areas contribute cool water that is filtered through soil and plant-buffered zones. Removal of these features and others, alteration of habitats on the bed and banks will lead to impairment of existing and designated uses of these streams and cause violations of Virginia water quality standards, because high water quality cannot be ensured when the systems that foster the streams are destroyed or greatly disrupted.

Stony Creek is also highly valued as for recreational and aesthetic uses, particularly in the area around crossing S-Z13 (Preparato C, Satterwhite E).

Threats of groundwater contamination are supported by dye tracing in the area that shows connections in the karst terrain many miles apart that may be affected by the pipeline. Also, there ae several additional work areas and access roads identified on plans for MVP that are not included on the Corps' tables.

Commenters

individuals MVP specific waterbodies	Conservation Groups
Hileman J	Trout Unlimited
Hileman M	
Preparato C	
Satterwhite E	
Shelton J	

Little Stony Creek
(tributary to New River)

Little Stony Creek is highly used and valued for a range of recreational uses for residents in the area (Kruger S) and visitors from throughout the region (Cathcart Freeda, Munley C, Wawro M), which would be affected by elimination of riparian vegetation and physical habitat alterations. The Corps' tables show one crossing of the Creek and 11 crossings of tibutaries.

Crossings here will require blasting in bedrock and commenters expressed concerns about impacts on hydrologic flow patterns (Cathcart Freeda, Munley C).

The stream is considered an exceptional aquatic resource, providing habitat for native Brook trout (Kirk D). Trout Unlimited has designated it a "high-priority wild trout stream" with a "stronghold population," representing an important remaining portion of the species' range and

habitats. TU judges that in such sensitive trout waters, a variety of impacts from pipelines "can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations."

One landowner describes specific concerns about the choice of crossing method at S-Z13. Sizemore, Inc states that, according to a letter to the Virginia Marine Resource Commission (VMRC) dated 1/25/18, MVP agreed to use conventional boring techniques but apparently plans to use open cut methods instead. The party asserts this activity would violate Resource Protection Area restrictions applicable under the Chesapeake Bay Preservation Act.

Commenters

individuals MVP specific waterbodies	Conservation Groups
Cathcart Freeda	SELC Appalmad
Kruger S	Trout Unlimited
Munley C	
Shortt Clyde Rickey	
Sizemore, Inc.	
Wawro M	
Kirk D	

Doe Creek
(tributary to New River)

This crossing is proposed in a karst area and dye tracing indicates it could present threats to water sources miles away without proper controls (Shelton J). The Corps has identified 4 crossings of Doe Creek and 3 of tributaries. The tables indicate some segments affected are intermittent streams but commenter Haverty Georgia states that the stream flows underground in the karst system in some areas. This fact causes concern about the crossing method proposed.

An analysis of construction plans improperly shows a drilling pit within the stream and sediment control measures are not correctly located to be effective (SELC Appalmad).

Commenters

individuals MVP specific waterbodies	Conservation Groups
Haverty Georgia	SELC Appalmad
Shelton J	

Greenbriar Branch
(tributary to Sinking Creek)

This stream is considered a highly-valued biological and recreation resource. Wawro identifies an existing use for recreation in the area affected by crossing S-RR2 and another commenter asserts that, rather than open cut, a crossing by boring or drilling should be evaluated.

Greenbriar Branch is among the group listed as "high-priority wild trout streams" by Trout Unlimited, exhibiting "prime wild brook trout habitat" including features such as "dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems." MVP work would alter these features, in some cases temporarily, in other permanently and may impair both existing and designated uses for support of aquatic life through changes in dissolved oxygen, temperature, and turbidity at the crossing site and at downstream locations.

Commenter Yolton David cites the record of non-compliance with pollution control requriements and notices of violation as a consideration that should be included in a decision about coverage of this area under a blanket approval.

Commenters

individuals MVP specific waterbodies	Conservation Groups
Wawro M	Trout Unlimited
Williams Jason	
Yolton David	

Unnamed Tributary to Grass Run

This stream is designated a "high-priority wild trout stream" and considered a "stronghold population for native Brook trout by Trout Unlimited, which explains that the types of stream habitat alterations and pollutant releases involved with pipeline construction and long-term maintenance of rights-of-way "can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations."

Commenters

Conservation Groups
Trout Unlimited

Sinking Creek
(tributary to New River)

There are 2 crossings of Sinking Creek and 30 crossings of unnamed tributaries, within an area of about 29 square miles. In a study submitted with comments, crossing S-NN17 was examined in detail. The analysis showed that Sinking Creek in this area has a number of characteristics (forested, threatened and endangered species, trout, and shallow soil over bedrock) which are amongst the factors DEQ has said ""should be considered when preparing a plan." Despite this finding, the study authors stated:

> We then reviewed the corresponding Detailed Alignment Sheets and details . . . to determine if the engineering plans reflect consideration of any of these conditions. There is nothing in the permit materials to indicate that different design considerations or standards were used in response to the site-specific conditions, or to mitigate any potential water quality impacts. The same designs and standards were applied uniformly to many crossings regardless of unique site conditions that warrant individual designs and plans to ensure that water quality standards will be protected.
>
> This analysis revealed many reasons to conclude that NWP 12 is insufficient to ensure that Virginia water quality standards will be met. In other words, based on the lack of information on the current plans and drawings, these crossings are at high risk of violating Virginia water quality standards.

(Nat. Res. Def. Council, meliora report at 23)

As noted above, this is a trout stream, deemed by Trout Unlimited to be a "high-priority wild trout stream" and to support a "stronghold population" of Brook trout. TU asserts in its comments that impacts from crossings, such as damage riparian habitat, removal of protective buffers, destabilization of banks, and alteration of streambeds, such as would be involved here, "can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations" (Trout Unlimited, also see Fine Elizabeth for discussion of temperature impacts).

Numerous commenters state that existing recreational uses of Sinking Creek that would be affected by pipeline construction and alterations that would persist afterward include trout fishing, hiking, swimming, photography, birding, etc. (Fine Elizabeth, Flores David, Homer K, Wawro M, Zoecklein). In addition, Jamison Ashley uses water from the creek for livestock watering.

On commenter states that sedimentation problems are already occurring due to tree felling and other pipeline work (Jamison Ashley) and another aserts that the ROW crosses a sinkhole and that changes to the route are not correctly shown on the Corps' tables (Lee Jonathon). Shelton J identifies karst-related hazards of contamination of groundwater and surface waters far from the crossing sites, citing dye trace results.

Attached to the SELC Appalmad comments, a technical review shows boring pits at the crossing at State Route 700 to be below the high water mark, providing an additional demonstration of the need for individual site-specific crossing reviews SELC Appalmad, Att. X, pg.5).

Commenters

individuals MVP specific waterbodies	Conservation Groups
Fine Elizabeth	SELC Appalmad
Flores David	Trout Unlimited
Homer K	Nat. Def. Res. Council
Jamison Ashley	
Lee Jonathon	
Shelton J	
Wawro M	
Williams Jason	
Yolton David	
Zoecklein Bruce	

James River Basin

Craig Creek
(tributary to James River)

Many of the commenters described the high value they place on existing uses of this stream, for which much of the headwaters lie in the National Forest and are now well protected. Also, SELC and Appalmad has included specific analysis with its comments, stating:

> Craig Creek crossing a Class V - vi (Stockable) trout stream. Sensitive stream crossing due to presence of James spinymussel; Atlantic pigtoe. Total impacted area is 3,721 square feet. Stream crossing on east side is at toe of long steep slope with a large drainage area. As shown, clean water diversions channelize flow from the large drainage area to a location at the upper side of the stream crossing. Large volumes of runoff will be directed into the compost filter sock shown on the plans. The drainage area exceeds the capacity of the filter sock to control the flow of erosion. Additional design required to extend clean water diversion to outlet structure at edge of stream crossing. Stream crossing is not designed correctly. No reasonable assurance can be provided that water quality will be protected.

(SELC and Appalmad, Att. X at page 6).

Commenters

individuals MVP specific waterbodies	Conservation Groups
Carmichael Katie	SELC Appalmad

Flores David
Hileman J
Jenkins D
Kelley-Dearing
Lee Jonathon
Savage N
Williams Jason
federally listed Roanoke logperch
Kirk D

Roanoke River Basin

Bottom Creek, Mill Creek, and tributaries
(tributary to South Fork Roanoke River)

Bottom Creek and its major tributary, Mill Creek, as well as numerous small tributaries of each of these streams were addressed in numerous comments and a large amount of specific information was provided. Bottom Creek is one of the select waterbodies in Virginia that has been designated Tier 3 (an exceptional state water) by DEQ. Streams in this category are of the highest quality and are found to have outstanding features deserving of the highest level of protection under the state's antidegradation policy. Quality is not to be lowered in these waters.

While MVP does not directly cross the designated Tier 3 section of Bottom Creek, there are at least 81 crossings by the pipeline or associated roads and work spaces upstream from this segment. The combined effects of this entire group of activities has not been assessed by the Corps or DEQ. Even if sediment discharges into streams or wetlands at any one site may be considered to be minor and short-term, the overall load of sediment, in aggregate, must be accurately predicted and compared to the antidegradation standard before it may be concluded that conformance with WQS is ensured (Johnson R, Reynolds E, etc.). A figure in Attachment A to SELC Appalmad comments is useful for understanding the concentration of impacts in this watershed.

As discussed in numerous comments listed below, many streams, springs, and wetlands in this relatively small headwater drainage have been omitted from the tables prepared by the Corps and relied upon by DEQ. Many others that were listed have been characterized incorrectly. General issues of this nature are discussed in section III. of this report.

Just a few examples of these deficiencies:

- Terry G describes numerous seeps and springs in the area along the pipeline route between mileposts 241.5 and 242.0 that are not identified on the Corps' list. A large perennial stream that would be affected by construction and which feeds the wetland labeled W-EF 21 is not listed on the Table (Scott Karen).
- A major right-of-way crossing of Mill Creek, which was identified as S-IJ 43 in the Final Environmental Impact Statement (FEIS) prepared by FERC, is left off of the Corps' lists. This stream segment lies just 3 miles upstream of the Tier 3 area and directly connected to

wetlands. The stream is within the habitat area for the Orangefin Madtom, which is on the list of Threatened and Endangered species and is supposed to be subject to time-of-year restrictions to avoid impacts during the spawning season. (Johnson R).

- On the Coffey property, at MP 243.1, spring-fed scrub and shrub wetlands were not identified or flagged prior to tree felling. DEQ personnel have since visited the site and "positively identified" this feature (Coffey Mary Beth).
- Potential impacts to the listed Orangefin madtom are not correctly included on the tables (Martin L).
- A large complex of wetlands identified by Reynolds E is incorrectly presented in the tables as a series of disconnected habitats (including W-MN7-PEM, W-KL53, W-Kl54, etc.) (Reynolds E).

Most commenters listed below note that Bottom Creek and its tributaries are designated waters for wild trout. Trout Unlimited has named Bottom Creek a "high-priority wild trout stream," explaining that it is considered a "stronghold population" - a remaining population in the greatly-reduced range for the Eastern Brook Trout that is most likely to be able to survive as climate change continues and, therefore, worthy of special protections. A deficiency in the Corps table, in addition to those mentioned above is that many tributaries to Bottom Creek are not listed as trout streams, despite the fact that the Virginia WQS classify all of the tributaries to Bottom Creek as trout waters (Reynolds E).

As with many waterbodies addressed herein on both pipeline routes, commenters have testified to the importance of Mill Creek, Bottom Creek, and their tributaries for recreational uses and other human uses. For many these are "existing uses" as defined in the WQS and authorization cannot be granted to interfere with these uses. In addition, all waters in Virginia are designated for recreational uses.

There are numerous specific waterbodies within this drainage for which commenters assert specific threats and some that have already been damaged by tree felling activities. Examples include:

- The ROW is proposed to pass within feet of an existing spring box in the Mill Creek drainage that has been used for generations and would disrupt the ground around the spring and affect groundwater flows. Blasting would be required in the vicinity, where soil above bedrock is only 31 inches deep, and would affect this and other springs and surface waters.
- Bottom Creek has been designated "impaired" for temperature violations by DEQ (Austin Robin) and dozens of instances throughout the watershed where mature forests and wetlands will be removed or disrupted must contribute to warming of the stream.
- One crossing designated S-EF 51 is claimed to have only temporary impacts but would result in filling a vernal pool and destroying this resource (Austin Robin and Reynolds E).
- A crossing between mileposts 241.3 and 241.5 is approached by a very steep slope which will result in direct deposition of sediments or rock from the hillside and must be reviewed as part of the crossing review.
- One of the supposed protective measures for Bottom Creek includes water quality and stage monitoring equipment upstream and downstream from crossing areas. However, the

equipment was shown not to be functioning properly during the period of tree felling so data to assess background conditions and judge potential for impairments may not be adequate.
- One landowner, on whose land an anode bed is planned for an area near a crossing is concerned that potential for heavy metal pollution impacts from this and associated underground structures could result (Thompson H).
- Some areas in the watershed are and have been heavily used for orchards and other farming and the disturbance of soils may release residual pesticides and fertilizers into ground and surface waters and violate antidegradation and other WQS (Scott Karen).

The potential groundwater threats in the Bottom Creek drainage are mentioned by numerous commenters. There are concerns about chemical pollutants that might affect groundwater through blasting operations in bedrock streams and a variance to requirements for blasting previously-defined in MVP submittals has already been granted (Gray Nan). Groundwater on Bent Mountain within the Bottom Creek drainage have a shallow perched aquifer lying atop basaltic bedrock formations. These geologic formations are subject to fracturing during blasting in stream crossings, which could result in the loss of private water supplies (Hileman J).

Commenters

individuals MVP specific waterbodies
Austin Robin
Chandlers
Coffey Mary Beth
Gray Nan
Hileman J
Johnson Robert
Kelley-Dearing
Kirwan M
Lusby-Denham Anne
Martin L
Reynolds E
Rogers A
Scott Karen
Scott M
Stinson S
Terry G
Thompson H

Conservation Groups
SELC Appalmad
Trout Unlimited
Va. Conserv. Network
Nat. Def. Res. Council

organizations
Va. Envir. Justice Collaborative

South Fork Roanoke River
(tributary to Roanoke River)

The South Fork Roanoke River is fed by Bottom Creek, so it will be impacted cumulatively by the 81 crossings in that drainage, as well as S-CD12 to an unnamed tributary to the South Fork. that MVP proposes to cross. One crossing on The federally Endangered Roanoke logperch inhabits parts of the upper Roanoke River drainage, including the South Fork.

As explained in comments from Roanoke City, "the Supplemental BA [Biological Assessment] states that sedimentation/siltation due to land use changes is one of the primary threats to this

species. *There appears to be a gap in acknowledgement by the USACE that the land use change occurring as a result of the MVP, specifically through mountainous terrain, will increase sedimentation both through land erosion and increased runoff leading to greater instream erosion. Sediment is an enduring habitat impact that can affect all lifecycle stages.*" (Roanoke City at 5, emphasis added). The City also includes detailed analyses of deficiencies in the methods and conclusions about sediment contributions to the South Fork and the Roanoke River and costs to citizens associated with these discharges.

Cititzens use the South Fork for a range of recreational activities including, for example, in the area aound mile post 230.7 to 230.8, which would be affected by pipeline crossing impacts (Kelley-Dearing).

Commenters

individuals MVP specific waterbodies	Localities
Kelley-Dearing	Roanoke City

Mill Creek (Montogomery Co.)
(tributary to North Fork Roanoke River)

Commenters address both surface water and groundwater impacts and threats in the Mill Creek drainage area. This watershed is underlain by extensive karst structures and one commenter reports a sinkhole that has been filled by pipeline work crews (Hileman J).

The stream is valued and used for recreation (Homer K, Malbon E) and one commenters asserts that MVP should be required to fully assess a crossing through drilling under the stream, before a final plan is allowed to proceed (Williams Jason).

Mill Creek is one of the streams along the MVP pathway that has been identified by Trout Unlimited as a "high-priority wild trout stream" containing a stronghold population of native Brook trout. Maintenance of what TU terms "prime wild brook trout habitat" would be necessary wherever possible and within the authority of the State of Virginia to prevent degradation or impairment of these waters. Such habitat includes "dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems," among other features.

> In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage riparian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water

temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

(Trout Unlimited)

Commenters

individuals MVP specific waterbodies	Conservation Groups
Hileman J	Trout Unlimited
Homer K	
Malbon E	
Williams Jason	

Bottom Spring
(tributary to North Fork Roanoke River)

This spring is located at latitude 37.261968 and longitude -80.332089 and lies down-gradient from the MVP work site. This feature is in the karst system and forms the headwater for wetlands and evidence is presented, through the commenter's report and photograph, that this spring has been contaminated with sediment. The spring has been observed for many years and this condition has never before been present and only appeared after pipeline work had begun (Malbon E).

Commenters

individuals MVP specific waterbodies
Malbon E

Salmon Spring
(tributary to Mill Creek)

This spring provides drinking water to 3 homes and has been used for generations. It is not listed on the Corps' tables and is located at latitude 37.263299 and longitude -80.339646. It feeds Mill Creek through both above-ground and underground flows (Malbon E).

Commenters

individuals MVP specific waterbodies	Conservation Groups
Malbon E	SELC Appalmad

Bradshaw Creek
(tributary to North Fork Roanoke River)

Numerous commenters expressed the high recreational value they hold for Bradshaw Creek and the Falls Ridge Preserve, which would be affected by crossings at S-0011 and S-C21. They describe activities that qualify recreation as an existing use under WQS (Carmichael Katie, Mohammed I, Preparato C, Reed A).

Commenters
individuals MVP specific waterbodies
Carmichael Katie
Hileman J
Mohammed I
Preparato C
Reed A
Williams Jason

Flatwoods Branch
(tributary to North Fork Roanoke River)

Hilemand M describes steep slopes on the ROW's approach to Flatwoods Branch that may contribute not only to indirect flows of sediments to the stream but, because of their proximity to the channel can cause direct discharges of fill material, which should be analyzed in an individual review of the crossing.

Commenters
individuals MVP specific waterbodies
Hileman M

North Fork Roanoke River
(tributary to Roanoke River)

Hahn Betty lives about 4 miles downstream from the crossing of the North Fork Roanoke River and the river is valuable for livestock watering and recreation (Hahn Betty). Other comments testify to the North Fork's use and value for recreational uses, which they believe will be impaired by pipeline impacts.

This stream, along with other parts of the upper Roanoke River watershed, is habitat for the listed Roanoke logperch, which is now limited to only a small part of its historical range and is endemic to parts of the Roanoke basin (Kelley-Dearing). The North Fork is also listed by TU as a "high-priority wild trout stream" and considered to host a "stronghold population" of brook trout that should be marked for special protective efforts in light of attributes that may make it especially suitable refuge as climate continues to warm.

In it comments, Roanoke City describes the impacts to its public water supply that are predicted from wok in this watershed and these crossings and asserts they can only be fully understood and impairment prevented with individual analyses of crossings.

Commenters

individuals MVP specific waterbodies	Conservation Groups
Hahn Betty	SELC Appalmad
Kelley-Dearing	Trout Unlimited
Kennedy R	Roanoke City
Smusz T	
Williams Jason	

North Fork Blackwater River
(tributary to Blackwater River)

Hileman M notes that the approach to crossing at this stream is on steep ground and it may result in direct discharges of sediment, rather than just indirect runoff from the uplands, and must be part of the crossing analysis.

Trout Unlimited considers this to be a "high-priority wild trout stream" and a "stronghold population" of native Brook trout, explaining that:

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

(Trout Unlimited)

Commenters

individuals MVP specific waterbodies	Conservation Groups

Hileman M Trout Unlimited

Green Creek
(tributary to South Fork Blackwater River)

Green Creek is cited as a "high-priority wild trout stream" and a "stronghold population" for native Brook trout (Trout Unlimited) and has steep slopes approaching the crossing, which may contribute direct dredge and fill discharges to the stream.

