Dear Objector:

This letter is my response to the objections filed on the Draft Record of Decision (ROD) for the Project-Specific Plan Amendments to the George Washington and Monongahela National Forest Plans and Special Use Permit Authorization for the Atlantic Coast Pipeline Project. This Draft ROD was prepared by Southern Regional Forester Tony Tooke1 (for the George Washington National Forest portion) and Acting Eastern Regional Forester Mary Beth Borst (for the Monongahela National Forest portion). I have decided to issue this single response to all objections as provided in 36 Code of Federal Regulations (CFR) 218.11(b).

Background
On July 21, 2017, a Draft ROD was released by the Southern and Eastern Regional Foresters to:
1) Authorize use and occupancy of National Forest System (NFS) lands for Atlantic Coast Pipeline, LLC (Atlantic) to construct and operate an interstate natural gas pipeline across the Monongahela and George Washington National Forests.
2) Amend the Monongahela and George Washington National Forests Land and Resource Management Plans (Forest Plans) specific to the authorization to allow the project to be consistent with the Forest Plans.

The Atlantic Coast Pipeline (ACP) includes:
- 519.7 miles of new buried 42- and 36-inch diameter natural gas pipeline in West Virginia, Virginia, and North Carolina;
- 84.8 miles of 20- and 16-inch-diameter natural gas pipeline in Virginia and North Carolina;
- Three new compressor stations – one each in West Virginia, Virginia and North Carolina; and
- Nine meter stations, along with pig launchers/receivers and mainline valves.

Approximately three percent of ACP will cross NFS lands. There are five noncontiguous miles of the Monongahela National Forests and approximately 16 noncontiguous miles of the George Washington National Forests affected by the construction, operation, and maintenance of a buried 42-inch diameter pipeline. Total disturbance, including access roads and additional temporary work spaces, is displayed in the following table:

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1 Tony Tooke is now the Chief of the Forest Service and has recused himself from any involvement in this review. Acting Southern Regional Forester Ken Arney will make the decision whether to authorize a Special Use Permit and the project-specific plan amendments for the George Washington National Forests Land and Resource Management Plan.
<table>
<thead>
<tr>
<th>Forest total acreage</th>
<th>Disturbance during Construction</th>
<th>Long term Operational impact</th>
</tr>
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<tbody>
<tr>
<td>Monongahela National Forests is 921,000 acres</td>
<td>112.3 acres (.01 % of Monongahela National Forests)</td>
<td>55.8 acres (.006 % of Monongahela National Forests)</td>
</tr>
<tr>
<td>George Washington National Forests is 1,066,000 acres</td>
<td>318.1 acres (.03 % of George Washington National Forests)</td>
<td>158.2 acres (.015% of George Washington National Forests)</td>
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The Federal Energy and Regulatory Commission (FERC) is the lead agency, and the Forest Service is a cooperating agency. The Final Environmental Impact Statement (FEIS) addressed the potential environmental effects of the construction and operation of the ACP and Supply Header Project. The Supply Header Project does not cross NFS lands and is not addressed in this review.

Section 313 of the 2005 Energy Policy Act requires federal agencies to cooperate with the FERC and comply with the deadlines it establishes. The ACP has been identified by the Office of Management and Budget (OMB) and the Council on Environmental Quality (CEQ) as a priority infrastructure project; it is designated as a “Covered Project” under Title 41 of the Fixing America’s Surface Transportation Act (FAST-41). The FERC established a deadline to release the FEIS on July 21, 2017. The FERC’s regulation at 18 CFR §157.22 (2016) provides that "a final decision on a request for a Federal authorization is due no later than 90-days after the Commission issues its final environmental document, unless a schedule is otherwise established by Federal law." In cooperation with the FERC, the Forest Service committed to issuing a final ROD for its portion of the project to meet the 90-day timeframe as closely as possible, while still adhering to the Forest Service regulatory objection review process.

**Objection Review Process**

36 CFR §218 provides for a pre-decisional administrative review, the objection process, for certain proposed actions of the Forest Service. The ACP FEIS and Forest Service Draft ROD were completed in July 2017. The objection process was initiated by releasing these analysis documents to the public through publication of a legal notice on July 21, 2017. The date of the legal notice marked the beginning of the 45-day objection filing period.

Objections to the Draft ROD were received via electronic or postal submissions until the objection filing period end date of September 5, 2017. A total of 69 individual objections were received. Objections received after the deadline or not meeting the filing requirements were set aside and not considered per 36 CFR §218.10. The objectors whose letters were set aside were notified their objections were not considered per 36 CFR §218.10. All other objections were considered in the process documented in this letter. There were no unique issues in the objections that were set aside. Some objections included possible remedies. Most of the proposed remedies involved restarting or enhancing the overall analysis process, or suggested selecting the No Action Alternative.

An independent team of Forest Service resource specialists reviewed all objections. The review team analyzed the issues raised along with the FEIS, Draft ROD, and other documentation in the Project Record. This response is based upon objections raised, the Project Record, and the recommendations of the review team.
Several objectors requested a meeting to discuss the issues raised in their objections. Resolution meetings are held at the discretion of the reviewing officer (36 CFR 218.11(a)). The purpose of such a meeting is for the reviewing officer to gain additional clarity and understanding of the issues and work with the objectors and the Responsible Officials to find opportunities to resolve those issues. The objectors’ issues and proposed remedies are clear. In an effort to weigh the need for a meeting and the timeframe required to complete my review, I decided not to host a resolution meeting.

**Response to Objections**

I appreciate the number of individuals and organizations that took the time to express their concerns. This project has been under analysis and the public involvement process since 2014. Having a lead agency and several cooperating agencies has added an additional layer of complexity to an already complicated process of environmental analysis and disclosure. At the time the FEIS and Draft ROD were made available and objections were raised, a number of steps in the process had yet to be completed. Since then, the U.S. Fish and Wildlife Service has issued its Biological Opinion addressing potential effects on federally listed species; the FERC has issued its Certificate of Public Convenience and Necessity; and old growth and sensitive species surveys, an updated biological evaluation, and other minor updates to the project record were completed. I have taken this information into consideration during my review. I recognize the National Historic Preservation Act consultation and state Clean Water Act section 401 certifications, Clean Water Act Section 404 permits, and several other state and federal permits have yet to be completed or issued. These processes involve additional coordination with numerous agencies and some may require additional studies or inventories, which may result in additional mitigations.

