January 23, 2015

H. Thomas Speaks, Jr., Supervisor
George Washington and Jefferson National Forests
5162 Valleypointe Parkway
Roanoke, VA 24019

RE: Atlantic Coast Pipeline LLC special use permit application

Dear Supervisor Speaks:

Thank you for the opportunity to comment on the September 29, 2014 application by Atlantic Coast Pipeline LLC (ACPLLC) for a permit to conduct surveying activities in the George Washington National Forest (GWNF) for purposes related to pipeline construction, including collection of environmental data needed to support the review and permitting of the pipeline construction project. The following comments are provided on behalf of the Dominion Pipeline Monitoring Coalition. We also endorse and incorporate the comments concerning the ACPLLC special use permit application submitted to the Forest Service by Appalachian Mountain Advocates and Southern Environmental Law Center.

It is our opinion that the Forest Service should reject the ACPLLC survey application because it is incomplete and the proposed survey will not provide the data that will be required for (1) informed project planning and design by the applicant, (2) informed review of the proposed pipeline project by the Forest Service, and (3) comparative evaluation of multiple pipelines corridors that currently cross or are proposed to cross National Forest lands in Virginia and West Virginia.

We further believe that the Forest Service would be wrong to consider the proposed ACPLLC survey activity as an independent project rather than an integral component of the proposed ACPLLC pipeline project. Approval of the survey project on the basis of the submitted application would preempt meaningful review and consideration of the proposed pipeline project as a whole. A segmented approach to review of the proposed pipeline would be inconsistent with requirements of the National Environmental Policy Act (NEPA), and it would fall short of public expectations for National Forest management.

Our opinion that the ACPLLC special use permit application is incomplete is based on the following:

1. Failure to properly identify and evaluate route alternatives.

In Section 13a of the submitted application form (SF-299), the applicant states that no alternative routes have been identified for the surveys (field, environmental, cultural resource, and civil surveys). In Section 13b the applicant further states that the question concerning selection of

alternatives is not applicable. These statements are inaccurate. Moreover, compliance with NEPA requires that the Forest Service consider alternatives in decision making associated with activities that have the potential to significantly affect the natural environment. The applicant has not provided the information that would allow the Forest Service to meet this NEPA obligation.

Contrary to the applicant's statements in the special use permit application form, the applicant has, in fact, identified and evaluated route alternatives both within and outside of the boundaries of the GWNF.[1] Although the analysis and consideration of alternatives is cursory, the applicant recognizes, and describes evaluation of various sets of alternatives in its Resource Report 10 Alternatives pre-filing submission to the Federal Energy Regulatory Commission (FERC; Docket No. PF15-6-000). These alternatives include what the applicant designates as system and major alternatives, as well as alternatives specific to the GWNF and the Monongahela National Forest (see **Appendix I; Figures 1-5**). It is misleading for the applicant to assert to the Forest Service and other stakeholders that no alternatives were identified when that is clearly not the case. This is a significant misrepresentation, which should by itself be sufficient reason for the Forest Service to reject the submitted application.

Further compounding this misrepresentation is the applicant's failure to acknowledge that the GWNF Management Plan clearly directs that if new pipelines cannot be located outside of the National Forest, they should, where possible, be located in Designated Utility Corridors.[2] Again, the applicant failed to provide critical information in its submitted application form (SF-299). Among the "system alternatives" identified and rejected by the applicant in the above cited submission to FERC is an existing Columbia Gas pipeline that crosses the GWNF via Designated Utility Corridors (see **Appendix I; Figure 6**). In addition to failure to identify alternatives in its survey permit application, ACPLLC provided no indication that it considered the Forest Management Plan or its requirements concerning the use of existing Designated Utility Corridors.