Commenters
individuals MVP specific waterbodies Conservation Groups
Hileman M Trout Unlimited

Teels Creek
(Tributary to Little Creek)

The Werners (Werner B and Werner Dave) provided detailed comments on crossings: S-C14, S-C16, and S-C17 in the Teels Cr. drainage. These proposed crossings are in the immediate vicinity of their family farm. Werner B is a trained volunteer water quality monitor on this and other streams. They report the following:

- S-C14: Stream banks are quite steep here and stream has bedrock bottom. The ROW has not been appropriately narrowed in the zone extending 50 feet from the stream and is in violation of DEQ certification conditions. The LOD is very near the stream in this area, sometimes less than five feet away.

- S-C16: Stream banks are unstable.

- S-C17: Stream banks are very steep here and the area is very prone to flooding and erosion from unstable banks. The ROW is not appropriately narrowed in close proximity to the stream, in contradiction to the plans submitted by MVP. The Corps did not visit this area and make wetland surveys, failing to identify wetlands that expand greatly during wet periods. There is no assurance that the wetland boundaries are accurate.

Commenters
individuals MVP specific waterbodies
Werner B.
Werner Dave

Little Creek
(Tributary to Blackwater River)

Little Creek has already been hit hard by uncontrolled sediment discharges caused by MVP (see e.g. Va. Conserv. Network, SELC Appalmad). These impacts show the weakness of the inspection and enforcement regimes so far established by DEQ and other agencies, where serious damage has occurred before strong action is taken. These concerns, which have emerged for "upland" work areas, must also be present for the crossing work areas.

The Werners (Werner B and Werner Dave) provided detailed comments on crossings: S-CD6, W-CD5, and S-I12 in the Little Creek drainage. These proposed crossings are in the immediate vicinity of their family farm. Werner B is a trained volunteer water quality monitor on this and other streams. They state that

- S-CD6: The stream bed is composed of nearly continuous bedrock. The bank width to be affected is inaccurately specified by MVP, in contradiction of VMRC records.
- W-CD5: Sediment has already flowed into this wetland after work done by MVP.
- S-I12: The ROW is within less than 50 feet of the stream in a least four areas, in violation of DEQ's certification requirements.

Commenters

individuals MVP specific waterbodies	Conservation Groups
Werner B.	Va. Conserv. Network
Werner Dave	SELC Appalmad

Blackwater River
(tributary to Roanoke River)

The Blackwater River would be crossed at S-F11 and would be affected by the cumulative contributions of pollution discharges from crossings and other activities in the North Fork and other tributaries addressed above. This stream is the source of public water supply for the Town of Rocky Mount (Sim J, Va. Conserv. Network) and sediment increases of any extent could impact that existing and designated use and violate antidegradation provisions in WQS. The Blackwater is also an important recreational resource, on which an annual festival is held and the elimination of mature trees from the ROW will impact the stream quality and these uses (Sims J).

Commenters

individuals MVP specific waterbodies	Conservation Groups
Sims J	Va. Conserv. Network

Pigg River
(tributary to Roanoke River)

The Pigg River would be affected by the crossing designated S-E11. This river is a major contributor of flows and pollutants to Leesville Lake and new or increased sediment discharges due to pipeline crossing work would worsen problems that have already been experienced and for which citizens have worked hard to address (Capuco Anthony).

Commenters
individuals MVP specific waterbodies
Capuco Anthony
Sims J

Roanoke River

The Roanoke River is an especially dire example of the failure to consider combined effects from many crossings throughout a drainage area on downstream waters. The discussions of fifteen separate streams and watersheds above must be factored into the concerns for the Roanoke. The City of Roanoke's comments in regard to the many impacts that will be felt, both from direct and indirect inputs to the River, is an important source to understand the ways WQS support in the Roanoke River cannot be ensured without individual crossing reviews in its watershed.

Commenters
individuals MVP specific waterbodies
Capuco Anthony

Conservation Groups
SELC Appalmad
Roanoke City

Localities
Roanoke City

Lake Gaston
(Roanoke River)

Hourigan M states that he owns property on and values Lake Gaston, a reservoir on the Roanoke (Staunton) River located many miles downstream of the MVP-impacted areas. Hourigan acknowledges that several crossings in the watershed lie within this drainage (naming four: S-G36, North Fork Roanoke River and tributaries S-G 38 through 40). He states "DEQ sediment and erosion control requirements will protect the North Fork Roanoke River from sedimentation."

Commenters
individuals MVP specific waterbodies
Hourigan M

Atlantic Coast Pipeline

James River Basin

Lick Draft
(tributary to Townsend Draft)

Lick Draft and a tributary where crossings are proposed are wild trout streams. They are also within the habitat range for the state endanger southern water shrew (Kirk D). Six crossings, by the pipeline ROW and access roads, are proposed on the two streams within a small drainage of just more 3 square miles. Trout Unlimited lists both the mainstem and tributary as "high-priority wild trout streams." The two bedrock stream bottoms will likely be trenched by blasting. Kirk D has assessed the sites and asserts, based on extensive expertise with streams in the Appalachian region, that "the level of impact between access road and pipeline crossing will be unacceptable."

Commenters

individual ACP specific waterbodies	Conservation Groups
Kirk D	Trout Unlimited

Townsend Draft (aka Warwick Run)
(tributary to Back Creek)

Townsend Draft is a small headwater drainage in which 10 waterbody crossings by the ROW and access roads are proposed. The main body of Townsend Draft is habitat for native Brook trout and all tributaries that would be affected would negatively impact the trout segments, even if not designated as such. (Kirk D, Wild Va DPMC)

Two tributaries that would be crossed by the ROW at shia407 and shia410 are designated by Trout Unlimited as "high-priority wild trout streams" and as home to "stronghold populations of native trout. The importance of individual and cumulative reviews of crossings in natural trout streams is explained by TU:

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate

> populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

(Trout Unlimited)

In addition to sensitive trout species, several of the affected tributaries to Townsend Draft are within range and have suitable habitat for the southern water shrew (Virginia Endangered list).

Potential temperature impacts to these streams will be caused from removal of riparian vegetation and ROWs on bordering mountain slopes, which will expose waters previously completely shaded in summer to direct sunlight in numerous places in the watershed during the hottest periods. Recent studies prove that temperature changes caused by existing pipeline rights-of-way, even if well maintained and compliant with NWP 12 "restoration" requirements will continue to cause elevated in-stream temperatures for years after construction ends (Wild Va. DPMC)

One commenter asserts, based on expert knowledge and site visits that crossing point Whia407 would be across the head of a bold spring and would irreparably alter the spring, and groundwater hydrology. (Kirk D)

In addition to the combined effects of sediments from multiple crossings on downstream segments, the disturbance of the mainstem and all tributaries will affect the movements of trout and other species. As demonstrated by recent research, trout may move for substantial distances within small headwater drainages such as this one and pipeline work may hinder their ability to respond to other stresses in the ecosystem. (Wild Va. DPMC).

A number of the crossings in this watershed are approached by very steep slopes, from which any sediment or debris that is dislodged will become direct "fill" that must be reviewed under crossing analyses. On one tributary, the mountain slope at the crossing site is a more than 90 percent degree slope and descends to the stream itself without any intervening bank or level area. These areas were designated "high-hazard" areas by the U.S. Forest Service due to such slopes, known history of landslides, and other factors. (Kirk D, Wild Va. DPMC).

Commenters

individual ACP specific waterbodies
Kelley-Dearing
Adams Pauline
Kirk D

Conservation Groups
Wild Va. DPMC
Trout Unlimited

Back Creek and tribs.Unnamed Tributary to Back Creek
(tributary to Jackson River)

One crossing for this stream is designated shia 405 on the Corps' tables but another planned crossing is not included in that listing. Therefore, there is no indication that the Corps or DEQ is aware of or has assessed potential impacts from this crossing. (Wild Va. DPMC).

A commenter whose property would be affected has submitted a detailed professional study of threats to springs, sinking streams, and other features on his property and asserts that increased sediment and water flows volumes and intensities during construction could damage and open new sinkholes (Paul Tyler).

Trout Unlimited has identified this as a "high-priority wild trout stream" housing a "stronghold population" of native Brook trout. Trout Unlimited

Commenters

individuals ACP specific waterbodies	Conservation Groups
Paul Tyler	Trout Unlimited
	Wild Va. DPMC

Jackson River
(tributary to James River)

As one of the most treasured and high quality rivers in Virginia, impacts to the Jackson River, through direct crossing and other areas is of grave concern to many commenters. This includes affected landowners, nearby residents (Koslen Mark), and users of the River from across the region.

Quoting from comments by Wild Va. DPMC:

> The designation for this crossing in the column "Feature ID" is DKSQ_VA_002. Note that the ID and the data in Table B-1 provided by the Corps shows that a "desktop" analysis was conducted. Such an approach could only be acceptable as a preliminary step in the regulatory review. To stop at a mere review [sic] computer data when deciding whether a major industrial project may be allowed to cross this important resource is outrageous. For DEQ to meekly rely on that approach by the Corps and claim to the public and the Board that the regulators have done their jobs is appalling.
>
> The Jackson River is one of the largest and most popular trout fisheries in Virginia, including both private and public waters. Sections of the river both upstream and downstream of the proposed crossing are managed for commercial fee fishing. A public special-regulation (catch and release) area is further downstream in the George Washington National Forest. Sedimentation associated

> with the proposed crossing would degrade both the aquatic habitat of the river and its use as a recreational fishery. Although the river is subject to periodic extreme high flows, no information concerning the stability of the stream bed and adjacent wetland areas were examined in the NWP12 review. This poses risks of stream bed destabilization and habitat
> impairment, as well as risks to the integrity of the pipeline.

As mentioned in this quote, the Jackson is an important trout habitat and is considered a "high-priority wild trout stream" that has a "stronghold population" best suited to survive in future stresses from climate change. TU raises particular warnings due to the fact that ACP proposes to cross the Jackson and its tributaries 7 times over the course of just 2 miles. (Trout Unlimited)

There have already been some concerns with temperature impacts on the Jackson and these could be exacerbated by the pipeline crossing activities (Limpert W). Further, flood impact analyses, in light of past extreme events and the ways they affected the River are necessary before ensuring that these crossings can be made without violation of WQS. (Jackson River Pres.)

Commenters

individuals ACP specific waterbodies	organizations
Koslen Mark	Dawson and Assocs.
Limpert W	Conservation Groups
	Jackson River Pres.
	Wild Va. and DPMC

Little Valley Run
(tributary to Bolar Run)

Where ACP would cross Little Valley Run (AP-1 0047) is designated by Virginia as a class III wild trout stream (Robinson Gary) and by Trout Unlimited as a "high-priority wild trout stream" that supports a "stronghold population" of native Brook trout.

> VDGIF District Field Biologist Steven J. Reeser, the field data "...shows that Little Valley Run is an important tributary for brook trout reproduction, that would also benefit the wild brook trout population in Bolar Run and other streams in the watershed." As the water table gets lower in periods of drought, long stretches of Little Valley Run downstream of the crossing often sink into limestone channels. The trout survive by gathering in spring-fed pools until the water table is recharged. Sediment could easily disrupt this delicate balance by filling up the spring-fed pools or entering the underground aquifer.

(Robinson Gary).

There are serious concerns about contamination of groundwater, springs, and wells. One unnamed tributary is wrongly listed by the Corps as an ephemeral stream but actually continues to flow below the stream bed as a sinking stream. (Bells). Another commenter cites karst expert

William Jones, stating that he concluded that construction of the Atlantic Coast Pipeline through Little Valley could "behead" Bolar Spring, a renowned warm spring near the mouth of Little Valley. (Limpert W). Endangered Madison Cave Isopod believed likely present, would be threatened and there is no evidence that any agency has conducted an analysis of the dangers. Blasting will be required through bedrock stream beds at some crossings and could divert or eliminate flows to water sources that residents depend upon. (Robinson Gary).
Recent dye traces conducted by surveyors for the ACP
Limpert W

In light to these kinds of concerns:

> The Virginia Department of Conservation and Recreation recommended dye traces be conducted in Little Valley and on December 5, 2017, Dominion karst contractors, GeoConcepts, injected one pound of Eosine dye into a sinking stream on our family farm just south of the proposed pipeline route and near the Little Valley Run stream crossing. Almost six months later, GeoConcepts has not definitively determined where the dye emerged, although some preliminary data indicates it may have surprisingly ended up in Bolar Springs, a significant karst aquifer, miles away. Future dye traces are planned, but at this time, the true extent of Little Valley karst and the true costs of contaminating it have not been adequately evaluated.

(Robinson Gary). Finally, the Corps' tables, which were presented by DEQ and should have been a reliable resource for citizens in making comments, omitted important features. One commenter reported that a sinkhole located in close proximity and downhill from the ROW is not even shown of ACP maps and cannot have been considered by the Corps. (McLean Ron).

Commenters

individuals ACP specific waterbodies

Conservation Groups
Wild Va. and DPMC

Laurel Run
(tributary to Dry Run)

Kirk D, has expressed concern that erosion and sediment control measures described by ACP cannot maintain the integrity of this stream channel and use as a wild brook trout habitat. The stream has been listed as one of Trout Unlimited's "high-priority wild trout stream" and is considered to be a "stronghold population" for Brook trout.

The sensitivity of brook trout and the need for "dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems," combined with the necessary alterations to the stream channel and banks as well as riparian zone and habitats "upland," means the pipeline "can impair existing and designated uses . . . and cause violations of Virginia water quality standards, including increases in water

temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations. (Trout Unlimited).

Commenters

individuals ACP specific waterbodies	Conservation Groups
Kirk D	Trout Unlimited

Dry Run
(tributary to Cowpasture River)

Study of streams in this watershed is important because of the combined threats from crossings in Laurel Run (discussed above) and in Dry Run. Even more concerning is the connection through groundwater transport in karst, to groundwater and surface water far away and outside this surface water drainage.

As explained in comments:

> The designations for each crossing in this cluster in Table B-1, in the column "Feature ID," are as follows: sbaa 028, sbaa 029, sbaa 030, sbay 008, wbaa 010s, wbay 003s. These crossing sites and other features are shown on Figure 7.
>
> This combination of crossings is of extreme importance, both because of direct impacts to segments of Dry Run and because there are proven, direct connections between activities in the karst areas here with groundwater resources and, through those groundwater connections, to streams many miles away. This situation illustrates the great danger in DEQ relyiance on the Corps' process. The federal authority under CWA reaches waters of the U.S. and the CWA does not require groundwater quality standards.
>
> On the other hand, the State of Virginia has groundwater standards that are very protective. The antidegradation provisions for groundwater require that wherever water is of high quality, levels of pollutants may not be increased by any amount. If any groundwater criterion is exceeded, no further increases in subject pollutants may be made.
>
> The straight lines passing through the Dry Run area on Figure 5 depict paths of groundwater flow that were discovered by dozens of dye testing events. Note that while the waterbody crossings all lie within the Dry Run surface watershed, the groundwater in this area uniformly runs toward the Bullpasture River, its tributaries, and contributing springs. The longest dye trace appears to run nearly five miles from the place substances entering the groundwater can be expected to re-emerge to surface waters.

Commenters

Conservation Groups
Wild Va. and DPMC

Cowpasture River
(tributary to James River)

The Cowpasture River is recognized as one of Virginia's cleanest and most ecologically intact free-flowing rivers. It supports a diverse and productive fishery, including cold and warm water species. Sedimentation associated with the proposed crossing would degrade both the aquatic habitat of the river and its use as a recreational fishery. (Wild Va. DPMC). The River is enormously population as a recreational resource (see e.g. Jamison Michael, Kelley-Dearing, Koslen Mark) and is very valuable for landowners (Carlson Berton, Quinlan M).

ACP proposes to cross the Cowpasture at sbaa 015 and two tributaries within one mile (sbaa005 and sbaa006). All of these activities may impact the endangered James River Spineymussel and the Yellow Lance mussel (Kird D, Wild Virginia DPMC). An example of the value the natural features is the educational and recreational mussel festival conducted by the U.S. Fish and Wildlife Service and Virginia Dept. of Game and Inland Fisheries to teach people about the mussel populations and the values of unimpaired streams to support these sensitive species (Quinlan M).

Although the river is subject to periodic extreme high flows, no information concerning the stability of the stream bed and adjacent wetland areas were examined in the NWP12 review. This poses risks of stream bed destabilization and habitat impairment, as well as risks to the integrity of the pipeline. Geophysical and engineering studies that need to be completed prior to permitting have not been done, despite Virginia agency staff's warnings about their importance. (Wild Va. DPMC)

Commenters

individuals ACP specific waterbodies
Carlson Berton
Jamison Michael
Kelley-Dearing
Kirk D
Koslen Mark
Quinlan M

organizations
Dawson and Assocs.

Conservation Groups
Wild Va. and DPMC

Stuart Run
(tributary to Cowpasture River)

Stuart Run supports both existing human uses and a high-quality population of aquatic organisms. It is designated a "high-priority wild trout stream," supporting a "stronghold population" of native Brook trout that may be among a limited number of existing communities of this species in Virginia that is best able to withstand future climate-related threats. This waterbody also serves existing human uses, such as agricultural water supply (Neely E).

The Corps' table list 25 crossings within this relatively small drainage but omits one crossing. The direct crossing of Stuart Run would be at MP 100.7 and the pipeline would continue along Deerfield Road to cross tributaries and wetlands of Stuart Run another 24 times within 1.7 miles. Stuart Run (sbaa 001), together with its major tributary, Bolshers Run, has a significant portion of its drainage area in steep, mountainous terrain and is subject to frequent flooding. Flood scour and the potential for channel changes in extreme flood events pose a threat to pipeline integrity for the ACP.

The Millboro Formation black shale occurs in the Stuart Run watershed and the ACP will cross 6 tributaries where the Millboro is bedrock. This shale has local concentrations of iron pyrite and can produce an acid mine drainage effect when broken up and placed in fills with exposure to oxygen and fluctuating water levels. The low pH can harm aquatic organisms.

A total of 15 of the Stuart Run tributaries or wetlands will require blasting in the streambed for construction and at least 7 crossings may require concrete armoring due to flood scour.

There are 2 tributaries which have adjacent steep slopes of 40% or more. This will increase the likelihood of normal erosion or slides washing sediment directly into the streams. These tributaries, sbaa 025 and sbae 201 also have steep slopes at least 500 feet long above portions of the streams. Activities in these steep-slope areas will contribute fill to the streams directly due to their proximity to the waterbodies and are therefore regulated under both CWA 404. Therefore, analyses of potential impacts at these crossing sites must be assessed in relation to the upland activities.

Stuart Run is identified to be within the range for the Roughhead shiner, a very rare federally and state listed species. Therefore, the crossing activities here must be limited in a way that will fully protect this species. This watershed has a Time of Year Restriction of March 15 to June 30 due to this fish. While this restriction prohibits construction activities during the spawning season for this fish, no evidence has been provided that this condition alone is adequate to protect these sensitive organisms. Increases in sediment in these waters may well impact the Roughhead shiner, even when discharges are of relatively short duration. Further, deposition of sediments may damage or destroy habitat for the shiner as well as organisms on which the fish feeds.

Commenters

individuals ACP specific waterbodies	Conservation Groups
Neely E	Wild Va. and DPMC
	Trout Unlimited

Mill Creek (Bath County)
(tributary to Calfpasture River)

Mill Creek is identified as a "high-priority wild trout stream," which shelters a "stronghold population" of native brook trout, the only trout species endemic to streams in our region. These fish have been eliminated from most of their historic range, because they require very high water quality and intact stream channels, riparian zones, and watersheds. The crossing ACP proposes can disrupt all of these features and cause violation of WQS. (Trout Unlimited).

There are a total of twenty-two waterbody crossings in this small watershed. Two of these are not listed in the table provided by DEQ. The others are listed there under the heading "Feature ID" as: sbaa 031, sbaa 032, sbaa 033, sbaa 034, sbaa 039, sbaa 040, sbaa 041, sbar 002, sbar 003, sbar 004, sbar 005, sbar 006, sbar 008, sbar 009, wbaa 011f, wbaa 012f, wbaa 014f, wbaa 015f, wbar 003e, wbar 004e.

Mill Creek (sbar 008) is in a George Washington National Forest priority watershed because of the presence of 4 Threatened or Endangered, sensitive, or locally rare species. These include the James spineymussel and Atlantic pigtoe mussel and result in a Time of Year Restriction for construction of May 15 to July 31. Mill Creek is also a stockable trout stream and enhanced erosion control measures and coordination with Va. DGIF is required prior to construction.