I have reviewed the Construction, Operations and Maintenance Plan (COM Plan) in detail. The COM Plan contains design features, mitigation measures, roles and responsibilities, monitoring, and procedures for construction and operation of the pipeline on NFS lands. It incorporates a large number of additional individual plans and attachments. The COM Plan includes agreed-upon measures to avoid or mitigate adverse effects and will be incorporated as a requirement of the Special Use Permit. Many of the objection issues are positively responded to by information found in the COM Plan. I recognize the lack of a final COM Plan is frustrating to objectors. The FERC process allows information to be gathered and considered after the release of the FEIS. The FERC process also allows for, and expects, minor pipeline route realignment and workspace refinements as the project is implemented and has put processes in place to address this. The FEIS explains the FERC Post-Approval Variance process (Section 2.5.5, p. 2-54 and 2-55) and the Draft ROD notes additional mitigation may be added to the COM Plan, if necessary.

The objection issues and my response are summarized below by topic. My response was developed in light of the following givens:

- New information obtained since the Draft ROD was issued, such as completed surveys and associated mitigations, will be addressed in the final ROD.
- Aspects of the Biological Opinion, particularly reasonable and prudent measures, terms and conditions, monitoring and reporting requirements, and conservation recommendations applicable to NFS lands will be addressed in the final ROD.
- The Responsible Officials will ensure the COM Plan is being followed and any needed corrective actions or adjustments occur in a timely manner.
• The Responsible Officials will provide a mechanism for the public to stay informed as new information is obtained and the project progresses on the National Forests.

• The status of needed follow up actions described in the Draft ROD (for example additional mitigation measures associated with the Visual Impact Analysis, results of the old growth survey, final determinations on Regional Forester Sensitive Species, and status of compliance with Section 106 of the National Historic Preservation Act) will be updated in the final ROD.

**National Environmental Policy Act (NEPA) Compliance**

Objectors’ contentions about Forest Service NEPA compliance cover a wide range of issues. A number of issues relate to the adequacy of the NEPA documentation for the entire pipeline. The issues raised include concerns regarding correct identification of the purpose and need, adequacy of the cumulative effects and range of alternatives, and incomplete information.

The Forest Service, as a cooperating agency, must make a decision whether to issue a Special Use Permit and amend the Forest Plans for the project. The Forest Service may, and has, adopted the FERC’s EIS as the environmental analysis to make our decision. We have an obligation to take a hard look and ensure the environmental impacts of the decision the agency will make are adequately disclosed. However, the scope of the Forest Service decision is narrow – whether to issue a Special Use Permit for a pipeline that would cross 21 noncontiguous miles of the total 604.5 miles of pipeline. The Forest Service does not have the authority to decide whether a pipeline will be built or not. The Forest Service only has the authority to make a decision whether, and if so, where, to allow a portion of the pipeline over NFS land. The NEPA “requires a reasonably close causal relationship between the environmental effect of the alleged cause.”

For the ACP, the Forest Service is not responsible for determining the entire pipeline’s overall purpose and need, nor the appropriate range of alternatives for its route. The Forest Service’s consideration of effects must be adequate for deciding whether to authorize the pipeline across NFS lands; not the effects of the entire pipeline. Therefore, we considered objectors’ issues as they relate to the Forest Service’s specific decision whether to allow the pipeline on the proposed route through NFS lands. Several objection issues dealt with the concerns about the entire pipeline. Those issues include pipeline safety, social and economic issues, private property rights, maintenance practices, and greenhouse gas/carbon emissions issues. I defer to the FERC with respect to overall pipeline authorization issues. Many of these issues are addressed in the FERC’s Certificate of Public Convenience and Necessity for the ACP, issued October 13, 2017.

**Purpose and Need and Range of Alternatives**

**Objections:** Objectors believe there is no evidence to support a new pipeline due to lack of market analysis, insufficient climate change analysis, and lack of a detailed accounting of social and economic costs to private land owners. They contend the development of the purpose and need for the action did not include adequate consideration of whether it was necessary to cross public lands. Further, a number believe the Forest Service should have analyzed routes that:

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2 *Dept. of Transportation v. Public Citizen*, 541 U.S. 752, 767 (2004), cited by the District of Columbia Circuit Court of Appeals in upholding a FERC EIS that disclosed the effects of a pipeline it authorized, but did not disclose the anticipated export of the gas to be transported through the pipeline, because the Department of Energy, not FERC, had the authority to make the latter decision. *Sierra Club v. FERC*, 827 F. 3d 36, 46-47 (2016).
• Avoid NFS lands, utilize existing energy corridors or pipelines.
• Take the shortest route through the NFS lands to minimize impacts and better protect or restore the environment and/or resolve conflicts.
• Co-locate the Mountain Valley Pipeline and the Atlantic Coast Pipeline, either by combining the two projects with a single, larger pipe along the Mountain Valley Pipeline route, or by constructing two parallel pipelines along the Mountain Valley Pipeline route.

Conclusions: The Forest Service accepts the overall purpose and need stated in the EIS. Pursuant to our obligations under 36 CFR 251.54(g) (Proposal and Application Requirements and Procedures), the Forest Service gave “due deference” to the FERC’s finding of the purpose and need for the pipeline. 36 CFR 251.54 (g)(2) (iii). Given the Forest Service’s limited role with respect to the overall proposal, the purpose and need for the Forest Service action is to respond to an application for a Special Use Permit that would authorize a pipeline to cross NFS lands and not to consider whether or not there would be a pipeline at all.

With respect to the range of alternatives, I find there was adequate consideration of the route across the National Forests. The FERC evaluated 27 major pipeline route alternatives including several that did not cross National Forests. Three key criteria were used to evaluate alternatives to consider in detail. An alternative must: 1) be technically and economically feasible and practical; 2) offer a significant environmental advantage over the proposed action; and 3) meet the project’s purpose (FEIS, Section 3.0, p. 3.1). The FERC required “additional environmental information [from Atlantic], requested that [it] assess the feasibility of certain alternatives as proposed by commenters, conducted site visits and field investigations, met with affected landowners and local representatives and officials, consulted with federal and state regulatory agencies, and sought additional public input.” (FEIS, Section 3.0, p. 3-2).

The Project Record shows consideration of alternatives that avoid National Forests. One such alternative would have increased the route by 43 miles to the south and another would have increased the route by 15 miles to the north. The FERC noted, as a general matter, environmental impacts increase as the length of a pipeline route increases. Furthermore, the FERC lacked information concluding a shorter overall route through NFS lands would have significantly greater impacts on sensitive resources because of the lands’ status as NFS lands. The northern route that avoids NFS lands in particular, would pass through the same forest habitats and water bodies, and similar terrain as on the National Forests. Therefore, it was concluded these alternatives would not provide a significant environmental advantage over a shorter route that passes through National Forests (FEIS 3.3.4, pp. 3-18 - 21).

The process of identifying a route through the National Forests involved consideration of numerous alternatives and variations. A route that would co-locate the Mountain Valley Pipeline and the ACP, would have avoided the National Forests, but the FERC found that “[w]hen the environmental factors, technical feasibility, and ability to meet the purpose and need of the projects are cumulatively considered,” this alternative did not offer a significant advantage. (FEIS, Section 3.2.3.2, p. 3-9). Also, the Forest Service rejected a shorter route through the Forests that Atlantic had applied for in 2014 because it did not meet the Forest Service’s initial screening criteria for Special Use Permits set out in 36 CFR 251.54(e)(1)(i) and (ii ), and the route would not avoid the Cheat Mountain, Back Allegheny Mountain, Shenandoah Mountains, and the Cow Knob salamander habitat. The longer route through the National Forests was
analyzed in detail. In conclusion, I find the consideration of alternatives for NFS lands was adequate.

**Incomplete and New Information**

**Objections:** Objectors claim the FEIS lacks sufficient information on which to base a decision and a supplemental EIS is warranted. They contend by issuing the Draft ROD, the Forest Service has adopted a deferred-analysis model of project review in which detailed site-specific plans and analysis of critical environmental issues have been delayed until after the conclusion of the public comment period. Objectors broadly claim the information additions between the DEIS and FEIS were substantive enough to warrant a supplemental DEIS, allowing for another public comment period. Objectors claim critical information concerning issues such as public necessity of the pipeline, alternatives, construction across steep Appalachian ridges, protected species, and karst topography was incomplete or missing altogether.

**Conclusions:** Between the issuance of the DEIS and FEIS and after the issuance of the FEIS and Draft ROD, new information was obtained. Other information from ongoing reviews or permitting processes is yet to be obtained. Some information, such as the mitigation measures in the COM Plan, are subject to change. At this time, I find there is no need to delay the Forest Service’s decision with further NEPA analysis.

Not all new information warrants preparation of a supplemental EIS. A “rule of reason” governs: only when the new information shows the action would “affect the quality of the environment ‘in a significant manner or to a significant extent not already considered, a supplemental EIS must be prepared.” National Committee for the New River v. FERC, 373 F. 3d 1323, 1330 (D.C. Cir., 2004), quoting March v Oregon Natural Resources Council, 490 US 360, 373. The new information would have to present a “seriously different picture of the environmental landscape” than had been described in the EIS, to necessitate a supplemental EIS. Id. (emphasis in original, internal citations and quote marks omitted.)

This rule of reason is particularly apt for this pipeline, which is a large, multistate project involving a number of agencies at the federal and state level with inherent uncertainties and a framework for decision-making established by statute and regulation. This rule of reason allows the Forest Service to proceed to a decision but establishes a standard for judging when new information will trigger additional NEPA analysis.

As I have presented in this response under the specific resource sections, I find the EIS provided sufficient discussion for the Forest Service and the public to understand the effects of the project. Mitigation measures, currently known or to be added later, would be designed to keep effects within the scope of the effects the FEIS describes. If any new information arising in the future indicates a “seriously different picture” than has been described in the EIS, a supplemental EIS would be warranted. The decision about the need for additional analysis resides with the Responsible Officials.

**Cumulative Effects**

**Objections:** Objectors argue there is insufficient cumulative effects analysis for the ACP, rendering the FEIS and Draft ROD incomplete. Specifically:

- The FEIS unreasonably restricts the geographic and temporal scope of analysis, as well as the types and magnitude of the cumulative impacts considered (FEIS at 4-591, 4-596).
- Objectors contend the FERC has not met EPA's requirements to analyze climate change impacts as the EIS did not contain sufficient analysis of the life cycle impact from source to use and the cumulative effects analysis is incomplete and inadequate.

**Conclusions:** The cumulative effects analysis, including geographic scope and temporal guidelines, are found in the FEIS, Section 4.13, pp. 4-591 - 623. The analysis was appropriately conducted and used an approach consistent with the methodology set forth in relevant guidance (CEQ, 1997b, 2005; EPA, 1999). Under these guidelines, inclusion of actions within the analysis is based on identifying commonalities between the impacts resulting from the projects and the impacts likely to be associated with other potential projects. The projects considered are discussed in Section 4.13.2. of the FEIS. For the most part, the unit used for analysis is a HUC-10 watershed. A HUC-10 level watershed tends to be 40,000 to 250,000 acres in size. A HUC-10 level watershed was judged to be neither too large nor too small to identify the cumulative impacts associated with the ACP. Some analyses were smaller, and some, larger than the HUC-10 level watershed, depending upon the resources affected and these differences were appropriate. The time frames varied, depending upon whether effects were short or long term. I find the scopes and durations used for considering cumulative actions and effects were appropriate, and consistent with 40 CFR 1508.7 and CEQ recommendations.

With respect to objectors’ claims the FEIS’s cumulative effects analysis regarding climate change impacts is incomplete and inadequate, the Forest Service defers to the FERC analysis of the pipeline’s cumulative effects on climate change. The decision before the Forest Service is whether to allow a pipeline to cross two national forests. The pipeline’s effects on climate change would not differ because of the route.

**Resource-specific NEPA issues** –

Objectors raise specific NEPA issues with respect to a number of resources. The following resource-specific discussions include responses to those issues.

**Wildlife**

**Objections:** Objectors contend the FEIS and Draft ROD should not have been issued prior to the completion of the Endangered Species Act (ESA) consultation on the pipeline with U.S. Fish and Wildlife Service and National Marine Fisheries Service. They believe the Biological Opinion should have informed the NEPA analysis with expected impacts on protected species and reasonable and prudent measure to lessen the impacts.