The ACP will cross 16 tributaries of Mill Creek which flow upon the Millboro Shale Formation and are thus vulnerable to low pH acidic leachate impacting aquatic species. Only one of these tributaries is not subject to blasting, which will break up the shale and increase the acidic leachate potential. The pipeline itself will be armored with concrete at the Mill Creek crossing and possibly others.

The application of concrete onsite increases the chance of harmful spills impacting stream chemistry and species. Acidic water contributed by the Millboro Shale may interact with the concrete structure and weaken its integrity. Further, the concrete "plug" may cause differential erosion around this structure, both on the adjacent banks and in the stream bed. Such impacts would interfere with aquatic life and human uses and, therefore, violate WQS.

Conservation Groups
Wild Va. and DPMC

Hughart Run
(tributary to Hamilton Branch)

One commenter uses this stream as a water supply for livestock and values it for other human uses. This person also expressed a concern about the connection between the surface water impacts here and a personal well used for drinking water. (Ralston B) [refer to the discussion below, for similar concerns expressed by the Augusta County Service Authority about pipeline impacts to a public water supply system].

The Ralston Trust explains in comments that in the area of crossing AP-1 0119 there has been ongoing uncertainty as to the final path, which must call into question whether the Corps could have adequately considered impacts. The commenter states that Dominion initially planned to shift the ROW due to a wetland on property adjacent to Hughart Run but then in March 2018 shifted the path back to its original location. (Ralston Trust)

Commenters
individuals ACP specific waterbodies
Ralston B
Ralston Trust

Hamilton Branch
(tributary to Calfpasture River)

The Augusta Co. Service Authority, which is responsible for the public water supply in the Deerfield Valley, notes that dye tracing shows that Hamilton Branch and the water system for Deerfield are directly connected, with extremely rapid flows through the karst formations. The Authority states:

> Since approximately 4.5 miles of Atlantic Coast Pipeline construction will occur in this corridor, the construction related runoff or potential fuel/chemical spills can be expected to affect the Hamilton Branch watershed, which includes the sole water source for Deerfield within 24 hours. The membrane filtration unit handles up to 5 NTU turbidity but does not treat fuel/chemical spills. Therefore, additional precautions need to be made in order to provide continued potable water service for the Deerfield community. There is no backup water supply for this area.
>
> . . . .
>
> ACSA is concerned that allowing a project the size of ACP to only need one permit for all the wetland and stream crossings while much smaller water and sewer utilities are required to receive a permit for each individual crossing sets a dangerous precedent. If the ACP is allowed to only need one NWP 12 permit, then the level of scrutiny in permitting and inspection would decrease in comparison to what would be imposed for individual permits.

(August Co. Service Authority)

Trout Unlimited has classified Hamilton Branch as a "high-priority wild trout stream" that is home to a "stronghold population" and may be vital to the continued survival of native brook trout populations in the central Appalachian region with changing climate conditions in the future. TU has stated that the kinds of habitat alterations, temperature impacts, and other changes during and after pipeline construction "can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water

temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations."

Commenters

organizations	Conservation Groups
Augusta Co. Service Authority	Trout Unlimited

Calfpasture River
(tributary to Maury River)

ACP proposes to cross the Calfpasture River and numerous tributaries 42 times over a span of just 13 miles. Commenters addressed the Calpasture itself as well as many of the individual tributaries that are cited for particular values and threats.

The individual tributaries addressed include:
Gibson Hollow
Barn Lick Branch
Dowells Draft
Braley Branch
Lick Branch
Hodges Draft
Broad Draft
Ramseys Draft

The Calfpasture is among Trout Unlimited's desiganted "high-priority wild trout streams" and is valued by many for its aquatic life values and human uses (see e.g. Ballin Scott). At the same time, major flooding affected the segment to be crossed here in 1986, destroying houses and strewing adjacent fields with rocks, calling into question the suitability of the environment to contain a major industrial structure within the floodplain. (Id.)

Dowells Draft - ACP's marking of waterbodies in the field while doing tree felling fails to identify the mainstem of Dowells Draft, two of its unnamed tributaries, and a wetland, calling into question the adequacy of regulatory reviews and making proper control of impacts impossible. (Bull Reese)

Braley Branch - has extremely steep slopes directly adjacent to the stream bed and there is a threat of direct input of fill from the uplands. Also, the stream has historically been affected by physical scouring and flooding, experiencing a recent event on January 17, 2018 after a storm of jsut 1.26 inches. (Bull Reese). Braley Branch and others is cited as having high recreational value and the site of educational outings (Wilson Mary).

Ramseys Draft - is adjacent to the National Forest wilderness area and is a highly-valued recreational resource and aquatic system (Vana Josh).

Hodges Draft - This significant stream was misidentified by the Corps. The proposed crossing would occur the stream has a bedrock bottom and would require blasting. A commenter has monitored this stream and document its high quality and site-specific study is required to ensure the habitat is not impaired.

Commenters

individuals ACP specific waterbodies
Kirk D
Bull Reese
Wilson Mary
Clantons
Benzing Thomas
Vana Josh
Ballin Scott

Conservation Groups
Nat. Def. Res. Council
Rockbridge Area Cons. Council
SELC and Appalmad

Spruce Creek
(tributary to South Fork Rockfish River)

The plans from ACP do not specify where blasting is necessary or planned for crossings in this area. Such information and analysis is necessary to determine local impacts and to account for extra staging areas adjacent to the waterbodies that will be required to accomplish this work. (Averitt J).

One commenter provides extensive and detailed information to show that the Corps has failed to accurately include and describe wetland and surface water resources on their property and has failed to acknowledge or assess the harms and losses that are likely to occur. (Horizons Village). These waters are an important value to the residents and the value of the property and these existing uses are threatened. (Id.)

One crossing that is identified, AP-1 9039, is proposed to be a wet cut and would cross through a perennial spring. (Averitt J).

Trout Unlimited considers Spruce Creek to be a "high-priority wild trout stream," which is a vital "stronghold population" that may help maintain native Brook trout populations in the face of continuing stresses from climate change.

individuals ACP specific waterbodies
Henrietta J
Leverone Paul
Averitt J

organizations
Horizons Village
Dawson and Assocs.

Conservation Groups
Trout Unlimited

South Fork Rockfish River
(tributary to Rockfish River)

Numerous commenters testified to the importance of this stream and affected tributaries for multiple existing and designated uses and to the threats posed by pipeline construction. A cumulative impact resulting from at least 24 crossings would have great impact on this relatively small, headwater drainage.

Commercial interests of landowners whose businesses and plans depend largely on the natural features and pristine streams that would be impaired through enormous physical changes in habitats, in the stream beds and banks, the riparian zones, and the wider watersheds. In addition, increased sedimentation in streams that currently run clear even in extreme storm events will interfere with human uses and harm aquatic habitats and species. (Averitt J).

Residential and resort property owners will be gravely affected, because the values of their properties ae largely dependent on the natural landscape and pure waterbodies that will be altered. (Wintergreen Prop. Owners, Fenton L, Averitt J, etc.) Use by visitors has been degraded by the tree cutting already done in the area and will be further impaired or eliminated in some areas by alteration of the aquatic and riparian habitats and pollution discharges. (Gilges Peggy, Williams Amelia, Wagener Ryan).

The South Fork is listed as a "high-priority wild trout stream" by Trout Unlimited and TU asserts the conditions in the watershed, the riparian areas, and the stream are likely to be altered in ways that could eliminate or impair existing and designated uses for aquatic life support.

One commenter notes that the crossing method has not been identified by the Corps and is apparently left to the company for decision after all regulatory approvals are made. Porter S quotes from documents stating: "The identified waterbody crossing methods are listed in the order of preference based on the information available at the time this table was developed. The waterbody crossing method will be selected from the identified options; the selected method will be based on conditions existing at the time the crossing is completed. The waterbody crossing method selected will maximize safety and environmental protection." (Porter S). However, there is no evidence presented to show that the types of investigations necessary to make a sound decision based on site-specific characteristics have been made.

Documents identify one crossing of an unnamed tributary to the South Fork but omits any reference to a contributing wetland and spring, which also don't appear on ACP maps.
A "losing spring" that goes underground at the spot where the ROW crosses and re-emerges down gradient is clearly tied to groundwater which the nearby neighborhood of Edgewater Park depends upon as a water supply. (Averitt J). The stream crossed by AP-9050 is incorrectly designated as intermittent on Corps lists but flow year-round. (Leverone Paul).

Commenters

individuals ACP specific waterbodies	organizations
Wagener Ryan	Wintergreen Prop. Owners
Smith Cabell	

Leverone Paul
Gilges Peggy
Fenton L
Williams Amelia
Avery Nancy
Averitt J
Porter S

Conservation Groups
Trout Unlimited

Muddy Creek and Tributaries
(tributary Rockfish River)

Commenters addressed Muddy Creek and two individual tributaries with proposed crossings: Davis Creek and Craig Creek.

Davis Creek is surrounded by steep, rocky slopes which descend to the valley that is often only as wide as the stream beds that drains it and is susceptible to direct discharges of fill from upland work, which is therefore subject to stream crossing review. The creeks are in an area that is, according to the Virginia Department of Mines, Minerals, and Energy (DMME), especially prone to landslides and debris "because of the presence of steep slopes and highly fractured bedrock over [sic] shallow soils." (Wellan D) Also, the valley is prone to flooding, as evidenced by the extreme events related to Hurricane Camille. (Bolton Jim).

Commenters
individuals ACP specific waterbodies
Wellman D
Bolton Jim

Localities
Nelson Co.

Dutch Creek and Tributaries
(tributary to Rockfish River)

Commenters addressed Dutch Creek and two individual tributaries ACP proposes to cross: Falls Run and Wheelers Cove.

Within the Falls Run drainage, crossings of 1 perennial stream, 1 intermittent stream, and 1 ephemeral stream are described. All lie between 1/2 and 1 mile upstream from an exceptionally valued site used for recreation and aesthetic enjoyment. (Kushner D).

Both Falls Run and Dutch Creek are designated by the National Audubon Association as "important birding areas" and are two of just 21 identified as such in Virginia. The Louisiana waterthrush , whose population is in serious decline in its range, is found here and this population is, therefore of significant importance. Also, Kentucky warbles are found here. The Falls Run watershed is in the Sugarloaf Forest Block, which has been identified by the Virginia DCR as the largest such unfragmented forest of its type in Virginia's Piedmont region. (McSwain S). Given these species' reliance on these valuable habitats and the requirement under

state WQS that wildlife species are to be protected as a use related to waterbodies, an individual analysis that takes these animals into account should be done.

Along with these high resource values, the terrain through the pipeline is proposed to pass presents special challenges. The USGS designates it as landslide prone and significant debris flows have been documented here (McSwain S), both factors that could lead to direct discharges of fill at stream crossing sites. A study by the NRDC estimates that there will be an increase in sediment discharges to these streams up to 9,000% during construction and > 300% post-construction. (Id.).

Troy G states that he has been monitoring water quality parameters in the Dutch Creek area for several years and that measures such as turbidity and conductivity show them to be of very high quality. Thus, an antidegradation analysis is necessary. This commenter relates that his family has owned property in and lived in the Dutch Creek watershed since 1980 and that they have an existing use of recreation that they highly value but cites the study by Gingerman and Hansen (2017) as a basis for concern that this use will be impaired by sedimentation from ACP crossings. (Troy G). Likewise, Jackson Janice reports extensive recreational use of the streams for years.

Commenters individuals ACP specific waterbodies	Localities
Kushner D	Nelson Co.
Jackson Janice	
Gibbons Marcia	
McSwain S	
Troy G	

Rockfish River
(tributary to James River)

McMoneagles describe that there are 4 crossings in an area where the Corps has identified just one and the crossing of a culverted stream about 60 ft from from and identified crossing is not included in table but has been marked in the field.

Residents expressed concerns that any increased sediments, even for short periods, will impair a 14-acre lake in their community that provides important recreational values and contributes to their property values. Others also express their concerns about impairment of existing uses on the lake (Summers Sharon, Reed Ernest, etc.).

Streams in the area are shown through long observation to be of very high value and intact riparian zones contribute to recreational and aesthetic uses (Wellman D, Ramirez Colin). Uses for livestock watering are also considered at risk (Maki Carolyn).

ACP would cross wider expanses of floodplain in Nelson County than anywhere else on its route and historical damages causes great concern. Also, the Virginia Department of Emergency

Management cites the County as "high risk, moderate incidence" for landslides and its mitigation plan plan specifically cites energy pipelines as high risk for areas all along the western route of the ACP in Virginia, further suggesting that a critical slope analysis should be done (Shifflet Marilyn).

In relation to crossing methods, one commenter states that "documents indicate that the Corps requires that the ditches through the stream be filled after construction so that the "original contours" are restored. However, if the ditch is refilled with loose materials, that soil and rock mixture may wash away in storms, resulting in a depression and even exposing the pipeline. Where construction requires ripping or blasting through solid rock stream bottoms, the materials put in to replace that bottom may be much less durable that the bedrock and may degrade. In some cases, the companies propose to fill bedrock cuts with concrete." (Reed Ernest).

Some crossings listed on the Corps tables, including snea052, have the notation "water quality standards - not assessed," which seems an admission that proper site-specific analysis sufficient for the State's purposes have not been done. (Id.)

Commenters

individuals ACP specific waterbodies
Reed Ernest
Maki Carolyn
Ramirez Colin
Morris Suzanne
Pearce Marian
Pearce S
Summers Sharon
Shifflet Marilyn
McMoneagles
Leverone Paul
Wellman D

Conservation Groups
Rockfish Valley Foundation

Localities
Nelson Co.

Sycamore Creek
(tributary to James River)

Apparently, the final route through this property and waterbodies have not determined so no site-specific analysis can have been done. The possible route runs across several deep existing erosion gullies, where water quality concerns already exist.

Commenters

individuals ACP specific waterbodies
Day Robert

James River

ACP proposes to cross this major river using horizontal directional drilling (HDD). The Corps does not consider this method to fall under its jurisdiction because they assert it does not result in direct dredge and fill discharges. Commenters cite numerous factors that they believe cause significant threats in this area to both groundwater and surface water and require the State of Virginia to examine this crossing area through an individual review.

One commenter has submitted extensive professional analysis of the geological structures and threats posed by this work in the vicinity of the River. These include the existence of a perched aquifer lying atop the crystalline bedrock structures that may cause difficulties in the HDD process, making it unsafe in this area and causing contamination of water resources (Fjord Lakshmi). Another commenter cites potential threats to a 4 acre natural spring pond just 1,000 feet from the work site and states that water supply testing does not appear to have been done as required. (Max Libra).

Commenters testify to the importance of the James River in this section as a resource for recreation, educational activities, nature photography and other existing and designated uses and assert that these uses will be harmed by the crossing activity (e.g. Stinnet Georgianne).
One of the commenters is the owner of property . of the from a Allen Freeman Hobbs

Commenters

individuals ACP specific waterbodies	organizations
Allen Freeman Hobbs	Yogaville
Fjord Lakshmi	Va. Envir. Justice Collaborative
Max Libra	

Butterwood Creek
(tributary to Stony Cr., Dinwiddie Co.)

This crossing, designated wdic013f is to traverse a 1423-foot section of a wetland connected to Butterwood Creek. It is the second longest wetland crossing in Virginia and ACP proposes an open cut. Prosise Everette asserts that there have been insufficient field visits and evaluation and that HDD should have been evaluated. The crossing would threaten a beaver pond and other wildlife such as otters.

Commenters

individuals ACP specific waterbodies
Prosise Everette

Appomattox River
(tributary to James River)

One commenter stated:

> I live in southern Chesterfield near the Tri-Cities. Communities in the Tri-Cities area are developing trails and public access along the Appomattox River. ACP crosses tributaries of the Appomattox and will be making these crossings using dry crossing methods which protect the aquatic life of those streams. Some of these crossing include VA AP-1 412 through 417. I ask that you do not make any new decisions that further delay this project, and that you will reassert support of the Nationwide 12 Permit as the appropriate measure for regulating the Atlantic Coast Pipeline.

(Atkinson Steve)

Commenters
individuals ACP specific waterbodies
Atkinson Steve

Ellis Creek
(tributary to Flat Creek, Nottoway County)

Ellington Allman owns property in Nottoway County where a perennial stream, Ellis Creek, would be crossed by VA AP-1 433. He states that he understands the crossing method will be either dam and pump or flume and expresses his confidence that the project "has been subjected to a thorough review and that the ACP team has taken all measures necessary to protect my stream."

Commenters
individuals ACP specific waterbodies
Ellington Allman

Unnamed Tributary to Waqua Creek

Dawson and Assocs. presented an analysis of crossing sbrr014, describing the area in detail and discussing the various requirements that apply under NWP 12, as well as from conditions imposed by other agencies. Under "Direct Impacts," the comments state that "The workspace needed to install the pipeline for the ACP Project will result in 38 linear feet of temporary waterbody impacts to this Waqua Creek crossing. This will result in the temporary loss of habitat/feeding areas for fish and benthic organisms. Excavation of the pipeline trench will directly impact existing benthos through removal and temporary stockpiling in upland areas of bottom sediment; however these impacts will be limited to a small area. The waterbody and its bed-banks will be restored by backfilling with the original substrate to preexisting elevations.

The restored waterbody bed and the area will be colonized fairly quickly by benthic species from the adjacent areas."

There are no mentions of portions of WQS, including antidegradation requirements, general or narrative criteria, or discussion of whether planned habitat changes will interfere with or eliminate recreational uses in any areas. The comments don't explain how temporary loss of habitat and feeding areas for aquatic organisms fully supports the aquatic life use and does not define what is meant by "fairly quickly" - the period in which colonization of organisms is expected to occur or what factors will determine the effectiveness of colonization or that affect the pertinent timeframe.

Commenters
organizations
Dawson and Assocs.

Cohoon Creek wetland

Dawson and Assocs. presented an analysis of crossing wsup032f, describing the area in detail and discussing the various requirements that apply under NWP 12, as well as from conditions imposed by other agencies. The discussion includes details about various measures described as "Mitigation Measures to Avoid and Minimize Direct, Indirect, and Cumulative Adverse Effects," including those designed for periods of "during unexpected high flows." There are no mentions of portions of WQS, including antidegradation requirements, general or narrative criteria, or discussion of whether planned habitat changes will interfere with or eliminate recreational uses in any areas.

Commenters
organizations
Dawson and Assocs.

Elizabeth River

An organization providee the following discussion in relation to the crossing of Elizabeth River:

> At milepost 81.8, the AP-3 Lateral would cross the Elizabeth River using the horizontal directional drilling (HDD) method.44 As outlined above, inadvertent returns associated with HDD installation have been observed regularly with similar large pipeline construction projects, and Nationwide Permit 12 even appears to anticipate that inadvertent returns occur with some regularity.
>
> FERC has placed time-of-year restrictions (TOYR) on this crossing of the Elizabeth River, noting that the presence of Atlantic sturgeon and shortnose sturgeon are assumed, along with the potential presence of marine mammals. FERC also noted that "NOAA Fisheries may request that the HDD be conducted outside of the TOYR due to potential for frac-out."

> The Board has a duty to assure that Virginia's water quality is sufficient to support designated uses such as the "the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them." FERC has identified aquatic life inhabiting the Elizabeth River at the proposed AP-3 crossing, and it has recommended additional precautions due to a potential "frac-out" associated with the HDD method.
>
> Nationwide Permit 12 conditions regarding HDD—namely, a prevention, containment, and cleanup plan for inadvertent returns and a notification requirement—have been insufficient to prevent repeated violations of water quality in other states where HDD has been used. An inadvertent return into the Elizabeth River would likely result in the loss of designated uses. Because the mere presence of a prevention and response plan has failed to prevent inadvertent returns and water quality violations elsewhere, the conditions imposed by Nationwide Permit 12 are insufficient to provide reasonable assurance that Virginia water quality standards will not be violated.