Objectors state a disproportionate amount of forest cover removal and other impacts related to construction and operation of the pipeline could adversely affect roosting (sheltering), maternity (breeding), foraging (feeding), and swarming habitat of the Indiana Bat and other threatened and endangered bats.

Objectors are concerned the FEIS and Draft ROD do not adequately address effects on sensitive or locally rare species (such as cerulean warblers, cuckoos, Allegheny woodrat) and relies on the incomplete COM Plan to mitigate impacts. They further state such incomplete analysis makes it difficult to determine actual effects on species diversity and viability. Objectors are concerned by the lack of completed surveys for many species.

Objectors state Management Indicator Species (MIS) such as black bear on the George Washington National Forests could be negatively affected due to increased disturbance, stress,
and vulnerability. Inventory, population, and suitable habitat data is not provided. Foreseeable direct, indirect, and cumulative impacts were not adequately considered and analyzed.

Objectors contend the ACP would fragment contiguous forests, leading to edge effects, reduction of habitat patches, spread of invasive species, and negative impacts for many special species, such as migratory birds, pollinators, amphibians, reptiles, and mammals that need interior forest habitat. They believe the analysis is incomplete and additional information is needed.

**Conclusions:** Effects of the project on federally-listed species were addressed throughout the Project Record, particularly in the Draft ROD (p. 41-42), the FEIS (section 4.7.1 “Endangered Species Act-protected Species beginning on p. 4-245), and associated documents (DEIS, FEIS Appendix R). The FEIS provided sufficient discussion of anticipated effects for the Responsible Officials to issue their Draft ROD. There is no requirement for an ESA consultation to be complete when a Draft ROD is issued. On October 16, 2017, an ESA consultation was completed with the issuance of the Biological Opinion by U.S. Fish and Wildlife Service. The Biological Opinion concluded the FERC authorization to construct and operate the ACP, as proposed, is not likely to jeopardize the continued existence of any of the eight species addressed in the Opinion.

The analysis of project effects to bats, particularly ESA-listed bat species, is adequate as presented in the Draft ROD, FEIS (Appendix R) and Update to the Biological Evaluation for the Monongahela and George Washington National Forests FINAL (August 4, 2017). These documents reference a variety of surveys and mitigation measures that would help conserve bat species.

Effects on Regional Foresters’ Sensitive Species (RFSS) and other locally rare species were addressed in numerous places in the Project Record including: the Draft ROD; FEIS (4.7.3.1, associated plans and appendices, specifically Appendix R); Draft Biological Evaluation (March 10, 2017) and Forest Service comments on the Draft Biological Evaluation (April 24, 2017); Appendix B: Update to the Biological Evaluation for the Monongahela and George Washington National Forests FINAL (August 4, 2017), and the Draft COM Plan and the Forest Service comments on the Draft COM Plan. Appendix R contains two tables (R-1 for RFSS on the Monongahela National Forests and R-2 for RFSS on the George Washington National Forests) that discuss habitat and species occurrence, detail potential impacts and conservation measures, and provide a status of determination of effects.

Potential impacts to all MIS for both National Forests are addressed in the Project Record, most notably in Appendix R of the FEIS. Table R-3 outlines Forest Plan objectives and describes habitats for each species as well as discusses potential impacts, lists conservation measures and provides effects conclusion. Overall impacts to MIS and species associated with habitats of concern will be minimal due to planned mitigation measures discussed throughout the FEIS (i.e., sections 2.3, 4.4, 4.5, 4.6, 4.7, 4.8.1, and 4.8.1.1), appendices (particularly Appendix R-3 as noted above), and implementation of various construction, restoration, and operation plans. Appropriate mitigation measures, including these plans, have been made part of the COM Plan.

The forest fragmentation analysis was revised and included in the FEIS. The FEIS discusses interior forest habitat fragmentation and edge effects in detail in Section 4.5.6. The FEIS states, “ACP… would not be expected to contribute to a significant reduction in the overall amount of forest cover available on a regional level; however, localized impacts on wildlife could be more significant depending on the species. (p. 4-188).” The operational corridor of the pipeline would
be cleared of trees within 15-feet and a 10-foot strip over the pipeline would be maintained in an herbaceous state. This impact would be long term, but it is unlikely the cleared corridor would serve as a long-term barrier to wildlife movement. Therefore, I find the Project Record effectively addressed the wildlife issues.

**Riparian, Soils and Vegetation**

**Objections:** Objectors contend the FEIS should specify how the project complies with Virginia Best Management Practices (BMPs), including how stream management zones would be protected. Objectors contend wider stream buffers should have been considered. Objectors argue the FERC prematurely concluded the project would not significantly impact wetlands before the wetland mitigation plan had been completed or wetland permits had been issued. In addition, surveys to identify wetlands are incomplete.

Objectors contend the assessment and analysis of environmental affects and resource impacts related to soil disturbance and revegetation is deficient, including the sediment modeling. The efficacy of erosion control mitigation is questioned. The objectors cite numerous instances where environmental impacts either were analyzed with inadequate or incomplete information or not evaluated at all and some relevant information was available but not utilized sufficiently.

Objectors contend the pipeline corridor could facilitate the spread of invasive plant species and additional impacts and site disturbances from the project would allow invasive species to spread into un-invaded areas on both public and private lands. Objectors are concerned extensive use of chemical herbicides could be the only control method for nonnative plant species in the pipeline corridor, negatively impacting surface water quality, groundwater, invertebrates, and fish; and these effects were not adequately assessed in cumulative impacts.

Objectors believe a buried pipeline would cause massive and permanent damage to 17 perennial, 28 intermittent, and 11 ephemeral water bodies the ACP will cross on NFS lands. The containment and mitigation plans are not sufficient to protect water bodies. The ACP crosses 26 native brook trout streams in the George Washington National Forests. The FEIS does not disclose the impacts that are likely to impair water quality, harm aquatic life, and pose long-term threats to forest water resources.

Objectors contend the FEIS understates impacts of erosion and sedimentation by relying on unreasonable assumptions about the efficacy of BMPs and mitigation measures, to mitigate impacts to aquatic habitat. The objectors note the FEIS says the "sublethal effects thresholds" are not known for fishes on NFS lands, and the conclusion sedimentation effects from the ACP will be minimal is, therefore, not supported. The impacts from increased stormwater runoff from the pipeline right-of-way are "unknown," and the FEIS does not include an analysis of the effectiveness of mitigation measures to protect against these impacts.