(Va. Envir. Justice Collaborative, at 10, internal citations omitted)

Commenters
Envir. Justice
Va. Envir. Justice Collaborative

Meherrin River

Dawson and Assocs. presented an analysis of crossings sgrp001 and wsop004f, describing the area in detail and discussing the various requirements that apply under NWP 12, as well as from conditions imposed by other agencies. The discussion includes the general statement that an alternative route was selected "to avoid or minimize crossings of the Meherrin River and Fountains Creek watersheds." The comments discuss methods through which direct and indirect impacts will be "minimized" and asserts that effects, such as habitat alterations, will be "temporary," though specific definitions of these terms are not provided. There are no mentions of portions of WQS, including antidegradation requirements, general or narrative criteria, or discussion of whether planned habitat changes will interfere with or eliminate recreational uses in any areas.

Commenters
organizations
Dawson and Assocs.

Lake Prince
(tributary to Nansemond River)

Commenters assert that while crossings to tributaries feeding this water supply reservoir will be crossed by using HDD failures and spills threaten Norfolk's drinking water.

Commenters

individuals ACP specific waterbodies	Conservation Groups
Polentes J	Va. Conserv. Network

Western Reservoir
(tributary to Nansemond River)

Commenters assert that while crossings to tributaries feeding this water supply reservoir will be crossed by using HDD failures and spills threaten Norfolk's drinking water.

Commenters

individuals ACP specific waterbodies	Conservation Groups
Polentes J	Va. Conserv. Network

Shenandoah River Basin

White Oak Draft
(tributary to Jennings Branch)

The designations for each crossing in this cluster are saua 425, saua 426, saua 427e, saua 427p, saua 428, waua 409s. White Oak Draft and its tributary, which would be crossed by the pipeline path and access roads, is a wild trout stream and lies within the George Washington National Forest. Nearby trails and the natural beauty of the stream and its surroundings cannot be replaced. Even a well-executed effort to "restore" the ROW adjacent to the stream and through the nearby forest will irreparably degrade uses. Recreation is without question a very popular "existing use," which the State of Virginia may not allow to be destroyed or impaired.

As is the case in many other waterbodie cited, the potential impacts on temperature in White Oak Draft, its tributary, and even on downstream trout waters have not been assessed. The Board must require an individual assessment of these crossings. The surroundings found here are of course unique but the methods that would be needed to continue to fully support all uses in this stream would also be needed in many other places along the proposed pipeline route. If those challenges cannot be met, Virginia must not allow these activities to proceed.

Commenters

Conservation Groups
Wild Va. and DPMC

Jennings Branch
(trib. to Middle River)

Jennings Branch and numerous tributaries are addressed individually and for concerns about cumulative impacts in comments submitted.

Individual tributaries mentioned and specific concerns are:

Stoutameyer Branch - this stream has been monitored for more than 2 years and is of high quality and, therefore at risk of violations of the antidegradation requirements in WQS. This is a wild trout stream and is subject to possible direct discharges of fill from an adjacent 30% slope over drop of 200 ft. Temperature impacts are also of concern. (Bull Reese). One commenter asserts the crossing here will have an unacceptable impact not only on the channels themselves but will have a cumulative negative impact on Buckhorn Creek where it will not be able to support beneficial uses of current aquatic life. Proposed erosion and sediment controls are deemed insufficient to maintain the integrity of the channel and beneficial uses (Kirk D).

high-priority wild trout stream - stronghold population
Trout Unlimited

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

Buckhorn Creek - has a crossing where the approach to the channel is on a 60% slope adjacent to the stream, over a length of 200 ft. stretch. This is also a wild trout stream where long-term monitoring has shown zero turbidity (Bull Reese).

high-priority wild trout stream - stronghold population

wild trout segment and present outside desig, area
passes near depression likely impacts on karst
Bull Reese

Commenters

individuals ACP specific waterbodies	Conservation Groups
Vacher C	Trout Unlimited
Ravina L	
Pingrey	
Moriss Albert	
Bull Reese	
Kirk D	

Folly Mills Creek
(tributary to Christians Creek)

Crossing AP-1 9024 in the Corps table is incorrectly labelled "intermittent" but is known to flow year-round, even in the most severe droughts. Also, the table omits one crossing for an unnamed tributary to Folly Mills Creek (Houser R).

This is designated a "high-priority wild trout stream" Trout Unlimited describes concerns related to pipeline construction through trout waters as follows:

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

Commenters

individuals ACP specific waterbodies	Conservation Groups

Houser R Trout Unlimited

Back Creek
(tributary to Middle River)

Back Creek is of high quality and is an important resource for existing uses for recreation (Euse L, Gauthier Molly, Loving Joy). It is designate a "high-priority wild trout stream" by Trout Unlimited and one landowner describes an existing use for irrigation that could be disrupted by increased sediment discharges (Scott).

Commenters

individuals ACP specific waterbodies	Conservation Groups
Euse L	Trout Unlimited
Gauthier Molly	
Loving Joy	
Scott	

Middle River
(tributary to South Fork Shenandoah River)

Middle River, a tributary to the South Fork Shenandoah River, would be affected by 41 crossings. Portions of the stream have been designated as impaired for excess sediment pollution, that has negatively affected communities of aquatic organisms and for bacteria. Many parties have worked diligently to solve the problems that led to these impairments and believe the discharge of sediments from the many waterbody crossings would set that effort back. As in many other drainages in both MVP and ACP areas, the combined effects of sediments from the dozens of areas ACP proposes to cross have not be assessed together. (Friends of the Middle River, Esteban Louisa, etc.).

Commenters

individuals ACP specific waterbodies	Conservation Groups
Esteban Louisa	Friends of the Middle River
Moriss Albert	
Loving Joy	
Bull Reese	
Cline Lindsey	

III. Overarching Issues

The issues highlighted below deal with overarching concerns that apply to the entire process of reviews by the Corps and DEQ and all are addressed in discussions above, as related to particular waterbodies and watersheds. However, we believe it may be useful to discuss each in a more general sense, to inform thos individual discussions.

Crossings Not Identified in Tables

DEQ provided a set of tables listing specific crossings (Tables) that were to inform the public in providing comments to the Board. Each of the tables is accessible through the hyperlinks provided. For MVP, there are four tables titled as follows:

Table 2.2 Field Survey Stream Impacts
Table 3.2 Field Survey USACE Jurisdictional Wetland Impacts
Table 3.3 Field Survey Non-Jurisdictional Wetland Impacts
Table 3.4 Desktop Survey Wetland Impacts

The headings for each of these tables state that they were revised in December of 2017.

For ACP, the table provided is entitled:

Table B-1 Revised November 30, 2017

As shown above in discussions of particular watersheds, dozens of crossings and affected waterbodies were omitted from the tables provided to the public by DEQ. Each table apparently lists the entire body crossing areas in each category that analyzed by the Corps as of the time MVP and ACP were approved for coverage under NWP 12. We must assume that crossings not shown on the tables were not assessed by the Corps and DEQ has offered no additional information to indicate that the State of Virginia reviewed these crossings independently.

Waterbodies Characterized Incorrectly or Incompletely

Streams are characterized by their flow regimes. Scientist generally designate streams as "perennial" (flowing year-round), "intermittent" (having natural flows only part of the year), or "ephemeral" (flowing only when stormwater runoff occurs). It is vital that each stream be correctly identified in the correct category, because it has implications for the crossing method that is allowed by the regulatory agencies and for the potential impacts that may occur.

Wetlands are characterized as to the nature of the vegetation and the functioning of the system. The categories, as shown on the Corps Tables under the heading "Cowardin Class" are:

PEM = palustrine emergent
PSS = palustrine scrub-shrub
PFO = palustrine forested
E2 = estuarine intertidal

As with streams, the characterization of wetlands as to type it extremely important.

Wetland Impact columns include acreage of temporary impacts with project workspace that will be restored and allowed to revegetate to pre-construction conditions after construction is complete, conversion impacts will result from operational maintenance of the pipeline right-of-way changing PSS and PFO wetland types to PEM and PEM/PSS.

The comments show that in many cases both stream flow regimes and wetland types were incorrectly described. These mistakes call into question the soundness, or even existence of, any detailed analysis by the Corps and make an assumption that chosen construction and pollution control measures are adequate not credible.

One reason the information provided by the Corps is likely to be unreliable in some cases is that at least 24 crossings listed in the ACP table under the column headed "provisional or field survey" are designated as "desktop" reviews. These notations apparently indicate that the crossing areas so-designated were not viewed and assessed by personnel in person. This failure to do adequate site visits is especially problematic, given that some of the areas listed have extremely high-value resource. These include, among others, the crossing of the Jackson River (VA AP-1 0037) and those on one unnamed tributary to the Jackson and 4 wetlands in the area. Likewise, the crossing of two tributaries to the Calfpasture River and one for a tributary of the South Fork Rockfish River were reviewed only through "desktop" analyses. This failure to perform detailed analyses supported by field data is negligent and should not be accepted by the Board. It stands to reason that if these individual crossings were not visited by the Corps, then other waterbodies in the same areas may have been missed and there is no assurance that these areas will be adequately protected.

Similar notations as to the type of analysis conducted (field or desktop) are not disclosed on the tables for MVP but landowners can verify that field visits were not conducted in some areas on that route also. In one case recounted in the comments, a resident was forced to insist on field visits by state personnel, who then verified that a wetland that had been missed by the Corps was indeed a waterbody due protection - but this visit by DEQ and DCR scientists occurred only after the Corps had granted coverage under NWP 12.

<u>Crossing Method Not Specified</u>

A particularly glaring deficiency in the tables produced by the Corps and relied upon by DEQ is that, in most cases, the particular crossing method is not specified. This is true for all of the crossings listed on the tables for MVP, which fail to include any mention of the proposed method. For ACP, while a column headed "Construction Method" is provided, 480 crossings include the notation "dam and pump or flume."

The choice of which crossing method will be used is, thus, left for the companies and/or the agencies to decide later. This choice has significant consequences for the waterbodies that will be affected and should be based on thorough characterizations of the environments to be crossed. The Board should insist the information necessary and the crossing methods be supplied for every crossing.

Of particular concern for some crossings:

> According to the Federal Energy Regulatory Commission, blasting may be required to cross streams along the Mountain Valley Pipeline route, and "[i]n-stream blasting has the potential to injure or kill aquatic organisms, displace organisms during blast-hole drilling operations, and temporarily increase stream turbidity. Additionally, shock waves created by blasting may pose a threat to aquatic organisms. Chemical by-products from the blasting materials could also be released and could potentially contaminate the water." FERC also notes that "blasting may be required in most waterbodies" crossed by Atlantic Coast Pipeline.

(Va. Envir. Justice Collaborative, at 6, internal cite omitted.)

Combined Impacts from Multiple Crossings

The Corps' practice of assessing almost all crossings as "separate and distant" activities and looking at each in isolation from all others that would affect the same watershed is simply negligent. One commenter explained: "As noted in the USACE's Decision Document NWP12 (p38), water quality issues are complex, are a direct result of upland activities and therefore, must be studied and resolved on a comprehensive watershed-scale. Watersheds are coupled land-water systems. This relationship necessitates comprehensive pipeline review to fully access cumulative effects both from land and water-based pipeline construction" (Roanoke City).

Dawson Inc. asserts in its comments that supposed cumulative impact reviews by FERC and the Corps are properly protective but this claim is unsupportable. First, Dawson cites the cumulative impacts analysis done by the Corps in approving NWP 12 on a nationwide basis. Clearly, assessing combined impacts on such a vast scale can provide no assurance that combinations of impacts won't seriously impair waters on a local or even regional level.

Second, Dawson claims cumulative impact reviews done by FERC are somehow adequate to address the kinds of local and watershed-scale effects adequate to ensure WQS can be met in all state waters in Virginia. However, FERC's analysis looked at huge watershed areas that are simply not useful for understanding combined impacts on a scale that applies here. Finally, the Corps claims it looked at cumulative impacts in issuing its regional conditions and in covering ACP and MVP under NWP 12 but no one, neither the Corps nor DEQ, has provided any documentation to show this claim is true.

Antidegradation

No analysis has been done by the Corps or DEQ as to whether antidegradation requirements in Virginia WQS will be met. The State of Virginia has an obligation to enforce all components of its WQS. It has not done so in this regard. Any lowering of water quality will violate this provision in high quality waters, unless DEQ shows a change is justified by economic or social necessity in the area affected by the waterbody impacted. No such showing can be made here, because even the benefits the companies claim will not accrue in the local communities directly affected by the water pollution that will occur. Failure to fully support all existing uses is an absolute requirement, for which there are to be no exceptions. And Tier III waters are to be maintained in their exceptional states.

Trout and Other Sensitive Aquatic Species

This discussion focuses heavily on concerns regarding crossings of trout waters. However, many of the issues that apply to trout streams apply likewise to fish and mussel species in headwater areas in western Virginia. Mussels and fish species such as darters and madtoms also need cold clear water. Specific waters that provide habitat for endangered or threatened species, on both state and federal lists, are discussed above.

In describing wild trout streams, such as the dozens of waterbodies discussed above that are subject to crossings, Trout Unlimited has explained:

> Trout streams are particularly sensitive ecosystems. Prime wild brook trout habitat tends to feature dense riparian buffers to shade the stream and protect the banks, undisturbed springs to cool the water, stable channels, and intact tributary systems.
>
> All of these features are at least temporarily affected by pipeline development, and can be damaged long term if a project is not properly managed. In-stream construction, clearing of vegetation, regrading, and soil compaction near these trout streams increase the potential for sedimentation from storm-water run-off, and this can reduce levels of dissolved oxygen, smother trout spawning habitat with silt, hamper fish egg development, and destroy benthic macroinvertebrate populations. Stream crossings can damage ri-parian habitat, strip away protective buffers, destabilize banks, and alter streambeds.
>
> These impacts can impair existing and designated uses of these streams and cause violations of Virginia water quality standards, including increases in water temperature and turbidity and decreases in dissolved oxygen (DO) concentrations, not just at the site of the crossings but also at downstream locations.

(Trout Unlimited at 2). In its comments, TU listed streams providing habitat for wild brook trout, the only native trout in the eastern U.S., as "high priority wild trout streams," which harbor what they term "stronghold populations" that are most likely to survive as climate change continues. Thus, these waters may be most crucial to the continued survival of these species in the small part of its historical range that it still inhabits. Within the larger list of priority streams, TU identified a subset it considers to be "particularly deserving of a state-level, site-specific review," all of which are included individually above.

In explaining its assertion that compliance with state WQS cannot be ensured under NWP 12, TU states:

> While the NWP 12 includes general and regional conditions that are intended to be protective of trout waters—ensuring aquatic organism movement at crossings (General Condition 2), protection of spawning areas "to the max-imum extent practicable" (General Condition 3), maintenance of sufficient water flows (General Condition 9)—it is not clear from the record whether the Corps had enough site-specific detail of each crossing to conclude that construction would

> meet these provisions. Other conditions of NWP 12 are clearly insuffi-cient: For example, the permit merely requires that waterbodies be "restored to their preconstruction contours."

(Id. at 3).

One reason that a group of separate crossings in the same relatively small watershed can be especially damaging is that "hitting nearly every separate stream within the drainage with multiple impacts, trout populations could be deprived of the ability to move, to seek refuge during droughts or other periods of stress. Research shows that trout sometimes travel significant distances within watersheds for just such purposes. (Wild Va. DPMC at 13, citation to research papers omitted).

Finally, cold water temperatures are vital to the survival of trout and any elevation, especially during summer, can cause serious damage. Though there appear to be few studies of temperature impacts from pipeline rights-of-way, Wild Va. DPMC include one such analysis as an attachment to their comments. That study demonstrated that "even well-maintained ROWs that meet all requirements imposed by the Corps and FERC can cause increases in stream temperatures from upstream stations to those at and downstream from the pipeline crossing sites. (Id. at 8).

Impacts on Tier III Waters

DEQ has asserted that because crossings for neither pipeline are planned directly through Tier III segments that these exceptional quality waters are afforded the necessary protection under the state's antidegradation policy. Such an approach ignores the fact that in some cases dozens of upstream impacts will likely degrade conditions in these segments. As discussed in comments described above, the Tier III segment of Bottom Creek will be impacted by at least 81 crossings of Bottom Creek and its tributaries, all of which feed the designated section.

Groundwater Threats

The Corps does not even claim that its NWP 12 reviews look at groundwater resources in any adequate way - in fact, the CWA section 404 permits are only designed to assess impacts and provide protection for "waters of the U.S.," which include surface waters but not the aquifers to which those streams and wetlands are often intimately connected. By contrast, all waters in Virginia, on the surface or underground are "state waters" and are covered by applicable WQS. The state has a separate set of groundwater quality standards that must be enforced but the Corps analysis cannot ensure that these requirements will be met. Like our WQS applied to surface waters, the groundwater standards require protection of uses, include criteria, and have antidegradation provisions. Under those antidegradation provisions, if any groundwater resource has quality that is better than that required to protect uses, then no increase in any pollutant may be allowed. It is indisputable, as described in detail above, that pollutants will enter aquifers, especially in karst regions where streams that are directly and indirectly affected by crossings are known to be "losing streams," through which streams sink into the groundwater on a regular basis.

Variances

In past summaries of comments, DEQ has not included all of the important issues raised by the public and where the Department has described issues it has failed to do so completely or to make it easy for Board members to access and inform those summaries with the basic documents. One of these, which Board members discussed at the December 2017 meetings, is the allowance of variance to general requirements that may be granted well after the Board or other authorities approve the actions.

Time of Year restrictions are one important example. TOYRs are put in place to protect endangered species and sensitive trout streams. The developers of ACP have already requested and been granted exception to these protections in some streams by Virginia's Department of Game and Inland Fisheries. This despite warnings in the state's comments to FERC that TOYR should be strictly enforced. These waivers were granted to ACP well after the Corps granted coverage to affected waters under NWP 12 and the documents in which DGIF discusses these variances do not explain why they are scientifically defensible.

Open trench length requirements - a minimum standard included in Virginia's erosion and sediment control rules - allow for trenches on construction sites to be open for lengths of no more than 500 feet at any one time. The reason for such a requirement is obvious. Limiting areas of disturbance during construction is one of the most effective ways of avoiding high runoff and sediment discharge events. When the area is properly limited, erosion and sediment control measures can be designed to handle the limited areas. Major storms, which are inevitable during construction projects of the immense scale and scope of these pipelines, can easily overwhelm the BMPs, which are designed to handle only a limited size of storm. Limited areas of disturbance can better be stabilized before storm events, while open trenches that run for anywhere from one-half mile to several miles cannot. As with the "leniency" the state has exercised for TOYRs, scientific analyses are not in the record for the trench length variances DEQ has granted or may grant at its discretion, without any way for the

Direct Discharges from "Uplands"

Extreme slopes on lands approaching certain crossings, on one or both sides, will contribute pollution directly to waterbodies. There has been no adequate analysis of the amounts of such direct discharges by the Corps or DEQ and no proof that these discharges can meet our water quality standards, especially antidegradation requirements.

DEQ segregated the reviews of so-called "upland" work on pipelines from the placement of the pipelines directly in waterbodies, assuming that contributions from these areas will only be indirect. The Corps regulations are supposed to address activities predicted to result in direct discharge of dredge and fill materials to surface waters. However, even with E&S measures in place, there are many crossing sites that will be directly affected by sediment running off of steep slopes outside the zone the Corps addresses and these discharges will feed directly into streams.

In many extraordinary cases on each pipeline route, the approach to crossings is extremely steep on one or both sides, soils are often shallow over bedrock, and areas are documented to have landslides, even without disturbance or tree removal having occurred. The efficiency of standard best management practices (BMPs) can decrease 50% or more on steep slopes, even in much less

challenging circumstances (see Atts. W and X, SELC Appalmad), and neither MVP nor ACP has shown through site-specific designs and calculations that they can avoid sediment discharges from the steep slopes directly adjacent to streams.

Impacts from Horizontal Directional Drilling and Spills

Many commenters, both those submitting form letters/emails and individual comments, have asserted that HDD crossings need not be considered by the Board because they avoid water quality impacts. For example, see the text of Form letter 38 in the Appendix, which states: "Because of the lack of impact to rivers crossed by HDD, this does not even fall under U.S. Army Corps of Engineers jurisdiction."

While it is true that the Corps deems the HDD drilling operations to be outside its authority because that action should not lead to direct "dredge and fill" discharges, this certainly does not eliminate concern or relieve the State of Virginia of the responsibility of reviewing HDD sites through individual section 401 reviews and should be addressed through individual reviews in every case where HDD is proposed.

General or Narrative Criteria

The Virginia DEQ has failed to adopt numeric criteria that would be most effective at controlling sediment pollution, despite the fact that this is acknowledged as one of the major pollutants impairing Virginia's waters, as well as waters across the U.S. The Environmental Protection Agency (EPA) has published suggested criteria to address these problems and other states have adopted such criteria (e.g. West Virginia, which has numeric turbidity criteria).

Still, Virginia has a responsibility to control these pollutants and the impacts they may have on designated and existing uses. General criteria in the WQS regulation states that "substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life." (Va. Envir. Justice Collaborative at 4, citing 9 VAC § 25-260-20). However, DEQ has not applied the narrative criteria and, we believe, in many cases sediment discharges, even those deemed "temporary" must violate these criteria.

Designated and Existing Uses - Recreation

In the public notice DEQ issued, it specified that comments should be "technical" in nature. While we have no specific interpretation as to how DEQ will define that term, it is important to understand that comments that address any aspect of the requirements within the WQS is a valid basis for comments, because the key question at issue to whether the Board can "ensure" those standards will be met under NWP 12 but without individual reviews by Virginia. To properly apply WQS that address chemical and biological health of waters can indeed require "technical" analyses in some cases. However, there are a number of requirements in the WQS regulation that do not require specialized expertise. In fact, the question of whether recreational and other human uses can be supported is, to some degree, dependent on the perceptions and values people have in regard to the waterbodies - the opinions of those who have used and who plan to use those waters is central to compliance with standards.

All Virginia waters are designated as recreational resources. Dozens of commenters have testified to their long-standing and ongoing uses of specific waters and in specific ways that would be affected by pipeline construction but also by the long-term. These uses must be acknowledged, as DEQ has failed to do in the past, and enforced. Importantly, the Corps has admitted in its decisions document for NWP 12 that, in some cases, project compliant with NWP 12 will impair or even eliminate recreational uses. A more explicit description of a WQS violation cannot be found and must be addressed by the State of Virginia.

Downstream Impacts of Sediments

The pipeline companies, the Corps, and DEQ seem to assert that any sediments released during stream crossing activities will have only minor and temporary impacts on these aquatic environments. Studies cited by commenters show this to be untrue. Impacts the Corps deems temporary may in fact change or even destroy habitats for months or years after the work is completed. Further, even if sediments clear in the areas directly at and downstream of the crossings, that sediment will settle at points downstream. As described above, there are numerous places where excess sediment resulting from pipeline construction will impact downstream lakes or reservoirs and will not disperse.

Temperature Impacts

Neither DEQ nor the Corps have acknowledged the clear reality that removal of riparian areas and overhanging trees will cause temperature in cold water streams to rise. Now, studies looking at specific pipeline ROWs years after "stabilization" continue to raise temperatures at the site of crossing and downstream for some distance. Where multiple crossings occur in one small cold water drainage these effects will be multiplied and may eliminate refuges for fish in tributaries or upstream segments that are vital to their survival.

Enforcement and Compliance

Neither the damages caused by MVP in a number of waterbodies nor the record of violations and irresponsible actions by Dominion can be ignored when assessing whether new crossing reviews are needed. First, there have been direct impacts on numerous streams in the MVP area, so any additional sediment discharges from the crossing activities must be factored into the equation before it can be concluded that WQS will be met. The West Virginia Department of the Environment (DEQ) has now issued 5 Notices of Violations (NOVs) for MVP and DEQ issued one NOV that covered multiple violations over several counties. The West Virginia DEP has also issued an NOV for ACP and even Dominion itself has reported numerous problems and erosion/sediment control failures to FERC.

DEQ has told citizens that it, in part, decides whether violations from BMP failures will be assessed only if the storms that contributed to those incidents were of a size that is less than that on which the construction plans were based. This means that, by design, DEQ acknowledges that large storms may cause water quality standards violations but not be cited for them. This approach is improper, and it was not explained to the Board when the "upland" certifications were under consideration in December 2017. This approach in fact negates the assurances DEQ and the Board gave when those certifications were issued.

Given that this approach is being applied to upland work, we must assume it will be followed for waterbody crossing work also. If the pollution control structures placed in streams are designed only to handle storms below a certain magnitude, when extreme weather events occur they will be overwhelmed and the results could be catastrophic, for the aquatic systems and for human users of these waters. Those uses described at-length in section II., such as irrigation of crops and gardens and water supplies for animals will be disrupted. Downstream reservoirs and recreational ponds valued by users will be inundated by mud which will not disperse and will harm the practical and aesthetic values of those impoundments for months or more.

Also, the Board has full authority to consider the records of compliance by parties seeking new authorizations as well as any indications as to whether DEQ is ready and able to inspect sites in a timely fashion and prevent pollution events - not just to respond after they occur.

Lack of Historical Information on Effectiveness of NWP 12

As stated above, historically DEQ presents the Board and the public with detailed analyses and data to support regulatory decisions, including both individual permits and regulations proposed for approval. In this case, DEQ and many commenters have asserted that the history of application of NWP 12 in Virginia has been successful at upholding WQS. However, DEQ has not provided evidence to show these assertions are true.

Wild Va. and DPMC included a report entitled "The agency has no records . . . DEQ's Failure to Use Sound Science to Protect Virginian's from Pipeline Threats" with its comments. DEQ Director Paylor has stated: "Based on DEQ's experience observing linear projects constructed under the requirements of NWP 12, DEQ determined that NWP 12 will protect water quality at each site." DPMC sought records from DEQ to support Paylor's assertion and other statements made by officials.

We asked for

> 1) Any site-specific records that DEQ has created or reviewed in the course of its decisional process in relation to its Clean Water Act (CWA) section 401 responsibilities for the proposed crossing sites" including "site-specific descriptions or characterizations of the physical, chemical, or biological characteristics of the sections of waterbodies associated with any one of the crossings or of any combination of the crossings and should include but not be limited to data, photographs, drawings, or narrative descriptions.
> 2) Any records that describe site-specific analyses performed by DEQ or reviewed by DEQ as to the potential for proposed project-related activities at any of the individual sites listed . . . to cause or contribute to violations of Virginia water quality standards (WQS) for either surface waters or groundwater, either at crossing sites or in other portions of the waterbody or watershed that may be affected by the crossing activities.
> 3) Any records that describe waterbody-specific or watershed-specific analyses performed by DEQ or reviewed by DEQ as to the potential for proposed project-related activities at any or all of the listed sites to cause or contribute to cumulative impacts and the potential for those cumulative impacts to violate Virginia WQS, for either surface waters or groundwater.

In response to each of these requests, DEQ responded that "The agency does not have any . . . records that would be substantive to your requests submitted." The DPMC includes a number of other instances of records sought from DEQ that would verify the soundness of DEQ's assurances as to the adequacy of NWP 12 to adequately protect Virginia state waters. Again, in most of these areas DEQ could supply little if any responsive records.

We encourage Board members to review this report. The inescapable conclusion is that Virginia has no technical data or analyses to justify its reliance on NWP 12. Additionally, though claiming DEQ had the proof needed to show projects complying with NWP 12 would also meet our WQS, DEQ has explained another reason why it has chosen not to do individual waterbody crossing reviews. At the Board's April 12, 2018 meeting, DEQ's Melanie Davenport stated that officials chose to defer to the Corps because the Department lacked the capacity to do crossing reviews so decided its resources would be better devoted to the upland certifications. This explanation seems to refute the contention that DEQ has in fact looked at information sufficient to justify its trust in the Corps' process, as does DEQ's inability to document valid data it compiled or reviewed pertaining to waterbody crossings.

The impressive body of evidence presented to the Board indicates NWP 12 is not sufficient and is unrefuted by either DEQ or the many commenters who have claimed otherwise.

<u>The Weight of Expert Opinions and Analyses and Local Detailed Knowledge</u>
Many of the substantive comments have been made by two groups whose submittals should be given extra weight. Numerous scientists and other technical experts have provided opinions and analysis and their credentials should be considered by the Board when it considers them. Also, many landowners and other citizens submitting detailed information have intimate knowledge of specific waters and crossing areas, because they live in the vicinity and/or use these waterbodies in ways that are to be protected, both as designated and existing uses under the WQS. In the past, DEQ has not acknowledged the expertise and special knowledge these parties contribute and has not explained the origins of the comments they submitted.

IV. Contents of Form Letters, Emails, Postcards, and the Petition

Rather than attempt to discuss in detail the thousands of formatted comments that were submitted by various groups of commenters, we believe it is appropriate to simply make them available, so the Board can easily review them. Therefore, we have reproduced the text of those communications in the Appendix below. We will simply add that while many comments listed one or more specific crossings, wherever those mentions did not include any detail as to the nature of the waterbodies or the specific measures or requirements that would affect them, we assert those comments fail to provide information helpful for the Board's decision. In many cases, form comments claim all water quality, including that in specified streams, will be protected simply because dry cut stream methods or HDD will be used. We believe such blanket assertions are of little value but illustrate the exact nature of the problem NWP 12 presents.

[note that form emails and letters described as "NWP 12 Sufficient" are designated by numbers and those described as "NWP 12 Insufficient" by letters]

V. Legal Analyses

The Board must address a baseline question if it believes the evidence in these comments warrants or requires individual regulatory reviews of pipeline crossing activities. The specific legal basis and proper methods for proceeding to require individual crossing analyses are described in some detail in comments from the Natural Resources Defense Council and SELC and Appalmad. Both are accessible through the link for Conservation Groups, in the folder SELC and Appalmad and the document Nat. Resources Def. Council.

Appendix

Text of Form Letters, Emails, Postcards, and Petition

Form email 1

Rigorous nationwide permitting for the ACP

Please do not revisit your reasonable and prudent decision to defer to the very rigorous U.S. Army Corps of Engineers nationwide permit 12. The full-time, career professionals at the Corps, FERC, and DEQ have brought the necessary level of rigor to the regulatory review of this project. Review of this project has been a successful state and federal partnership that has resulted in best in class protections for water quality. This is an outcome to be proud of, not to be revisited. The result has been a project that protects all the waterways and wetlands in the project area. It protects the Chesapeake Bay and it protects specific waterways and stream crossing such as those in Bath County, for example VA AP-42, 44, 46, 47, 50, 51, 52 and all other waterways and wetlands in Bath and along the project route.

Form email 2

The ACP will go above and beyond to protect waterbodies and wetlands

Virginia needs the natural gas from the Atlantic Coast Pipeline to keep energy prices affordable, to keep our power system reliable, to provide much needed service to Eastern Virginia (where new large businesses cannot be guaranteed reliable gas service at present), and to support manufacturing, both new and existing. Thanks to the federal and state partnership in oversight of the project, including the Army Corps Nationwide 12 Permit, the ACP will go above and beyond what is required to protect waterbodies and wetlands along the entire route, including those in Chesapeake such as VA AP-3 0208-0233.

Form email 3

Natural gas is a worthy resource that keeps costs low

Who doesn't love a good deal? It's time for Virginia to tap into our naturally occurring resources and enjoy the highly affordable clean energy available here in the United States. The ACP will protect our waters, including Bishop Creek (VA AP-1 0362) in Buckingham County. This waterway will be protected using a dry crossing method either dam and pump or dam and flume.

Here in Virginia, we have an opportunity to utilize the benefits of natural gas via the Atlantic Coast Pipeline to improve air quality, promote manufacturing and economic development, and lower energy costs while improving reliability. I look forward to reduced energy bills and overall costs in our future. Don't delay the ACP!

Form email 4

Please don't delay, approve the ACP

All of us in Virginia treasure the Chesapeake Bay and are rightly proud that we have a regulatory process in place already that protects precious waterways ranging from the Chesapeake Bay and specific stream segments such the waterways in Highland County that I so enjoy—segments VA AP-1 through VA AP-39. Virginia needs the Atlantic Coast Pipeline—this winter made that abundantly clear. Each additional month of delay is another month customers are exposed to higher prices than they need to pay and to reliability shortcomings. Please do not take any action to delay this project. The review conducted by the environmental professionals at the federal and state level and the rigorous conditions contained in the accompanying nationwide permit 12 are protective of water quality and there is no need to revisit this decision. In fact, the project design goes beyond what is required to protect the Bay, the waterways noted above in Highland County, and all waterways and wetlands. Please stay the course and encourage your staff to bring the nearly four years of regulatory review of this project to as prompt conclusion.

Form email 5

Please don't delay this much needed project – approve the ACP

The U.S. Army Corps of Engineers Nationwide 12 permit has been used to build some of Virginia's most significant linear projects, from highways to energy projects. The Atlantic Coast Pipeline has been through more than three years of rigorous review by all levels of government and the result of this partnership has been a best in class project that protects all the water resources along the pipeline route including but not limited to the Chesapeake Bay and those in Virginia's largest city in terms of land area—Suffolk—VA AP-3 0111-0207.

Form email 6

Nearly four years is a sufficient wait

Any continued regulatory hurdles the Atlantic Coast Pipeline may be confronted with will not produce obvious benefits to energy customers or businesses that are counting on completed construction of the ACP or for construction workers eager to go to work. The project team has patiently waited, simultaneously addressing every requirement and expectation and ultimately receiving approval for its activities related to ACP development. The James River and its tributaries will be protected starting with the Jackson River in Highland County (VA AP-1 0037). These tributaries will be crossed by either cofferdam or dam and flume depending on the flow at the time of construction while the James River will be crossed by horizontal directional drill. Nearly four years and is enough: please do not delay the progress of the Atlantic Coast Pipeline another day.

Form email 7

Economically beneficial to workers in Virginia

Any opportunity to create jobs in the United States is one I can get behind – and the Atlantic Coast Pipeline has done (and continues to do) just that. The pipeline has already created jobs in the steel industry (the steel used to build it is 100% American made from the Northeast U.S.) and will continue to produce jobs for hard-working union members as part of its development. In fact, demand generated by the pipeline has already created a need for 200 union jobs in Pennsylvania.

This is just the start of what the ACP can do, and workers in Virginia should be looking forward to the day when the opportunity to work on this project comes knocking at our state's door. Our waterways will be protected, including the Nottoway River in the Dinwiddie and Nottoway counties, which will be protected using a cofferdam crossing (VA AP-1 552). This is a common construction method used by VDOT and is protective of water quality and aquatic life. The time to move forward is now.

Form email 8

The ACP is a reliable and vital source of energy

As a member of the EnergySure Coalition, I value the Atlantic Coast Pipeline for its urgently needed contributions to consistent, affordable access to energy in our state. This is an area that is of great concern to our organization's work. Many of our industries heavily depend on reliable supplies of power that can be easily tapped into without having to wait. The ACP will provide that energy supply.

Our waterways are also important resources that are amply protected by the federal and state cooperative partnership in reviewing this project. The ACP crosses tributaries of the Appomattox (VA AP-1 412 through 417). It will be making these crossings using dry crossing methods to protect the aquatic life of those streams. The project will likewise use protective crossing methods tailored to the waterways along the entire route. The ACP needs to move forward – our industries depend on it.

Form email 9

The ACP goes above and beyond

As a Virginian, I am glad that professionals across the federal and state levels have worked together to ensure the Atlantic Coast Pipeline will protect water quality. Every consideration should be made and every precaution should be taken to preserve our environment, and I believe the ACP team is doing just that. I also believe that the Army Corps nationwide permit is protective of Virginia's water quality.

This pipeline is needed to boost our state's economy, further shift us away from burning coal, and increase our capacity for manufacturing. Further, I believe it has been designed to go above and beyond regulatory requirements to ensure environmental protection along the entire route and across all county and state lines, such as VA AP 1– 410 which crosses local boundaries to include both Cumberland and Prince Edward counties.

Form email 10

The ACP aids in statewide development and progress

I strongly support the Atlantic Coast Pipeline and its construction. By approving the permitting requirements, the DEQ will be helping our commonwealth move forward with future economic development and progress on air quality, lower energy costs, and improved reliability. This includes (but is not limited to) organizational and business expansion, technological innovations, and economic advancement. The possibilities that the clean, safe natural gas the ACP offers Virginia will help us keep up with the demands of modern consumers.

And we can enjoy this progress safely: The City of Norfolk water supply reservoirs, Lake Prince, and the Western Branch Reservoir will be crossed by Horizontal Directional Drill. The tributaries to these reservoirs are also protected by dry crossing methods. These crossings include VA AP-3 - 188, 189, and 191 through 194. I respectfully urge the State Water Control Board to move ahead and not to revisit past decisions.

Form email 11

The ACP is the environmentally friendly choice

Natural gas is a highly efficient fuel that is a very environmentally friendly and an alternative to other fossil fuels. Natural gas is clean burning; it is the default fuel for power generation; and it is essential to power generation. Additionally, it contributes only a fraction of the waste byproducts that other fuels, such as coal and oil, add to our aggregate, statewide emissions.

The wetlands crossed by the ACP, including VA AP-3 – 215, 220, and 221 through 223 in the City of Chesapeake, will be protected while the project provides needed natural gas to Hampton Roads, which has long suffered from an acute short fall of this vital resource. Please do not further delay this project.

Form email 12

The ACP's strong design protects water quality

Thanks to an exhaustive review and several hundred project adjustments, the Atlantic Coast Pipeline is a safe and environmentally responsible pipeline project. The Army Corps nationwide permit is protective of Virginia's water quality, and we should have faith in it.

I value Virginia's waters and am grateful to see that agencies of all levels, working with the Atlantic Coast Pipeline, have provided an extremely strong project design to build this vital pipeline in a way that will keep our water safe (for example, the North River (VA AP 1– 310) and all the other crossings and wetlands in Buckingham County). Please move forward and allow this important project to proceed so that our state can reap the environmental, economic development, and energy-cost benefits that the ACP will provide.

Form email 13

I support the Atlantic Coast Pipeline

The Atlantic Coast Pipeline will be good for our communities, our economy, and our environment. Moving to more environmentally friendly sources of energy is vital for Virginia, our region and our country. And the best way to do that is with the ACP.

A diverse range of Virginians support the Atlantic Coast Pipeline and I am proud to be one of them. I care for Virginia's waterways and wetlands, and I believe that the rigorous process the federal and state government has undertaken will protect water quality in our state. The Army Corps nationwide permit is protective of Virginia's water quality, and I believe the ACP team will ensure that the project goes above and beyond to do right by Virginia and its wetlands and water bodies—from the Chesapeake Bay to areas at the border of the Dinwiddie and Buckingham County, such as the Nottoway River (VA AP 1– 552). The time has come to recognize that and to allow this much-needed project to proceed.

Form email 14

The ACP provides needed access to abundant energy

The Atlantic Coast Pipeline will provide the infrastructure needed to transport abundant, reliable and clean domestic natural gas to displace the higher-emitting fuel source coal. Unlike other legacy fuels, natural gas is inherently clean burning with half the carbon emissions of coal and much lower levels of other emissions. The ACP will allow Virginia to harness the characteristics of this resource that make it so attractive, providing our state with enough energy to meet demands for home heating, power generation, manufacturing, and economic development. For example, the natural gas provided by the ACP is desperately needed in Hampton Roads, which is chronically short of natural gas to the point where large customers cannot be guaranteed reliable service on cold days.

In Chesapeake, the ACP will cross three tributaries to Deep Creek (VA AP-3 0212, VA AP-3 0213 and AP-3 0214). All three will be crossed in a safe, environmentally-friendly manner. These crossings demonstrate the care that the ACP is taking to ensure the protection of water quality. The existing process is working and does not need to be changed.

Form email 15

Don't put the regulatory process in turmoil

The Department of Environmental Quality is staffed with dedicated career professionals doing their utmost to protect the environment. The same is true of the U.S. Army Corps of Engineers. The state and federal teamwork in reviewing the Atlantic Coast Pipeline has gone above and beyond to protect the environment. I cherish Virginia's waterways, including the historic South Fork Rockfish River (VA AP 1-9046) in Nelson County, which will be protected when crossed by using a the most appropriate method.

Accordingly, in the case of the recent discussions by the State Water Control Board regarding the state's use of the Army Corps of Engineers Nationwide Permit 12, I believe revisiting the existing process would be a mistake.