**Conclusions:** The Special Use Permit for the ACP will require compliance with erosion and sedimentation control and stormwater plans mandated by the West Virginia Department of Environmental Protection and Virginia Department of Environmental Quality. Atlantic would
implement BMPs, as well as Atlantic’s internal management standards and specifications\(^3\). Where required by the FERC Plan and Procedures\(^4\), permanent erosion controls, such as slope breakers, would be installed to aid long-term stabilization along with restored vegetation. The FEIS specifies measures to reduce impact and restore disturbed riparian areas through intensive revegetation efforts including restoration of in-stream woody debris habitat. (FEIS sections 4.3, 4.5.9 and 4.6). Protection of riparian communities is emphasized throughout the Project Record and the COM Plan.

Limiting impacts to wetlands is a priority. The FEIS, Section 4.3.3.8, recognizes final mitigation requirements have not been determined, but requires a copy of the final wetland mitigation plans and documentation of U.S. Army Corps of Engineers (USACE) approval of the plans be filed. The FERC recommended mitigation in the FEIS states Atlantic shall file a copy of its final wetland mitigation plans and documentation of USACE (Clean Water Act, Section 404 Permit) approval of the plans. This is also required in the FERC’s Certificate of Public Convenience and Necessity as Environmental Condition 53 which says Atlantic “shall file with the Secretary a copy of its final wetland mitigation plans and documentation of USACE approval of the plans.”

The Project Record for soils indicates the Order 1 Soil Survey, completed at the Forest Service request, was used and will serve to ensure application of the best mitigation and revegetation techniques. Any necessary mitigation measures, including those to ensure adequate revegetation for soil and water effects, will be included in the COM Plan or can also be added as separate terms and conditions in the Special Use Permit beyond the COM Plan, if needed.

The Invasive Species Management Plan for the ACP is designed to identify areas supporting invasive plants prior to construction; prevent the introduction and spread of invasive plants from construction equipment moving along the right-of-way; contain invasive plant propagules by preventing segregated topsoil from being spread to adjacent areas along the construction right-of-way; and address invasive plant infestations that develop during restoration and operation of the Projects. The Invasive Species Management Plan includes actions for pre-treatments, preventative treatment measures during construction, post-construction treatments, and follow-up monitoring activities. Herbicide applications necessary to prevent and control invasive plants will be consistent with applicable state and federal regulations and in compliance with Forest Service pesticide use policy requirements when conducted on NFS lands. Herbicide application will be based on information gathered from field surveys and consultations with applicable State/Commonwealth or Federal agencies. Before application, Atlantic or its Contractors will obtain required State/Commonwealth or local permits and landowner approval. Further, the FERC’s Certificate of Public Convenience and Necessity requires Atlantic to file an updated Invasive Species Management Plan. Environmental Condition 18 in the appendix of the Certificate requires Atlantic “to revise their Restoration and Rehabilitation Plan and Invasive Species Management Plan to minimize and/or restrict herbicide, pesticide, and insecticide applications.” This condition will improve protection for rare species, waterbodies and wetlands, karst features,

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\(^3\) Dominion Energy Transmission Inc (DETI) 2016 Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management for Construction and Maintenance of Linear Gas Transmission Pipeline, and Dominions SAIPR (Slip Avoidance, Identification, Prevention, and Remediation) Policy and Procedures Handbook

\(^4\) The FERC Plan and Procedures are a set of construction and mitigation measures developed in collaboration with other federal and state agencies and the natural gas pipeline industry to minimize the potential environmental impacts of the construction of pipeline projects in general.
and sensitive features as identified by West Virginia and Virginia Natural Heritage Program recommendations.

Based on my review of the Project Record as highlighted above, issues raised by Objectors regarding riparian, soils, and vegetation have been properly addressed.

**Steep Slopes, Landslides, Caves and Karst**

**Objections:** Objectors point out the ACP would cross 4.4 miles of the Monongahela National Forest with a high incidence of landslides, 1.9 miles of slopes of 20 to 35 percent, and 0.7 miles of slopes greater than 35 percent. The ACP would cross 9.3 miles of the George Washington National Forest that has a high incidence of landslides and 6.6 miles with a moderate risk of landslides. The ridgelines and steep backslopes over which the ACP would be built on NFS lands are comprised mostly of silt-rich soil of a small (2 to 50 micrometer) particle size that is most susceptible to erosion due to its light weight and minimal cohesiveness. Objectors assert there has been insufficient analysis of high hazard/steep slope areas. The FEIS admits that Atlantic has "not yet completed the Phase 2 analysis and field surveys at all evaluation sites, and final measures related to slope hazards have not yet been completed[.]"

The objectors advise cave systems should have been recognized to exist in the area of the proposed pipeline and a full analysis of impacts from the project on caves systems and other karst features should have been completed.

Objectors contend the ACP will negatively impact two sinkhole ponds and surrounding drainage area of Browns Pond Special Biological Area, including rare species associated with a depression. They believe there is a lack of information on hydrological connectivity of the area and that Atlantic has not been clear on their planned use of Forest Road 281.

**Conclusions:** The Project Record shows that steep slopes, landslides, caves and karst issues are adequately, and often extensively, covered. The COM Plan consists of a number of individual topical plans and attachments applicable to construction and operations of the ACP on NFS lands. The COM Plan is the repository and reference for new and amended permits, approvals, clearances and plans that may be issued during the planning, construction and operation portion of the project on NFS lands (p. 3, Draft COM Plan). The COM Plan details how the project will be implemented on the ground. In order to reduce environmental impacts, Atlantic will both follow the COM Plan and also, “implement the construction and restoration measures identified in the FERC Plan and Procedures, and their Restoration and Rehabilitation Plan, COM Plan (for activities on NFS lands), SPCC Plan, HDD Contingency Plan, Timber Removal Plan, Invasive Plant Species Management Plan, Fire Prevention and Suppression Plan, Open Burning Plan, Fugitive Dust Control and Mitigation Plan, WVDEP’s Erosion and Sediment Control BMP Manual, the Virginia Erosion and Sediment Control Handbook, the Pennsylvania Erosion and Sediment Pollution Control Handbook, and the North Carolina Erosion and Sediment Control Planning a Design Manual.” (FEIS, p. ES-11)