Our state's environment and our business climate have prospered from a consistent, predictable regulatory climate and from federal and state partnerships to allow scarce regulatory resources to be put to optimal use. There is no need to change the current approach.

Form email 16

Please do not hold back Virginia's economic growth

The essential need for the Atlantic Coast Pipeline is clear, judging from the past winter when overwhelming demand meant access to natural gas was not reliable for businesses and customers. Virginia's economy can only grow if we address this deficiency. The ACP will help do just that.

Of course, environmental protection is an important part of this process. Virginia's overall water quality is well protected by the thorough review and numerous adjustments the ACP has undergone during the past four years—becoming safer each step of the way. Most notably is the Army Corps nationwide permit, which is protective of Virginia's water quality.

These adjustments and protections extend to all waterbodies and wetlands along the route, including those in Dinwiddie County, such as Butterwood Creek (VA AP 1- 504). I believe it will have a positive impact on our economy without any adverse environmental effects.

This project is a success story for the regulatory process that has been undertaken and it should not be revisited. Please allow this pipeline to proceed.

Form email 17

Recognize the long-standing history of protecting our waterways

The partnership the DEQ has maintained with the U.S. Army Corps of Engineers has helped Virginia make critical decisions about linear projects crossing our waterways for decades. This process is one we can trust, and certainly is one that has more than proven itself to be able to go above and beyond what is required to achieve the goal of keeping our streams and water sources protected. The wetlands crossed by the ACP will be protected, including VA AP-1 698, 710, 703 and 704 in Greensville County, where the most modern natural gas plant in the country, now finishing construction, will be one of the pipeline's customers. The federal and state partnership on this project has worked and should be a source of pride for both agencies.

Form email 18

The ACP's best-in-class design

The state made the right decision to trust the rigorous work of the U.S. Army Corps of Engineers and its nationwide permit for its part of the review process of the Atlantic Coast Pipeline. The Army Corps nationwide permit is protective of Virginia's water quality—not only has the Corps managed this process for decades across the country, but the additional multi-year review of the ACP alone has resulted in a best-in-class design to protect water quality along the entire route, including West Creek (VA AP 1- 445) in Nottoway County.

With the pipeline's review already going above and beyond what is required, there is no need to revisit the decision and further delay the Atlantic Coast Pipeline.

Form email 19

It's time to allow the ACP to move forward

The U.S. Army Corps of Engineers has a long reputation of protecting water quality. The Commonwealth made the right decision in deferring to the Corps' nationwide permit for certain aspects of the Atlantic Coast Pipeline, because the Corps has the expertise to regulate and manage the construction of large utility projects, while providing the necessary environmental protections for streams and wetlands. The Army Corps nationwide permit is protective of Virginia's water quality.

The project is fully protective of the Chesapeake Bay and all waterbodies and wetlands along the route, including but by no means limited to those in Cumberland County, such as Dry Creek (VA AP 1– 388 and 390).

The time is now, after nearly four years of regulatory review by numerous groups and individuals, to allow this project to proceed.

Form email 20

The ACP will be safe and dependable

Virginia needs a safe and dependable avenue for accessing around the clock energy. I know many consumers and business owners who are concerned about encountering issues (such as the circumstances that arose this past winter) in maintaining a consistent supply of energy to meet our state's needs in the future. The Atlantic Coast Pipeline will relieve the burden of such supply constraints and help us provide power when consumers need it most.

We can make this great progress while still protecting Virginia waters. For example, tributaries to the Great Dismal Swamp (VA AP-3 204, 205 and 207) will be protected using dam and pump or dam and flume. These tributaries are in the City of Suffolk through which the badly needed lateral to Chesapeake will pass. After this past winter and the energy challenges our state faced, including price spikes and curtailed service to businesses, I encourage you to not delay the ACP any further.

Form email 21

Please don't delay the ACP

Virginia needs the Atlantic Coast Pipeline – this winter made that abundantly clear. Without new access to the affordable natural gas the ACP will bring, customers will continue to face higher prices and reliability shortcomings.

Building the ACP safely is vital, but delaying this project further will not do our area any favors. Regulatory agencies on the national, state and local levels have determined that the ACP is the safest way to get affordable, cleaner natural gas to those in our region who desperately need it.

The environmental professionals at the Army Corps of Engineers have diligently reviewed all factors, and the resulting nationwide permit is protective of Virginia's water quality and other sensitive resources. We have a regulatory process in place already that protects waterways ranging from the Chesapeake Bay to Augusta County—like the Tizzle Branch (VA AP - 138) and Benson Branch (VA AP 1 – 139). There is no need to revisit this decision. Please allow the ACP to move forward and help Virginia.

Form email 22

Virginia needs the Atlantic Coast Pipeline

Virginia needs the Atlantic Coast Pipeline. This winter, consumers paid hundreds of millions of dollars in higher energy costs because of pipeline constraints. Worse still, vital business customers had their service limited due to the extremely cold temperatures. Our economy can't grow with limitations like this.

The ACP would secure an additional supply of affordable natural gas, easing the utility cost burden for so many residents and businesses. Federal and state governments have worked together on this project to ensure we can enjoy these economic benefits without sacrificing strong water quality protections for Virginia's waterbodies along the entire route, such as those in Nelson County, including the South Fork of the Rockfish River (VA AP 1– 9046). The Army Corps nationwide permit is protective of Virginia's water quality, and there is no reason to revisit it.

It is time for the project to proceed.

Form email 23

Virginia needs the ACP to transition to clean energy

Dominion Energy's ongoing transition to clean energy includes a dramatic increase in solar energy, extension of the life of the company's four nuclear units in Virginia, and switching from coal to natural gas as the default fuel for around-the-clock power generation. This switch requires additional natural gas pipeline capacity provided by the Atlantic Coast Pipeline and the result will be continued improvements in regional air quality, along with economic development benefits for Virginia and energy cost savings for customers. At the same time, the project is designed to protect water along its entire route thanks to the rigorous state and federal partnership that has resulted in a best in class design to protect water bodies and wetlands along the entire pipeline route, such as those in Nelson County, VA AP-1 0237-0279.

Form email 24

Years of rigorous review

During the past three plus years, federal and state regulators have worked together to ensure maximum protection for Virginia's waterbodies and wetlands in the design of the Atlantic Coast Pipeline, which itself will provide demonstrable air quality benefits for the entire region once constructed. This regulatory oversight has included strong implementation of the U.S. Army Corps of Engineers Nationwide Permit 12. These combined federal and state efforts go above and beyond to protect water, including for example the resources in Nottoway County, VA AP-1 0426-0503.

Form email 25

Nearly four years of regulatory process

Permitting for the Atlantic Coast Pipeline began in September 2014, which means the ACP is nearing the end of a years-long review process. During this time, it has been studied in great detail by agencies and organizations on the federal, state and local levels. These agencies have analyzed potential impacts to land, air and water quality, wildlife, and other resources—and overwhelmingly, they agree that the ACP can be built safely.

The Army Corps nationwide permit is protective of Virginia's water quality. In fact, the ACP's water quality protections go beyond requirements to safeguard the waterways along the route, including but not limited to the historic James River.

It is time to bring the regulatory process to a conclusion and allow this urgently needed process to move forward, so the public can access the clean, affordable, and abundant natural gas supply that the ACP will provide.

Form email 26

Rigorous nationwide permitting for the ACP

Please do not revisit your reasonable and correct decision to defer to the rigorous U.S. Army Corps of Engineers nationwide permit. The Corps and many other agencies have carefully analyzed potential impacts to land, air and water quality, wildlife, and other resources along the ACP route. This extensive review process has ensured that the ACP is the safest way to bring affordable, cleaner natural gas to those in our region who desperately need it.

Because of this exhaustive process, I believe the ACP can and will safely cross Virginia's streams and rivers. I believe it will protect the Chesapeake Bay as well as specific waterways and stream crossings such as those in Bath County—for example, Little Valley Run (VA AP 1- 47) and Laurel Run (VA AP 1 – 50).

The Army Corps nationwide permit is protective of Virginia's water quality. Review of this project has been a successful state and federal partnership that has resulted in best-in-class protections for water quality. This is an outcome to be proud of because allowing the pipeline to proceed is for the good of the whole state.

Form email 27

The ACP will improve access to natural gas for businesses

Reliable natural gas service is table stakes, a necessary prerequisite for retaining or attracting manufacturing. The Atlantic Coast Pipeline will improve access to natural gas for businesses along the entire project route, including for chronically gas short Eastern Virginia. The project is also designed to protect water resources along the entire route including but not limited to specific identifiers in Augusta County such as VA AP-1 0106-0235.

Form email 28

Support for ACP

The U.S. Army Corps of Engineers has a well-deserved reputation for rigor in protecting water quality. The Commonwealth made the right decision in deferring to the Corps' nationwide permit 12 for certain aspects of the Atlantic Coast Pipeline. The strong water quality protections built into this project's design show the power of the federal and state governments' environmental professionals working together. The project is fully protective of the Chesapeake Bay and all waterbodies and wetland along the route including but by no means limited to those in Cumberland County such as VA AP-1 0376-0410 <tel:0376-0410> . Now it is time, after nearly four years of regulatory review by different regulators, to allow this project to proceed.

Form email 29

Virginia needs the Atlantic Coast Pipeline

Virginia needs the Atlantic Coast Pipeline. This winter customers incurred more than $100 million in fuel expenses due to pipeline constraints. Worse still, vital business customers had their service limited due to the extremely cold winter. This is no way to build a 21st century economy. The federal and state governments have worked together on this project to ensure very strong water quality protections for the Chesapeake Bay and all waterbodies along the route (such as those in Nelson County including for example VA AP-1 9037-9050 and all other waterbodies and wetlands in Nelson County and along the entire route). It is time for the project to proceed and I support it completely.

Form email 30

Please allow the ACP to proceed promptly

Virginia's Chesapeake Bay and all its waterways, wetlands, and water quality generally are well protected, above and beyond federal and state regulatory requirements, by the design of the essential Atlantic Coast Pipeline. This protection extends to all waterbodies and wetlands along the route, including for example those in Dinwiddie County, that are part of the Chowan watershed, such as VA AP-1 0504-0551. The essential need for this project is clear from the past winter where customers paid too much and reliability was not adequate for business customers needing natural gas. This project is a success story for the regulatory process that has been undertaken and does not need to be revisited. Please allow this pipeline to proceed promptly.

Form email 31

Virginia needs sufficient and reliable natural gas service

Our state's industrial heartland in Hampton Roads does not have sufficient natural gas service. The Atlantic Coast Pipeline will fix that problem and provide cost, reliability, and economic development benefits throughout Virginia. The ACP will have best in class protections for water bodies during both construction and operation, and will go above and beyond to protect wetlands, water bodies, and stream crossings along the entire route, including those in Highland County, VA AP-1 0001-0039.

Form email 32

Nearly four years of regulatory process

Work on permitting the Atlantic Coast Pipeline began in September 2014. As the fourth anniversary approaches it is time to bring the regulatory process to a conclusion to allow this urgently needed process to proceed. The existing regulatory process has succeeded. The project has been thoroughly reviewed by federal and state regulators. It has water quality protections that go above and beyond requirements to protect Virginia's water and waterways, including the Bay and specific stream crossing and wetlands such as those in Augusta County. These include but are not limited to VA AP-106, 108, and 110-121 and all other waterways and wetlands along the project route. This high level of protection is a great outcome for the public, which now needs access to the clean, affordable, abundant natural gas supplies that this project will provide.

Form email 33

Don't leave Virginians out in the cold next winter. We need the ACP.

This winter Virginia customers paid more than they should have for energy and businesses did not have the reliable natural gas service they needed because our state does not have enough natural gas pipeline capacity. The Atlantic Coast Pipeline will fix these problems while being extremely protective of the environment, including water resources along the entire route, such as those in Bath County, VA AP-1 0042-0105.

Form email 34

The ACP's strong design protects water quality

We all value water quality and the existing federal—state coordinated review of the Atlantic Coast Pipeline has provided an extremely strong project design to accomplish this shared goal, from the Chesapeake Bay to the waterbodies and wetlands in Buckingham County (for example VA-1 0285, 0286, 0287, and all the other crossings and wetlands in Buckingham and everywhere along the route). Please do not reverse course on the Army Corps of Engineers nationwide permit 12. It is important to our state for this project to proceed so that our state can reap the environmental, economic development, and energy cost benefits that the pipeline will provide.

Form email 35

The ACP's best in class design

The state made the right decision to defer to the rigorous work of the U.S. Army Corps of Engineers and its nationwide permit 12 for part of the review of the Atlantic Coast Pipeline. The multi-year review of this project by multiple federal and state agencies has resulted in a best in class design to protect water quality from the Chesapeake Bay to all specific waterbodies, crossings, and wetlands along the route including for example those in Nottoway County such as VA AP-1 0426-0503. It goes above and beyond what is required. There is no need to revisit the decision and to further delay this much needed project.

Form email 36

I trust the U.S. Army Corps of Engineers review

There is no more professional or dedicated organization than the U.S. Army with a tradition stretching from Bunker Hill to the snows of Valley Forge to the beaches of Normandy. The U.S. Army Corps of Engineers has developed a rigorous nationwide permit (Nationwide Permit 12) for linear projects and has rigorously applied this to the Atlantic Coast Pipeline. The pipeline project is designed to fully protect all the waterways and wetlands along its route, including for example in Buckingham County, VA AP-1 0285-0375.

Form email 37

Don't block reliable energy

Virginia cannot afford another cold winter without adequate pipeline capacity to bring needed natural gas to heat homes, fuel businesses, and power the grid at affordable prices. The Atlantic Coast Pipeline is the solution. Due to the rigorous work of federal and state regulators, including the vigorous application by the U.S. Army Corps of Engineers of its Nationwide 12 permit, the ACP will protect all of the water along its routes, including the crossings in specific localities and those that are in multiple localities such as VA AP-1 410 in Cumberland and Prince Edward Counties.

Form email 38

ACP's design goes beyond regulatory requirements

Virginians are fortunate that the career, full-time environmental professionals at the federal and state level have worked together to ensure that the Atlantic Coast Pipeline will protect water quality from the Chesapeake Bay to all specific waterbodies and wetlands along the route including but not limited to those that cross local boundaries, such as VA AP-1 410 which includes both Cumberland and Prince Edward counties. The pipeline is needed urgently to strengthen our state's economy, enable the ongoing shift away from burning coal for power generation, and to enable manufacturing. Its design has gone beyond regulatory requirements to ensure environmental protection. I respectfully ask that you allow this project to proceed.

I believe this is vital to continue to growth in Virginia and develop more jobs. It will allow us to burn a cleaner fuel in our state and build highly efficient natural gas facilities.

Form email 39

I support the Atlantic Coast Pipeline

The Atlantic Coast Pipeline will be good for our communities, our economy, and our environment. Moving to more environmentally friendly sources of energy is vital for Virginia, our region and our country. And the best way to do that is with the ACP.

I care for Virginia's waterways and wetlands, and I believe that the rigorous process the federal and state government has undertaken will protect water quality in our state. The Army Corps nationwide permit protects Virginia's water quality, and I believe the ACP team will ensure that the project goes above and beyond to do right by Virginia and its wetlands and water bodies--from the Chesapeake Bay to areas at the border of the Dinwiddie and Buckingham County, such as the Nottoway River (VA AP 1 552).

The time has come to recognize that and to allow this much-needed project to proceed.

Form email 40

I support the Atlantic Coast Pipeline

When the Atlantic Coast Pipeline (ACP) was announced, Governor McAuliffe correctly described it as an energy highway. Numerous highways in Virginia have been built using the Army Corps nationwide permits while protecting water resources. The ACP will fully protect all the stream crossings, wetlands, and waterbodies along its route, as a result of the federal-state partnership overseeing its design and construction, including for example those in Cumberland County, VA AP-1 0376-0410.

Form email 41

I support the Atlantic Coast Pipeline

The diverse range of Virginians supporting the Atlantic Coast Pipeline treasure Virginia’s water quality and its waterways and wetlands as much as any proud Virginian. We are rightly proud of the rigorous process that the federal and state governments have undertaken to ensure that the project goes above and beyond to protect water quality and its wetlands and water bodies from the Chesapeake Bay to the border of the Dinwiddie and Buckingham County, such as VA AP-1 0552. The time has come to recognize this success and to allow this much-needed project to proceed.

Form email A

Nationwide Permit 12 does not protect VA's streams and wetlands

I truly appreciate the State Water Control Board's decision to revisit the sufficiency and adequacy of the Commonwealth's Clean Water Act Section 401 certification and the Army Corps of Engineers' Nationwide Permit 12 for the Mountain Valley Pipeline (MVP) and Atlantic Coast Pipeline (ACP) to protect water quality from pipeline construction through Virginia's rivers, streams and wetlands. I agree that there is not adequate assurance that the MVP and ACP will have "minimal impacts" to waters of the U.S., or that the impacts from waterbody crossings authorized by NWP 12 in combination with impacts from upland disturbance will not lead to violation of Virginia's water quality standards. Together, these pipelines cross more than 1,000 streams, rivers and wetlands, and traverse sensitive habitat and steep terrain -- posing a significant threat to Virginia's special places, water quality, recreational uses, public health and safety, and sensitive aquatic life.

In regards to the Mountain Valley Pipeline, at a minimum, DEQ should give special consideration and individual analysis to the following water crossings: Kimballton Branch, Dry Branch, Curve Branch, Little Stony Creek, Clendennin Creek, Doe Creek, Stony Creek, Sinking Creek, Craig Creek, Mill Creek, Greenbriar, Branch Dry Run, Bradshaw Creek, North Fork Roanoke River, Flatwoods Branch, Roanoke River, South Fork Roanoke and River Bottom Creek.

Water bodies slated to be crossed by the Atlantic Coast Pipeline and deserving the same level of review and analysis include but are not limited to: Townsend Draft, Warwick Run, Lick Draft, Back Creek, Peak Run, Stony Run, Morris Run, Jackson River, Laurel Run, Dry Run Cowpasture River, Calfpasture River, Hamilton Branch, White Sulphur Spring branch and Stuart Run Mill Creek.

The hundreds of other water bodies and almost 800 acres of wetlands that these pipelines will cross all deserve individual analysis as they traverse rugged mountain terrain and sensitive habitats, and provide drinking water sources for Staunton, Waynesboro, Roanoke, Salem, and Vinton.

The State Water Control Board should vacate the 401 Certification for the ACP and MVP, including the reliance on the general certification of NWP 12, and instead conduct individual reviews for each river, stream and wetland crossing for these and future pipelines. In issuing permits, it is critical that the Board and the Department of Environmental Quality consider site-specific topography, vegetation, ecology and human use, and consider the impacts of the stream crossings in combination with the concurrent impacts from upland disturbance, in order to minimize harm to aquatic habitat, recreation opportunities, and drinking water sources.

Form email B

Building the Mountain Valley Pipeline will require crossing more than 1,146 waterbodies, traversing sensitive habitat and steep terrain and posing a significant threat to one of Virginia's most precious resources. Right now, Virginia lacks adequate assurance that the Mountain Valley Pipeline will only have "minimal impacts" on our cherished waterways.

Waterbody crossings in Virginia were authorized under the U.S. Army Corps of Engineers' Nationwide Permit 12, a blanket, one-size-fits-all permit that does not look at the unique and special properties of individual streams and rivers and fails to provide adequate protection.

For example, among hundreds of other crossings, the MVP will cross Bottom Creek, one of Virginia's few Tier III exceptional waterways. The hundreds of other waterbodies that this pipeline will cross all deserve individual stream-by-stream analysis as they traverse rugged mountain terrain and sensitive habitats, and provide drinking water sources for Roanoke, Salem, and Vinton.

I strongly urge the state to conduct individual reviews for each river, stream and wetland crossing for these and future pipelines. In issuing permits, it is critical that the Board and the Department of Environmental Quality consider site-specific topography, vegetation, ecology and human use, and consider the impacts of the stream crossings in combination with the concurrent impacts from upland disturbance, in order to minimize harm to aquatic habitat, recreational opportunities, and drinking water sources.

Without this individual analysis, the state simply cannot ensure that I will be able to enjoy Virginia's streams and rivers in the same way if the pipeline gets built.

Form email C

I appreciate the State Water Control Board's decision to revisit the sufficiency and adequacy of the Commonwealth's Clean Water Act Section 401 certification and the Army Corps of Engineers' Nationwide Permit 12 for the Mountain Valley Pipeline (MVP) and Atlantic Coast Pipeline (ACP) to protect water quality from pipeline construction through Virginia's rivers, streams and wetlands. I agree that there is not adequate assurance that the MVP and ACP will have "minimal impacts" to waters of the U.S., or that the impacts from waterbody crossings authorized by NWP 12 in combination with impacts from upland disturbance will not lead to violation of Virginia's water quality standards.

Together, these pipelines cross more than 1,000 streams, rivers and wetlands, and traverse sensitive habitat and steep terrain -- posing a significant threat to Virginia's special places, water quality, recreational uses, public health and safety, and sensitive aquatic life. All deserve individual analysis as they traverse rugged mountain terrain and sensitive habitats, and provide drinking water sources for Staunton, Waynesboro, Roanoke, Salem, and Vinton.

NWP 12 does not consider cumulative impacts to water quality where there are multiple crossings along the same stream and its tributaries.

Without doing individual stream crossing reviews, the total threat to our water supply is not understood. For example, all of Staunton's water comes either Gardner Spring or the reservoir in the National Forest, both located in the county and both downstream of intense pipeline construction. Since the Atlantic Coast Pipeline project began, city officials have been asking for individual wetland and stream crossing reviews in order to protect the city's water supplies.

The proposed permit does not carefully examine on a case-by-case basis the unique characteristics of our special places.

Without detailed review and research of our headwaters, there is no way for the pipeline developers and regulators to know what our frequent thunderstorm and hurricane deluges do to the river bottoms and stream banks where the pipe is proposed to be buried. An exposed and fractured pipe is an environmental and safety concern.

The State Water Control Board should vacate the 401 Certification for the ACP and MVP, including the reliance on the general certification of NWP 12, and instead conduct individual reviews for each river, stream and wetland crossing for these and future pipelines.

In issuing permits, it is critical that the Board and the Department of Environmental Quality consider site-specific topography, vegetation, ecology and human use, and consider the impacts of the stream crossings in combination with the concurrent impacts from upland disturbance, in order to minimize harm to aquatic habitat, recreation opportunities, and drinking water sources.

Thanks for your time and consideration.

Form email D

Please ensure full protection of Virginia's clean water from the proposed Atlantic Coast and Mountain Valley Pipelines. I urge you to require individual permits for high-risk water crossings.

Crossings that are at significant risk of pollution include the pristine Calfpasture River and Bottom Creek and their tributaries, which will be crossed over 100 times.

Cumulative damage from sediment pollution, species impact, and loss of recreational uses in the Calfpasture, Bottom Creek, and similar at-risk waterways must first be assessed before these projects can proceed.

As a Virginian whose family depends on our state's water quality, I'm depending on you to do the right thing and fully assess the cumulative dangers posed by these pipelines which remain currently unknown.

And I respectfully ask that you put on hold any further development until all legal and regulatory challenges are resolved. Once the water sources have been sullied, we will have much bigger problems ahead.

Thank you for your time and your consideration.

Form email E

I appreciate the State Water Control Board's decision to revisit the sufficiency and adequacy of the Commonwealth's Clean Water Act Section 401 certification and the Army Corps of Engineers' Nationwide Permit 12 for the Mountain Valley Pipeline (MVP) and Atlantic Coast Pipeline (ACP) to protect water quality from pipeline construction through Virginia's rivers, streams and wetlands. I agree that there is not adequate assurance that the MVP and ACP will have "minimal impacts" to waters of the U.S., or that the impacts from waterbody crossings authorized by NWP 12 in combination with impacts from upland disturbance will not lead to violation of Virginia's water quality standards.

Together, these pipelines cross more than 1,000 streams, rivers and wetlands, and traverse sensitive habitat and steep terrain -- posing a significant threat to Virginia's special places, water quality, recreational uses, public health and safety, and sensitive aquatic life. All deserve individual analysis as they traverse rugged mountain terrain and sensitive habitats, and provide drinking water sources for Staunton, Waynesboro, Roanoke, Salem, and Vinton.

NWP 12 does not consider cumulative impacts to water quality where there are multiple crossings along the same stream and its tributaries.

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Without detailed review and research of our headwaters, there is no way for the pipeline developers and regulators to know what our frequent thunderstorm and hurricane deluges do to the river bottoms and stream banks where the pipe is proposed to be buried. An exposed and fractured pipe is an environmental and safety concern.

The State Water Control Board should vacate the 401 Certification for the ACP and MVP, including the reliance on the general certification of NWP 12, and instead conduct individual reviews for each river, stream and wetland crossing for these and future pipelines.

In issuing permits, it is critical that the Board and the Department of Environmental Quality consider site-specific topography, vegetation, ecology and human use, and consider the impacts of the stream crossings in combination with the concurrent impacts from upland disturbance, in order to minimize harm to aquatic habitat, recreation opportunities, and drinking water sources.

Thanks for your time and consideration.

Form email F

Building the Mountain Valley Pipeline will require crossing more than 1,146 waterbodies, traversing sensitive habitat and steep terrain and posing a significant threat to one of Virginia's most precious resources. Right now, Virginia lacks adequate assurance that the Mountain Valley Pipeline will only have “minimal impacts” on our cherished waterways.

Waterbody crossings in Virginia were authorized under the U.S. Army Corps of Engineers’ Nationwide Permit 12, a blanket, one-size-fits-all permit that does not look at the unique and special properties of individual streams and rivers and fails to provide adequate protection.

For example, among hundreds of other crossings, the MVP will cross Bottom Creek, one of Virginia’s few Tier III exceptional waterways. The hundreds of other waterbodies that this pipeline will cross all deserve individual stream-bystream analysis as they traverse rugged mountain terrain and sensitive habitats, and provide drinking water sources for Roanoke, Salem, and Vinton.

I strongly urge the state to conduct individual reviews for each river, stream and wetland crossing for these and future pipelines. In issuing permits, it is critical that the Board and the Department of Environmental Quality consider sitespecific topography, vegetation, ecology and human use, and consider the impacts of the stream crossings in combination with the concurrent impacts from upland disturbance, in order to minimize harm to aquatic habitat, recreational opportunities, and drinking water sources.

Without this individual analysis, the state simply cannot ensure that I will be able to enjoy Virginia’s streams and rivers in the same way if the pipeline gets built.

Sincerely,

Form letter 1

The Commonwealth should be proud of the quality of the review of the Atlantic Coast Pipeline that its agencies, in partnership with the federal government, have conducted. The result has been a best in class project that will have unprecedented measures to protect water quality and the environment generally.

The regulatory process in place protects all the major watersheds including those of the Chesapeake Bay and it protects specific waterways and stream crossing including Mill Creek (VA AP l- 90) in Bath County, which is being crossed using a dry crossing method, darn and pump or flume and the tributaries to Mill Creek are also being crossed by dry methods.

In view of these measures, and in view of the rigor of the review that has already been conducted by the professionals at the Army Corps of Engineers, I respectfully ask that you stick to your previous decision and defer to Corps and allow this vital project to proceed.

Form letter 2

When a project is urgently required to meet customer needs and complies with law and regulation (and in fact goes well beyond what is required) it should get the necessary approvals. too many factories were idle this winter and too many Virginians struggled to meet energy costs because of the lack of the Atlantic Coast Pipeline.

This project, in its fourth year of review, goes beyond what is required to protect water. Virginia’s Blackwater River and all its tributaries, in addition to several other rivers in the path of the ACP wi11 be protected, not only as the result of the thorough review by Virginia's environmental regulators, the Army Corps of Engineers, and the Federal Regulatory Commission, but also due to the fact that the river crossing will be completed by Horizontal Directional Drill. This method of river crossing avoids impacts to water quality and aquatic life in the Blackwater River.

It is time to allow the project to proceed.

Form letter 3

The U.S. Army Corps of Engineers Nationwide 12 permit has been used to build some of Virginia's most significant linear projects, from highways to energy projects. The Atlantic Coast Pipeline has been through more than three years of rigorous review by all levels of government and the result of this partnership has been a best in class project that protects all the water resources along the pipeline route including but not limited to the Chesapeake Bay and those in Virginia's largest city in terms of land area Suffolk-VA AP-3 0l I l-0207.

Form letter 4

This winter Virginia customers paid more than they should have for energy and businesses did not have the reliable natural gas service they needed because our state does not have enough natural gas pipeline capacity. The Atlantic Coast Pipeline will fix these problems while being extremely protective of the environment, including water resources along the entire route, such as those in Bath County, VA AP-L 0042-0105.

Form letter 5

Virginia needs the Atlantic Coast Pipeline. The pipeline protects water quality. The Southern Branch Elizabeth River will be protected, not only by the rigor of Virginia's environmental regulators and the U.S. Army Corps of Engineers, but also by the additional oversight of the Federal Regulatory Commission. The crossing of the Southern Branch Elizabeth River by Horizontal Directional Drill avoids any impacts to water quality and aquatic life at the crossing.

The pipeline should be approved. Thank you for considering my views.

Form letter 6

! understand that the Board's decision to seek additional public comment was a compromise among board members to end a contentious meeting. The reality is that the Atlantic Coast Pipeline has taken unprecedented steps to protect water quality. The project has also undergone nearly four years of review, including review by the highly capable professionals at the U.S. Army Corps of Engineers.

The current regulatory structure is rigorous and protects all major watersheds including specific waterways and stream crossing such as White Sulphur Spring Branch (VA AP t-721and Stuart Run (VA AP 1- 73) in Bath County, which are being crossed using dry crossing methods, the dam and pump or flume.

Calls for further review are not meant to improve the project, they are meant to delay or defeat it. Please stick to your previous decision and allow this vitally needed project to proceed. It is critical to energy security in our region and to the ongoing and laudable transition from coal to natural gas for electricity generation.

Thank you for your consideration,

Form letter 7

Virginia needs the natural gas from the Atlantic Coast Pipeline to keep energy prices affordable, to keep our power system reliable, to provide much needed service to Eastern Virginia (where new large businesses cannot be guaranteed reliable gas service at present), and to support manufacturing, both new and existing. Thanks to the federal and state partnership in oversight of the project, including the Army Corps Nationwide L2 Permit, the ACP will go above and beyond what is required to protect waterbodies and wetlands along the entire route, including those in Chesapeake such as VA AP-3 0208-0233.

Form letter 8

lf you think changing the process now will satisfy a single opponent of the Atlantic Coast Pipeline, I have a bridge to sell you. The pipeline is designed already to go well beyond what law and regulation require to protect water.

The lateral to Chesapeake, Virginia will cross several wetlands. The methods for crossing wetlands have been approved by the Corps of Engineers and FERC. Some of the crossings in the City of Chesapeake include VA AP-3 - 2L5,22O, and 221 through 223. These crossing methods ensure that the impacts to these wetlands are temporary and there is no impact to these waters.

No change is necessary.

Form letter 9

Virginia has a well deserved reputation for protecting its natural beauty while providing needed regulatory certainty to businesses. The State Water Control Board is rightly concerned about protecting the quality of our waterways and wetlands, and the state's partnership with the U.S. Army Corps of Engineers has achieved this result.

The regulatory process in place protects specific waterways and stream crossing including Hamilton Branch (VA AP 1 - 115) in Augusta County. These streams are being crossed using a dry crossing method, dam and pump or flume. The tributaries to Hamilton Branch are also being crossed by dry methods, which will ensure the safeguard of these waterways.

Changing the process at the eleventh hour would not improve the goal of protecting water quality but would badly damage the state's reputation for a transparent, fair regulatory process.

Form letter 10

Virginia has a well-deserved reputation for protecting its natural beauty while providing needed regulatory certainty to businesses. The State Water Control Board is rightly concerned about protecting quality of our waterways and wetlands, and the state's partnership with the U.S. Army Corps of Engineers has achieved this result. The regulatory process is place protects all the major watersheds and it protects specific waterways and stream crossing including Hamilton Branch (VA AP 1 - 11-5) in Augusta County which is being crossed using a dry crossing method, dam and pump or flume and the tributaries to Hamilton Branch are also being crossed by dry methods. Changing the process at the eleventh hour would not improve the goal of protecting water quality but would badly damage the state's reputation for a transparent, fair regulatory pro

Form letter 11

Virginia's historic James River and all its tributaries are well-protected not only by the rigor of Virginia's environmental regulators and the U.S. Army Corps of Engineers, but the additional oversight by the Federal Regulatory Commission.

The crossing of the James River by Horizontal Directional Drill avoids any impact to water quality and aquatic life at the crossing. Because of this lack of impact, rivers crossed by using a Horizontal Directional Drill do not fall under U.S. Anny Corps of Engineers jurisdiction. The ACP is making several river crossings using the Horizontal Directional Drill method, thus will avoid impacting water quality or aquatic life. The state federal partnership on the Atlantic Coast Pipeline has resulted in a best in class project.

The State Water Control Board should recognize this notable accomplishment and maintain the path forward it has previously set on the division of responsibilities for this project.

Form letter 12

I was interested to leam that the State Water Control Board, after a recent meeting, was accepting additional public comment on whether or not to stick to its prior decision to defer to the U.S. Army Corps of Engineers nationwide permit for the long-awaited Atlantic Coast Pipeline. This vital infrastructure has already been the subject of nearly four years of review.

The James River, the largest watershed in Virginia and a precious natural resource, is well protected with nearly all of the tributary crossings being made using dry crossings methods, using dam and pump or flume. It has the best technology and design available to protect the environment. In fact, the pipeline will demonstrably improve the environment by enabling further switching of fuels from coal to clean natural gas for around the clock generation.

Please stay the course and allow this project to proceed without delay.

Form letter 13

Stick to the process you have already committed to. The Atlantic Coast Pipeline meets and exceeds all requirements to protect water bodies and wetlands.

The regulatory process in place will protect the water quality of our rivers and streams including West Creek IVA AP L- 445) in Nottoway County, which is being crossed using dry crossing methods. The tributaries to West Creek are also being crossed by these methods. In addition, these stream crossings have been reviewed by DGIF and the Fish and Wildlife Service to ensure the protection of aquatic life.

There is no need to change the process. The current one has worked.

Form letter 14

Virginia has been working hard, under Governors of both parties, to regain its cherished ranking as the best state for business. The review of the Atlantic Coast Pipeline has gone well beyond any past review of a project and it has gone above and beyond regulatory requirements.

The regulatory process in place by the DEQ, the Corps of Engineers and the Federal Energy Regulatory Commission will protect waterways and streams, including Calfpasture River (VA AP 1- 148) in Augusta County which is being crossed using a dry crossing method, dam and pump or flume. The tributaries to the Calfpasture River are also being crossed by dry methods.

Changing approaches at the very end of this process and revisiting the decision to defer to the Army Corps of Engineers nationwide permit for part of the overall process would not increase environmental protection but would be devastating the state's reputation, to say nothing of deferring for an indefinite time the much needed benefits of the pipeline.

Form letter 15

It is time to get the Atlantic Coast Pipeline under construction and in-service. The state's process has worked and the project is designed to go well above and beyond what is required to protect state waters.

The regulatory process in place protects all watersheds and it protects stream crossings including the Nottoway River (VA AP 1- 552) in Dinwiddie and Brunswick Counties. This river is being crossed using a dry crossing method, cofferdam. The tributaries to the Nottoway River are also being crossed by dry methods. ln addition, DEQ sediment and erosion control requirements will protect the Nottoway River watershed from sedimentation.

It is time for the project to proceed. It is much needed.

Form letter 16

There is an old saying to not switch horses mid-stream. The regulatory process for the Atlantic Coast Pipeline is much further along than mid-stream-it is nearly complete.

The current regulatory structure is rigorous and protects all the major watersheds. Many of the waterways and streams are being protected using dry crossing methods. Specifically, the Tizzle Branch (VA AP - 138) and Benson Branch IVA AP 1 - 139) crossings in Augusta County are being crossed using this method, which will ensure our waterways are protected both during construction and in the future.

Changing the nature of the review process at this stage would do significant damage to Virginia's business reputation without any corresponding benefit in protecting the environment Please stay the course.

Form letter 17

The Aflantic Coast Pipeline is much needed and it is designed to go well above and beyond to protect water bodies and wetlands.

The current regulatory process protects rivers and streams including the North River (VA AP 1-310) and its tributaries in Buckingham County, which is being crossed using a dry crossing method, dam and pump or fltrme. In addition, Department of Quality sediment and erosion control requirements will protect the North River from sedimentation.

The current approach is working. Do not change the rules of the game at the end because of a noisy few.

Form letter 18

The Atlantic Coast Pipeline is ready for construction after hundreds of thousands of pages of federal and state reviews. It has broad public support and is much needed to strengthen both our state's environment and the economy.

It is designed and equipped to fully protect water quality and the environment overall. Specifically, it protects all of the major watersheds including those of the Chesapeake Bay and it protects specific waterways and stream crossing such as Peak Run (VA AP 1- 22) and Morris Run IVAAP 1-36) in Highland County, which are being crossed using dry crossing methods, such as the dam and pump or flume.

Additional delay in the regulatory review of this project will simply serve to defer the pipeline's substantial benefits for Virginia. Please do not give into a relatively small group of vocal opponents to the detriment of our state's environment and economy.

Form letter 19

The Atlantic Coast Pipeline is ready for construction after hundreds of thousands of pages of federal and state reviews. lt has broad public support and is much needed to strengthen both our state's environment and the economy. It is designed and equipped protect fully water quality and the environment overall. Additional delay in the regulatory review of this project Will simply serve to defer the pipeline's substantial benefits for Virginia. Please do not give into a relatively small group of vocal opponents to the detriment of our state's environment and economy.

Form letter 20

The commonwealth should be proud of the curent regulatory process for the Atlantic Coast Pipeline. It has worked extremely well to the point where the project is now designed to go well beyond what is required by law and regulation to protect wateways and wetlands.

The regulatory process previously endorsed by the SWCB protects all the major watersheds and it protects specific waterways and stream crossing including Butterwood Creek (VA AP l- 504) in Dinwiddie County, which is being crossed using a dry crossing method dam and pump or flume. The tributaries to Butterwood Creek are also being crossed by dry methods.

There is no need to change this process.

Form letter 21

Please do not further delay the much needed Atlantic Coast Pipeline. There is no additional analysis that the state can conduct that will satis$ the relatively small number of committed opponents to this project.

The U.S. Army Corps of Engineers has thoroughly reviewed the project as part of its nationwide permit. The Board has already decided to defer to this nationwide permit and should not reverse itself.

The regulatory process is place protects all the major watersheds including those of the Chesapeake Bay and it protects specific waterways and stream crossing including the Cowpasture River (VA AP l- 58) in Bath County, which is being crossed using dry crossing methods, cofferdam or dam and flume, and the tributaries to Cowpasture are also being crossed by dry methods.

Regulatory certainty is a key part of Virginia's business reputation and it would be particularly ironic to lose this reputation while delaying a project that will improve the environment.

Form letter 22

Reliable natural gas service is a prerequisite for retaining or attracting manufacturing. The Atlantic Coast Pipeline will improve access to natural gas for businesses along the entire project route, including for chronically gas-short Eastern Virginia. The project is also designed to protect water resources along the entire route including but not limited to specific identifiers in Augusta County such as VA AP-1 0106-0235.

Form letter 23

When the Atlantic Coast Pipeline (ACP) was announced, Governor McAuliffe correctly described it as an energy highway. Numerous highways in Virginia have been built using the Army Corps nationwide permits while protecting water resources. The ACP will fully protect all the stream crossings, wetlands, and waterbodies along its route, because of the federal-state partnership overseeing its design and construction, including for example those in Cumberland County, VA AP-1 0376-0410.

Form letter 24

It is a fundamental regulatory tenet that you do not change the rules at the end of a process. The current process for review of the Atlantic Coast Pipeline has worked. lt fully protects water bodies, wet lands, and water quality. lt goes above and beyond regulatory requirements.