The COM Plan will be attached to and made a part of the Special Use Permit. The FEIS, p. 2-31 explains Atlantic and the Forest Service are engaged in ongoing communications to develop measures to avoid and minimize impacts on NFS lands. Communications continue as the project proposal is refined. Any revisions or modifications to the COM Plan that are not described in the FEIS would be included as requirements in the Special Use Permit.
The COM Plan describes, in Section 2.1.9.5 Steep Terrain, how Atlantic will address construction in areas of steep slopes (COM Plan, p. 28). The COM Plan, p. 114, details how hazards will be dealt with as follows “The BIC Program Team convened in a series of design workshops to examine the identified hazards and supporting information along the pipeline alignment. The hazards were initially identified by studies such as the geohazards assessment or the karst study, and/or from other targeted studies such as the Order 1 Soil Survey. These studies identify and assess or support the review of the hazard, and provide a basis to select the most applicable and robust BIC mitigation response to minimize or eliminate the hazard, and then monitor the hazard through ongoing operations.” Attachment C of the COM Plan is the “Slope Stability Policy and Procedures”.

Adherence to the U.S. Department of Transportation pipeline safety regulations at 49 CFR 192.317(a) require Atlantic to take all practicable steps to protect the pipeline from washouts, floods, unstable soil, landslides, or other hazards that may cause the pipeline to move or to sustain abnormal loads. As part of the COM Plan, soil slips will be repaired and restored when they occur due to pipeline construction during and after construction.

In addition, while engineering designs and construction are based on industry best management practices to prevent slope failures and landslides, the COM Plan provides a process to correct issues as they are encountered due to unforeseen conditions or discovered natural defects. My review found that the Project Record adequately addresses steep slopes, landslide hazards and erosion control measures.

The potential existence of caves and karst, as well as a full analysis of potential impacts to caves and karst are addressed in depth in the FEIS (4.1.2.3, and Appendix I, pp. I-13 -15). No significant caves were determined to exist on NFS lands in the proposed pipeline corridor during surveys conducted on the ground and remotely. The FEIS, Section 4.3.1, describes Atlantic’s measures to reduce the potential to impact karst features and groundwater resources, which are in accordance with the cave and karst-related standards, guidelines, design criteria, and goals of both the Monongahela National Forest and George Washington National Forest Forest Plans.

The FERC requested additional inventory work to further pinpoint areas of potential karst/cave development in the FEIS (5.1.1). If any additional caves or karst features are inventoried during this process they will be addressed following the FEIS Appendix I Karst Terrain Assessment, Construction, Monitoring, and Mitigation Plan, which is part of the Project Record.

Analysis related to wildlife dependent on cave and karst systems is in the FEIS (4.2.5.4, 5.1.5) which states, “Subterranean obligate species are often endemic to only a few known locations, and are vulnerable to changes in hydrological pattern or water quality; therefore, it is possible that impacts associated with construction activities could have population level effects on these species.” Given the nature of shallow pipeline trenching relative to deeper aquifers, the FEIS concludes effects on groundwater and subterranean species would be less than significant.

The FEIS, p. 424, discloses, “The proposed access road would follow Forest Road 281 where it consists of a two-track primitive road along the southern boundary of Rx 4D-Browns Pond Special Biological Area. In response to the Forest Service’s recommendation, Atlantic stated it would widen the entrance-way where Forest Road 281 intersects Indian Draft Road, and apply gravel to the road surface. Atlantic contends it is not proposing construction or reconstruction of Forest Road 281.”
Based on my review of the Project Record as highlighted above, issues raised by Objectors regarding steep slopes, caves and karst have been properly addressed.

Aquatics and Groundwater

Aquatics

Objections: Objectors contend the DEIS was released prematurely, since the requisite full, intensive, and competent surveys, inventories, and data gathering for listed and agency-recognized species of freshwater mussels and their host species had not been performed. Objectors are concerned multiple topics including fish host species, timing of activities, potential water contamination from corridor maintenance, steep slopes within the units, and levels of large woody debris have not been adequately analyzed.

Objectors contend the pipeline will cause negative impacts to water quality, impacting trout habitat and populations. They state impacts will result from increased sediment as a result of construction and ineffective mitigation, and increased water temperatures from removal of vegetation around waterbodies. Objectors believe surveys were inadequate for many fish species. They believe the Draft ROD improperly dismisses effects on brook trout streams crossed by the ACP and access roads and fails to discuss impacts on all sensitive streams.

Conclusions: Atlantic is conducting additional aquatic surveys at the request of the Forest Service and intends to complete them during 2017. The results of these surveys will inform site specific pipeline location, sedimentation mitigation, and potential relocation of ESA listed species. If ESA listed mussels are found by Atlantic during construction, Atlantic would implement mussel relocation efforts or design crossings to reflect mitigation measures for protection of listed mussels (FEIS, p. 4-312). In accordance with the Virginia Relocation Plan and Freshwater Mussel Relocation Plan, Atlantic will attempt to trap aquatic species at all perennial and intermittent stream crossings to limit mortality when water is diverted.

Implementation of mussel relocation is also a requirement of the FERC’s Certificate of Public Convenience and Necessity (See pp 86 and 140). Restrictions on the time of year construction can take place in streams (FEIS Section 4.6.1.2) are designed to minimize the impacts of construction on aquatic species of concern.

The FEIS explains constructing the pipeline will reduce shade in some riparian areas, resulting in a slight temperature increase in waterbodies. The FEIS, p. 4-114, states, “Large woody debris, where available and appropriate habitat conditions exist, would be placed adjacent to waterbody crossing to add shade and fish habitat. Forested riparian areas would be restored and enhanced using planting of native shrubs and trees, excluding the 10-foot corridor centered on the pipeline.” These measures help protect aquatic species. Forest Plan standards and guidelines will be met and impacts to aquatic species will be kept within acceptable levels by following the mitigation measures in the FEIS and COM Plan. The aquatic issues raised in the objections are aptly addressed in the Project Record.

Groundwater

Objections: Objectors contend the pipeline could negatively affect groundwater by re-directing run-off, disturbing sensitive karst by digging and blasting and potentially burying waterways and springs. The headwaters of drinking water sources for towns near the pipeline contain extremely sensitive karst terrain. Objectors believe drinking water for residents both within and outside the NFS lands will likely be disturbed or ruined. Springs could become polluted, creeks could dry
up, water containing chemicals from drilling or possible spills could flow into wells and water systems.