The current regulatory process ensures the protection of all major watersheds and stream crossings such as Dry Creek (VA AP 1- 388 and 390) in Cumberland County and its tributaries. This watershed will be crossed using a dry crossing method, dam and pump or flume to ensure continued water quality and the protection of aquatic animals. ln addition, DEQ sediment and erosion control requirements will protect the Dry Creek from sedimentation.

Any change at this stage will not provide any additional environmental protection simply unwarranted delay in a much needed project.

Form letter 25

The review process for the Atlantic Coast Pipeline has worked. The project is designed to go above and beyond to protect water quality.

The methods for crossing wetlands in Chesapeake Virginia have been approved by the U.S. Army Corps of Engineers and the Federal Energy Regulatory Commission. Some of the crossings in Southampton County include VA AP-3 - 20,23,24 25,26 and,27. These crossing methods ensure that the impacts to these wetlands are temporary and there is no loss of waters in the United States.

Do not change the process.

Form letter 26

No one on the State Water Control Board should believe that a different process from the rigorous one already nealy complete will change the mind of ideological opponents of the much needed new pipelines in Virginia When opponents are willing to even visit board member's homes and disrupt public meetings, there is no regulatory process that is going to satisfy them.

The state has put in place a rigorous process that goes beyond what is required to protect water quality. That is what is required. The regulatory process previously endorsed by the SWCB protects all the major watersheds and it protects specific waterways and stream crossing including Back Creek (VA AP l- 9027) in Augusta County. At this specific waterway, the ACP will cross using a dry crossing method, dam and pump or flume. The tributaries to Back Creek are also being crossed by dry methods, which will ensure these waterways are protected.

Do not change the process trying to mollify parties who will never be mollified.

Form letter 27

Governors McAuliffe and Northam have both made building the 21st century economy for Virginia an important part of their governorship. This winter, large businesses had to curtail or suspend operations because they could not get enough natural gas. That is no way to build a 21st century economy.

The current, very rigorous process has resulted in best in class water quality protections. The current process will protect the water quality of our rivers and streams including the Willis River (VA AP 1- 339) in Buckingham County. The ACP will cross this river using a dry crossing method, dam and pump or flume, which will ensure the continuation of water quality in this area. ln addition, these stream crossings have been reviewed by the Department of Game and Inland Fisheries, and the U.S. Fish and Wildlife Service to ensure the protection of aquatic life.

Please stick to this process and allow this critical project to proceed.

Form letter 28

There is no process that will please the vocal minority of Atlantic Coast Pipeline opponents but there is a process that is fu!!y protective of water quality and which fully meets and, in fact, exceeds the requirements of state and federal law and regulation.

The regulatory process in place protects all the major watersheds and it protects specific waterways and stream crossing including the South Fork of the Rockfish River (VA AP 1- 9046) in Nelson County, which is being crossed using a dry crossing method, dam and pump or flume in addition to the tributaries to South Fork of the Rockfish River, which are also being crossed by dry methods.

In addition, DEQ sediment and erosion control requirements will protect the South Fork of the Rockfish River from sedimentation. It is the current process. Please stick to this process.

Form letter 29

Regulatory work on the Atlantic Coast Pipeline began in the fall of 20t4. It is now nearly summer 2018. After hundreds of thousands of pages of review, the federal and state governments have nearly completed review of this urgently needed project and the result has been the best that there is in terms of protecting water (and for that matter air) quality while brining much needed supplies of clean natural gas to help displace coal power generation, fuel industries, and heat homes.

The regulatory process will protect specific waterways and streams including Mayo Creek (VA AP 1-2741and its tributaries in Nelson County, which is being crossed using a dry crossing method, dam and pump or flume. ln addition, these stream crossings have been reviewed by the Department of Game and Inland Fisheries and the U.S. Fish and Wildlife Service to ensure the protection of aquatic life.

The process has been a success. It is time to be done with the process not revise it.

Form letter 30

There is no more professional or dedicated organization than the U. S. Army with a tradition stretching from Bunker Hill to the snows of Valley Forge to the beaches of Normandy. The U. S. Army Corps of Engineers has developed a rigorous nationwide permit (Nationwide Permit 12) for linear projects and has rigorously applied this to the Atlantic Coast Pipeline. The pipeline project is designed to fully protect all the waterways and wetlands along its route, including for example in Buckingham County, VA AP-l 0285-0375.

Form letter 31

I would like to comment on the State Water Control Board's consideration of revisiting the U.S. Army Corps of Engineers nationwide permit. This permit was developed by one of the most highly professionalized regulators anywhere.

Efforts to delay much needed pipeline projects to revisit this permit are simply delaying tactics. I am confident that there is no analysis that DEQ could perform that would lead the opponents seeking delay to ultimately approve the project.

The current regulatory structure is rigorous and protects all major watersheds and it protects specific waterways and stream crossing such as Little Valley Run (VA AP 1- 47) and Laurel Run (VA AP 1 - 50) in Bath County which are being crossed using dry crossing methods.

The state has made its decision and should stick to it. Thank you for considering my views.

Form letter 32

You can't please all the people all the time is certainly true of the regulatory process for the Atlantic Coast Pipeline, but that is not the standard the board should follow.

The current process fully protects water quality, water bodies, and wetlands. lt has resulted in a project design that goes well beyond regulatory and legal requirements to be more protective than required.

The regulatory process protects all major watersheds. ln addition, this process protects specific stream crossings including Dry Creek (VA AP 1- 388 and 390) in Cumberland County, which is being crossed using a dry crossing method, dam and pump orflume and the tributaries to Dry Creek are also being crossed by dry methods. ln addition, DEQ sediment and erosion control requirements will protect the Dry Creek from sedimentation.

That's what matters. Stick to the current process.

Form letter 33

During the past three plus years, federal and state regulators have worked together to ensure maximum protection for Virginia's waterbodies and wetlands in the design ofthe Atlantic Coast Pipeline, which itself will provide demonstrable air quallty benefits for the entire region once constructed. This regulatory oversight has included strong implementation of the U.S. Army Corps of Engineers Nationwide Permit 12. These combined federal and state efforts go above and beyond to protect water, including for example the resources in Nottoway County, VA AP-l 0426-0503.

Form letter 34

Virginians cannot afford another winter with huge prices spikes to heat and light their homes due to pipeline constraints and with factories idled because of shortage of natural gas. It is time for this problem to be solved and the Atlantic Coast Pipeline is the solution.

The state and federal review of the project has taken nearly four years and the pipeline will meet and in fact will do better than is required to protect waterways and wetlands. The lateral to Chesapeake, Virginia will cross several wetlands. The methods for crossing wetlands have been approved bythe U.S. Army Corps of Engineers and the Federal Energy Regulatory Commission. Some of the crossings in Southampton County include VA AP-3 - 20,23,24 25,26 and 27. These crossing methods ensure that the impacts to these wetlands are temporary and there is no loss of waters to the United States.

It is time for the review to end and construction to begin.

Form letter 35

The Atlantic Coast Pipeline is a landmark project that after more than three years of in-depth federal and state reviews has reached the end of the permitting process.

However, a recent suggestion has resulted in revisiting whether a previous decision to defer to the Army Corps of Engineers nationwide permit was the right path. The past very cold winter showed how much this project is needed.

It protects all the major watersheds including those of the Chesapeake Bay and it protects specific waterways and stream crossing such as Lick Draft (VA AP 1-10) and Back Creek (VA AP -13) in Highland County which are being crossed using dry crossing methods, the dam and pump or flume.

Please do not put up new, unnecessary obstacles for a project that already has state of the art design and equipment to protect water quality and the environment generally.

Form letter 36

The Atlantic Coast Pipeline is a landmark project that after more than three years of in-depth federal and state reviews has reached the end of the permitting process. A recent suggestion to revisit the decision to defer to the Army Corps of Engineers nationwide permit was the wrong suggestion. The past very cold winter showed how much this project is needed. Please do not put up new, unnecessary obstacles for a project that already has state of the art design and equipment to protect water quality and the environment generally.

Form letter 37

ln the City of Suffolk, the two water supply reservoirs, Lake Prince and the Western Branch Reservoir are crossed by Horizontal Directional Drill, this method is exempt from the Army Corps of Engineers jurisdiction because there is no impact to the reservoirs from the crossings. The tributaries to these reservoirs are also protected by dry crossing methods. These crossing include VA AP-3 - 188, 189, and 191 through 194.

It is time for choosing. The board can choose to continue its current process which fully protects Virginia's water and will help meet its energy needs. Or the board can choose to change the rules of the game, harm consumers and the environment and devastate the state's business reputation.

The connect choice is clear. Stay the course.

Form letter 38

Virginia's Nottoway Rivel an important Native American waterway and all its tributaries will continue to be well protected, not only by the rigor of Virginia's environmental regulators and the U.S. Army Corps of Engineers, but also by the additional oversight by the Federal Regulatory Commission. The crossing of the Nottoway River by Horizontal Directional Drill avoids any impacts to water quality and aquatic life at the crossing. Because of the lack of impact to rivers crossed by HDD, this does not even fall under U.S. Army Corps of Engineers iurisdiction.

You could hold dozens more water control board meetings and the result would be the same. The Atlantic Coast Pipeline would still be needed, it is already designed to go well beyond what the law (and regulation) requires to protect water quality, and opponents would still say it isn't enough.

Please stick to your current process, allow the environmental professionals to do their work, and this much needed proiect to proceed.

Form letter 39

The Atlantic Coast Pipeline fully protects water qualtty. The ctrrent process has worked.

The lateral to Chesapeake, Virginia will cross several wetlands. The methods for crossing weflands have been approved by the Army Corps and FERC. Some of the slsssings in the City of Suffolk include VA AP-3 - l4l through 144. These crossing methods ensure that the impacts to these weflands are temporary and there is no loss of U.S. waters.

Do not give into a vocal few calling on you to change the rules of the game at the end.

Form letter 40

I would like to cornment on the State Water Control Board's consideration of revisitingthe U.S. Army Corps ofEngineers nationwide permit. This permit was developed by one of the most highly professionalized regulators anywhere. Efforts to delay much needed pipeline projects to revisit this permit are sirnply delaying tactics. I am confident that there is no analysis that DEQ could perform that would lead the opponents seeking delay to ultimately approve the project. The state has made its decision and should stick to it.

Thank you for considering my views.

Form letter 41

Virginia cannot afford another cold winter without adequate pipeline capacity to b"i"g needed natural gas to heat homes, fuel businesses, and power the grid at affordable prices. The Adantic Coast Pipeline is the solution. Due to the rigorous work of federal and state regulators, including the vigorous application by the U.S. Army Corps of Engineers of its Nationwide 12 permit, the ACP will protect all the water along its routes, including the crossings in specilic localities and those that are in multiple localities such as VA AP-1 410 in Cumberland and Prince Edward Counties.

Form Letter 42

The Commonwealth should be pleased of the quality of the review of the Atlantic Coast Pipeline that its agencies, in partnership with the federal govemment, have conducted. The outcome has been a best in class project that will have exceptional measures to protect our waters and the environment as a whole.

ln sight of these measures, and in sight of the care of the review that has been conducted by the Army Corps of Engineers, I dutifully ask that you maintain your previous decision and defer to Corps and let this vital project to proceed. Virginia's environmental regulators have a well-deserved reputation for care. So does the U.S. Army Corps of Engineers. The state-federal partnership on the Atlantic Coast Pipeline has brought about in a best in class project. The State Water Control Board should recognize this accomplishment and maintain the pattr forward it has formerly set on the division of responsibilities for this project.

Form Letter 43

Our state’s industrial heartland in Hampton Roads does not have sufficient natural gas service. The Atlantic Coast Pipeline will fix that problem and provide cost, reliability, and economic development benefits throughout Virginia. ACP will have best in class protections for water bodies during both construction and operation, and will go above and beyond to protect wetlands, water bodies, and stream crossings along the entire route, including those in Henrico County, VA AP- I OOO - I OO39.
Thank you for your attention.

Form Letter 44

Dominion Energy's ongoing transition to clean energy includes a dramatic increase in solar enerry, extension of the life of the company's four nuclear units in Viryinia and switching from coal to narural gas as the default fuel for around-the-clock power generation. This switch requires additional natural gas pipeline capacity provided by the Atlantic Coast Pipeline and the result will be continued improvements in regional air quality, along with economic development benefits for Virginia and energy cost savings for customers. At the same time, the project is designed to protect water along its entire route thanks to the rigorous state and federal partnership that has resulted in a best in class design to protect water bodies and wetlands along the entire pipeline route, such as those in Nelson County, VA AP-I 0237-0279.
Sincerely,

Form Letter 45

All Virginians value water quality- we depend on it for our daily household and business needs. The existing federal/state partnership for the ACP has provided a strong project design to accomplish this shared goal.
Please move the process fonlrard and allow this important project to proceed. We want our state to be able to reap the environmental, economic development, and energy cost benefits that the pipeline will provide.
Thank you, kindly-

Form Letter 46

Please do not further delay the needed Aflantic Coast Pipeline project. There is no additional analysis that the commonwealth may conduct that will satisff the small number of committed opponents to the project. The U.S. Army Corps of Engineers has reviewed the project thorougbly as part of its permit. The Board has already decided to defer to this permit and should not reverse. Regulatory certainty is a key part of the commonwealth's business reputation and it would be mostly biting to lose this reputation while delaying a project that will improve our environment.
Kindly,

Form Letter 47

Virginia's James River and its tributaries are well-protected, not only by the thoroughness of the Commonwealth's environmental regulators and the U.S. Army Corps of Engineers, but also the additional
oversight by the FERC.
The crossing of the James River by HDD avoids any impact to water quality and aquatic life at the
crossing. Because of this lack of impact, rivers crossed by using a Horizontal Directional Drill do not fall
under U.S. Army Corps of Engineers jurisdiction. The ACP is making several river crossings using the
HDD method, thus will avoid impacting water quality or aquatic life.
The state-federal partnership on the ACP has resulted in a best in class project. The SWCB should
recognize this notable accomplishment and maintain the path forward it has previously set on the division
of responsibilities for this project.
Kindly,

Form Letter 48

You could hold dozens more water control board meetings and the result would be the same. Virginia's Nottoway River, an important Native American waterway and all its tributaries well protected, not only by the rigor of Virginia's environmental regulators and the U.S. Army Corps of Engineers, but the additional oversight by the Federal Regulatory Commission. The crossing of the Nottoway River by Horizontal Directional Drill avoids any impacts to water quality and aquatic life at the crossing. Because of the lack of impact rivers crossed by HDD do not even fall under U.S. Army Corps of Engineers jurisdiction. ACP is making several river crossing suing the HDD method. The Atlantic Coast Pipeline would stil1 be needed, it is already designed to go well beyond what the 1aw (and regulation) requires to protect water quality, and opponents would stil1 say it isn't enough. Please stick to your current process, a1low the environmental professionals to do their work, and this much needed project to proceed.

Form letter 49

There is no need to revisit your reasonable and prudent decision to defer to the very rigorous U.s. Army Corps of Engineers nationwide permit The fulltime, career professionals at the Corps bring the necessary level of rigor to the regulatory review of this project. Review of this project has been a successful state and federal partnership that has resulted in best in class protections for water quality. This is an outcome to be proud of, not to be revisited.
Sincerely,

LIUNA Letter 1

Subject: I support the Atlantic Coast Pipeline

Dear Virginia State Water Board,

The Atlantic Coast Pipeline will be good for our communities, our economy, and our environment. Moving to more environmentally friendly sources of energy is vital for Virginia, our region and our country. And the best way to do that is with the ACP.

I care for Virginia's waterways and wetlands, and I believe that the rigorous process the federal and state government has undertaken will protect water quality in our state. The Army Corps nationwide permit protects Virginia's water quality, and I believe the ACP team will ensure that the project goes above and beyond to do right by Virginia and its wetlands and water bodies--from the Chesapeake Bay to areas at the border of the Dinwiddie and Buckingham County, such as the Nottoway River (VA AP 1 552).

The time has come to recognize that and to allow this much-needed project to proceed.

Sincerely,

LIUNA Letter 2

Subject: The Atlantic Coast Pipeline is good for Virginia

Dear Virginia State Water Board,

After a thorough review and many project adjustments, we should allow the Atlantic Coast Pipeline to move forward. ACP is a safe and environmentally responsible pipeline project. It will also create thousands of good construction jobs.

As a member of LIUNA, I know about pipeline construction and the importance of a skilled workforce. Rest assured the Atlantic Coast will be built to the highest standards by the most experienced pipeline workers.

I also value Virginia's waters and am grateful to see that agencies of all levels, working with the Atlantic Coast Pipeline, have provided an extremely strong project design to build this vital pipeline in a way that will keep our water safe.

Please allow this important project to proceed so that our state can reap the environmental, economic development, and energy-cost benefits that the ACP will provide.

Sincerely,

Form Letter A

To Whom It May Concern:

I truly appreciate the State Water Control Board's decision to revisit the sufficiency and adequacy of the Commonwealth's Clean Water Act Section 401 certification and the Army Corps of Engineers' Nationwide Permit 12 for the Mountain Valley Pipeline (MVP) and Atlantic Coast Pipeline (ACP) to protect water quality from pipeline construction through Virginia's rivers, streams and wetlands. I agree that there is insufficient assurance that the MVP and ACP will have "minimal impacts" to waters of the U.S., or that the impacts from waterbody crossings authorized by NWP 12 in combination with impacts from upland disturbance will not lead to violation of Virginia's water quality standards. Together, these pipelines cross more than 1,000 streams, rivers and wetlands, and traverse sensitive habitat and steep terrain-- posing a significant threat to Virginia's special places, water quality, recreational uses, public health and safety, and sensitive aquatic life.

To qualify for NWP 12 authorization, the permittee must comply with the following general condition Number 12: Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction. The severity of the slopes and the fragile geology throughout these regions makes pipeline construction risky. Contributing to this risk is the lack of proven efficiency of erosion control measures on steep slopes and rocky terrain. Even "best in class" pollution control measures are insufficient to prevent significant damage to water resources from pipeline construction. Assumptions were made during design of construction plans that the Best Management Practices (BMPs) will function at maximum efficiency. Studies show the efficiency of BMPs is reduced by as much as 50% on steep slopes. As an example of the deficiency of design evident in the soil erosion and sediment control planning for the ACP and MVP, I am including a comment specifically regarding Crossing S-Q13 of the MVP, which would utilize compost filter socks for erosion/sediment mitigation.

Crossing Concern: In areas with steep slopes and/or rocky terrain, soil conditions must be such that good continuous contact between the sock and the soil is maintained throughout its length. The steep, rocky mountainous terrain conditions in the location of the MVP will make it difficult to install compost filter socks.

Concern Detail: The stream crossing is located at the toe of steep slopes on both sides of stream crossing. The fill depth at crossing is shown as 10 feet. The slope on the north side of the crossing is 34% slope with a length of 350 feet of corridor above the crossing. The slope on the south side of the crossing is 31% slope with a length of 450 feet of corridor above crossing. The construction plans do not specify the stream crossing method. The impact area is shown as 344 square feet. Both sides of the crossing show compost filter socks. Slope lengths and drainage area on both sides of crossing exceed engineering design specifications for filter socks despite use of water bars above filter socks. No outlet structures or slope drainage swales are shown at the end of the waterbars above the stream crossing. As designed, runoff is channelized down the slope into the compost filter socks at the toe of steep slopes, resulting in sediment ~owing into the stream. In heavy rain, the filters socks will fail as they will not have the capacity to contain

erosion from graded areas above the crossing. The stream crossing is not designed correctly. No reasonable assurance can be provided that water quality will be protected.

Petition CBF

The Atlantic Coast Pipeline will cut a wide path hundreds of miles long through the heart of Virginia's Chesapeake Bay watershed. Crossing more than 1,000 streams, the pipeline construction will destroy thousands of acres of forests and other sensitive areas in the Bay watershed—diminishing the ability of these lands to filter water and clean the air. Virginia must use its full legal authorities to ensure Atlantic Coast Pipeline construction and operation are held to the strictest environmental standards. The current general nationwide permit will not provide adequate protection to our waterways.

Postcard

I support the Atlantic Coast Pipeline and trust the regulatory review process. DEQ certified and authorized the use of the NWP 12 for the project. It adequately addresses individual stream crossings. I urge you to uphold the NWP 12 for the Atlantic Coast Pipeline.