**Conclusions:** The FERC acknowledges in the FEIS activities associated with pipeline and above-ground facility construction have the potential to affect groundwater. Surface drainage and groundwater recharge patterns can be temporarily altered by grading and trenching, potentially causing minor fluctuations in groundwater levels and increased turbidity in shallow aquifers. These impacts would be minimized or avoided through the FERC Plan and Procedures and measures outlined in Construction and Restoration Plans (FEIS, Table 2.3.1-1, p 2-28). Compliance with these plans and enhancement of several measures are found with the FERC’s Certificate of Public Convenience and Necessity.

Sediment, spills, and drilling fluids could contaminate water resources such as springs, drinking water, and streams during construction. Measures identified in the COM Plan and Attachment H: Karst Mitigation Plan are designed to prevent or minimize impacts to water resources related to karst. The Karst Mitigation Plan details pre-construction survey requirements and construction monitoring requirements designed to protect karst features and water within the karst system. In addition, the Karst Mitigation Plan details requirements for notification and consultation with a variety of federal and state agencies. It also contains a list of karst mitigation and conservation procedures, including a detailed list of measures to avoid impact to the karst aquifer and environment. Therefore, I conclude that ground water issues were adequately addressed.

**Visual and Recreational Issues**

**Objections:** Objectors contend impacts to visual and recreational characteristics were not adequately analyzed or were improperly dismissed in the FEIS. The FEIS mentions and dismisses scenic impacts on Torry Ridge Trail, Three Ridges Overlook, Ravens Roost, and Cedar Cliffs. They state that the FEIS dismissed long-term visual impacts and failed to consider visual impacts to multiple other popular locations and trails. In addition, they conclude the visual impacts analysis relies on inadequate information.

Objectors believe the proposed Forest Plan amendments would be unprecedented and would significantly erode the value of viewsheds of the National Forests, the Great Basin Trail, the Blue Ridge Parkway, and the Appalachian Trail; recreation areas such as the Sherando Lake Recreation Area and the Braley Pond Day Use Area, degrading the overall experience of trail users and possibly costing Virginia tourist dollars.

Objectors contend the proposed construction corridor and permanently-cleared corridor will significantly degrade the scenic quality of the southern end of the proposed Shenandoah Mountain National Scenic Area, in violation of the moderate Scenic Integrity Objectives of the Forest Plan for Hankey Mountain area.

Objectors assert the ACP will provide miles of easy, illegal motorized access to wilderness, roadless areas, old growth forest and other interior portions of the Forest. Signs, fences/gates, rocks and other barriers have not proven effective across many sites on NFS lands. The FEIS must analyze mitigation measures in detail and explain the effectiveness of such measures.

**Conclusions:** As a cooperating agency and in accordance with 40 CFR 1501.6, the Forest Service provided input on the analysis and worked with the FERC and the proponent to develop
mitigation measures for scenery that would reduce or eliminate impacts to resources on NFS lands. Mitigation and expected effectiveness relevant to NFS lands was discussed in the DEIS (Section 4.8.9, pp 4-376 - 4-377) and the FEIS (p. 4-467 and 4-475). The Forest Service provided feedback to draft visual impact assessments. The Draft ROD disclosed the mitigation that had been developed and will continue to be refined to ensure consistency with Forest Plans as amended and to minimize visual impacts to areas of high scenic value and other highly used recreation areas and trails (Draft ROD, pp 36 and 37).

The Draft ROD states approval to begin operations on NFS land will require incorporating changes (e.g., additional mitigation measures) into the COM Plan necessary to meet the requirements of 36 CFR 25 Subpart B and ensure consistency with the two Forest Plans as amended (Draft ROD, page 33).

Mitigation for off-road vehicle use was discussed in the COM Plan (Section 18.0 Off-Highway Vehicle (OHV) Blocking Plan). The Forest Service provided feedback to sections of the blocking plan. The OHV Blocking Plan discussed that travel along the proposed pipeline (and associated access roads) could lead to unauthorized motorized entrance. Blocking measures will be considered at all Forest roads crossed by the ACP, and other locations determined by the Forest Service to be likely access points for OHVs to travel along the pipeline. These locations are provided in Table 18.3-1. Various blocking measures will be considered for installation at each of the locations listed from Table 18.3-1. Methods are described in detail in Section 18.4 and include: Berms; Rock and Woody Material Distribution; Existing Vegetation; Surface Preparation; Gates; and Signs. The site-specific measures, and placement of any physical barriers, will be approved by the Forest Service. Further, in conjunction with its post-construction restoration monitoring, Atlantic will monitor each site for two-years following completion of construction activities, and will annually prepare a report documenting their effectiveness and needed corrective measures.

Based on the above discussion and documentation in the Project Record, I conclude that visual and recreation issues have been appropriately addressed.

**Wild and Scenic River Values and Potential Wilderness**

**Objections:** Objectors contend the FEIS makes a cursory statement on designated Wild and Scenic Rivers but fails to mention there are a number of Virginia waterways in the pipeline corridor that are eligible Wild and Scenic Rivers. Objectors claim the FERC does not explain whether any aspects of the project could impact the Outstandingly Remarkable Values for which these rivers were found to be eligible Wild and Scenic Rivers under the George Washington National Forest Forest Plan Revision process. They believe the FEIS does not address whether any aspect of the project would preclude designation as a wild and scenic river or would preclude future eligibility as a wild and scenic river. The amendment to manage prescription 2C3 would allow for major reconstruction of existing Forest Road 281, an Eligible Recreation River Corridor associated with the Cowpasture River. Objectors note the FEIS and Draft ROD conclude that because of unspecified mitigation, the amendment "would not substantially affect the outstandingly remarkable values associated with the Cowpasture".

Objectors argue the proposed amendments conflict with 36 CFR § 219.10(b)(v), which requires Forest Plans (and amendments) to protect rivers found eligible or determined suitable for the National Wild and Scenic River system, with regard to Forest Road 281.
Objectors are concerned Paddy Knob potential wilderness area that is next to the proposed ACP crossing of Allegheny Mountain, may be negatively impacted by the proposed pipeline.

**Conclusions:** In terms of Wild and Scenic River suitability, the objectors mention two rivers which were determined to be eligible for designation under the Wild and Scenic Rivers Act in the George Washington National Forest Forest Plan (2014): Bullpasture River and Cowpasture River. The Bullpasture River is not located within the project area and is, therefore, not included in the Draft ROD and FEIS.

The ACP project includes a proposal to cross the Cowpasture River within Segment B of the river on private lands. This segment of the river was found eligible for designation in the FEIS for the Revised George Washington National Forest Forest Plan due to its free-flowing condition and outstandingly remarkable fish and wildlife and historic and cultural values. The preliminary classification for this segment was determined to be “Recreational” based on the fact that several roads cross the river, concentrated development exists along portions of the river, and there is a small dam on the river in the Millboro Springs area.

The assessment of impacts on the Cowpasture River with measures that would be implemented to avoid, reduce, or mitigate those impacts are found in section 4.6 for fish and wildlife and section 4.10 for historic and cultural Outstandingly Remarkable Values. The impacts analyzed were related to Forest Road 281. The FEIS, at p. 424, discloses, “The proposed access road would follow Forest Road 281 where it consists of a two-track primitive road along the southern boundary of Rx 4D-Browns Pond Special Biological Area. In response to the Forest Service’s recommendation, Atlantic stated it would widen the entrance-way where Forest Road 281 intersects Indian Draft Road, and apply gravel to the road surface. Atlantic contends it is not proposing construction or reconstruction of Forest Road 281.” Therefore, there is no “major reconstruction” planned for this road.

The Draft ROD indicates, “with incorporation of appropriate mitigation”, the reconstruction of Forest Road 281 within the Rx 2C3 area would “not substantially affect the outstandingly remarkable values associated with the Cowpasture River Segment B” as the standard “already allows for road reconstruction activities to take place in the Management Prescription area for a variety of purposes.” This conclusion is not based on “unspecified mitigation” but on the specific use and reconstruction proposed by Atlantic. The Draft ROD further states, “Should it be determined that reconstruction of this road is needed for long term monitoring of the ACP, measures that are necessary to protect the resource values of Cowpasture River Segment B would be incorporated into the Special Use Permit and the COM Plan”. I find Wild and Scenic River Values have been satisfactorily addressed.

The ACP does not cross the Paddy Knob Potential Wilderness Area nor is it located immediately adjacent to the area. There is no need for additional analysis.

**National Forest Management Act (NFMA) Compliance**

**Plan Amendments**

**Objections:** Many objectors believe amending two Forest Plans should not be done. They believe the existing plans, prepared collaboratively, provide the proper balance and standards should not be modified to meet Atlantic’s needs.
Some objectors also disagree with the Forest Service’s determination that substantive Planning Rule provisions are not “directly related” to the proposed amendments and, therefore, do not apply. They contend the agency appears to ignore other criteria at play when determining whether an amendment directly relates to a rule provision. (36 CFR 219.13(b)(5)(i) and (b)(5)(ii)(A)). They contend the Forest Service has not shown it can allow these modifications yet still satisfy the substantive requirement of the NFMA and ensure the agency meets its fundamental obligations to protect soil and water resources.

Conclusions: The Responsible Officials properly determined the following:
- The Monongahela National Forest proposed amendments to plan standards for soil, and threatened and endangered species are not "directly related" to the substantive rule provisions.
- The George Washington National Forest proposed amendments to utility corridor, soil and riparian, Appalachian National Scenic Trail crossing, and scenery integrity objective standards, as well as the standard relating to old growth (if needed) and 2C3 recreation river area (if needed), are not "directly related" to substantive rule provisions.

Following procedures at 36 CFR 219.13(b)(5)(ii)(A), a responsible official determines when a proposed amendment is directly related to any of the substantive rule provisions of 36 CFR 219.8 through 219.11 based on whether the amendment would have “substantial adverse effects” or would “substantially lessen protections for a specific resource or use.” The Responsible Officials properly determined there would not be substantial adverse effects or a substantial lessening of protections due to mitigation requirements in the COM Plan and mandated by the modified standards. Therefore, the substantive rule provisions of 36 CFR §§ 219.8 through 219.11 are not “directly related” to the amendments and do not need to be applied.

Comment Period for Changed Amendments –

Objections: A few objectors claim the Forest Service violated 36 CFR 219.4 when it did not provide a comment period on the June 5, 2017 Federal Register “Notice of the Updated Information Concerning the Atlantic Cost Pipeline Project and Supply Header Project and the Associated Forest Service Land and Resource Management Plan Amendments.” They contend changes to the proposed Forest Plan amendments made late in the process differ from the proposal set out in the DEIS and the public had no opportunity to comment on the changes. A few objectors contend the proposed amendment to Monongahela National Forest Forest Plan standard TE07 was not considered in the DEIS and was not among those noticed on June 5, 2017, therefore the Forest Service failed to give adequate public notification of this proposed amendment.

Conclusions: The “Notice of Updated Information” published in the Federal Register on June 5, 2017 met the requirement at 36 CFR 219.13(b)(2) to provide information on which substantive requirements of 36 CFR 219.8 through 219.11 are likely to be directly related to the amendments. The “initial notice for the amendment” was published on February 27, 2015. The requirement to provide information on which substantive requirement of 36 CFR 219.8 through 219.11 are likely to be directly related to the amendments did not exist until the December 15, 2016 amendment to the 2012 Planning Rule, which became effective January 17, 2017. There is no requirement in the Planning Rule to take comment on such notice.

Standard TE07 of the Monongahela National Forest plan was not identified as potentially needing modification in the DEIS because biological surveys were not completed until after
publication of the DEIS. Therefore, it was reasonable for standard TE07 to be identified in the FEIS and the Draft ROD.

The approval of plan amendments is consistent with 36 CFR 219.

**Objection Review Conclusion:**

The objection process documented in this review complies with the regulations at 36 CFR 218 for a predecisional administrative review process. These regulations provide opportunity for concerns to be raised and considered on a project-by-project basis prior to a decision being made. My written response concludes the administrative review process for the Project-Specific Plan Amendments to the Monongahela National Forest and George Washington National Forest Forest Plans and Special Use Permit Authorization for the ACP Project decision by the Forest Service. In accordance with 36 CFR § 218.11(b)(2), my written response is not subject to further review from any other Forest Service or U.S. Department of Agriculture official.

Sincerely,

/s/ Glenn Casamassa  
GLENN CASAMASSA  
Reviewing Officer