Contrary to the information submitted by ACPLLC, alternate routes for the ACP pipeline have been identified and evaluated by ACPLLC. ACPLLC has also taken the next step and selected a preferred alternative from among the identified alternative routes. At this point, however, none of the stakeholders except ACPLLC have had an opportunity to examine the alternatives and the information that serves as the basis for the selection among the alternatives —not the Forest Service, not FERC, and not the public. We share a responsibility to ensure that management of

[1] Alternative routes outside of the National Forest boundaries should be considered first. The purpose of special use authorizations is to ". . . provide for those private uses of Forest land that are necessary to serve the public interest and whish cannot be accommodated on non-Federal land." (GWNF Management Plan, page 2-31)

[2] Management prescription 5C designates utility corridors and provides that "Where possible, existing corridors are expanded as needed rather than creating additional areas." (GWNF Management Plan, page 4-76)

our public lands is based on informed decisions. We also share a responsibility to ensure that our national environmental policy, as represented by NEPA, is implemented. Acceptance of the incomplete and inaccurate application submitted to the Forest Service by ACPLLC would prevent meaningful exercise of these responsibilities.

2. Failure to address potentially significant environmental impacts.

The environmental survey design proposed to the Forest Service by ACPLLC involves only the least amount of data collection required for minimal compliance with selected provisions of the Clean Water Act (CWA) and the Endangered Species Act (ESA). Moreover, the proposed survey design reflects minimal consideration of existing and available information related to environmental attributes and sensitivities. Of even more significance, the proposed survey design and other application material includes no reference to, nor apparent consideration of, the GWNF Management Plan.

Forest Service responsibilities include, but are not limited to, compliance with the CWA and the ESA. As described in the GWNF Forest Management Plan, the Forest Service has broad responsibilities associated with sound and sustainable National Forest management.

The proposed ACP is one of the largest and potentially most-significant developments proposed for the GWNF and adjacent lands in recent years. Effective implementation of the GWNF Management Plan and compliance with NEPA is critical. ACPLLC may take the position that the proposed survey is an independent activity, and that the potential impacts of the actual pipeline construction and maintenance should be addressed later and separately. However, a failure on the part of the Forest Service to require needed data collection and consideration of potential environmental impacts during the survey phase of the project will have the result that needed information will not be available when later decisions are made concerning pipeline construction. The Forest Service can and should require that the needed data are obtained now during the preliminary survey phase. This will both inform consideration of alternatives and provide an informed basis for decision making about the construction project, including identification of necessary permit conditions. Failure to require needed data collection and analysis now will result in less-competent National Forest management later.

ACPLLC survey plans do not include the data collection and analysis needed to assess and avoid or mitigate the environmental impacts of its proposed project in the GWNF. As National Forest stakeholders we suggest that data collection is needed in the following areas:

Slope stability

Slope failure or earthen slippage is a problem with construction on steep slopes that results in impacts to downslope areas including damage to both terrestrial and aquatic habitat. ACPLLC has not addressed this critical issue in its survey permit application to the Forest Service.

Recent problems at multiple locations at Dominion pipelines construction sites in western West Virginia illustrate the importance of collecting information prior to pipeline construction in order to identify risks and provide the information necessary to avoid slope failures. As described in a Consent Order issued by the West Virginia Department of Environmental Protection (WVDEP; Order No. 8078, 10/01/14), slope failures associated with Dominion pipeline construction resulted in water quality violations affecting a number of separate streams in several West Virginia counties (see **Appendix II**). This poor performance by a primary ACPLLC partner is a major cause for concern, given that the proposed ACP pipeline corridor across the GWNF goes over much-higher mountains than those associated with the violations listed in the WVDEP Consent Order.

An important outcome of the above cited WVDEP Consent Order is that Dominion is required to conduct a geotechnical analysis and prepare a report that describes the causes of historical pipeline right-of-way failures. The order also requires that Dominion develop a company policy for avoiding such problems with future pipeline construction projects. This policy will evidently apply to the part of the ACP that crosses West Virginia and the Monongahela National Forest. It should also apply to the ACP in Virginia and the GWNF. This will require collection of the type of geophysical and hydrologic data that are required to evaluate the potential for slope failure. The ACPLLC application to the Forest Service for a survey permit provides no indication that such data will be collected.

It should be noted here that the Forest Service has published a Slope Stability Reference Guide for National Forests in the United States.[3] It may be that this 1994 publication has been supplanted by additional Forest Service guidance. In any case, the ACPLLC should not be permitted to conduct a survey in preparation for pipeline construction without addressing the slope failure issue and collecting the data needed both to evaluate the potential for and avoid slope failures.

There is certainly a large body of geotechnical information that ACPLLC can draw on, as well as the current or pending analysis of historic slope failures in West Virginia, in designing a corridor survey that includes collection of the data required for evaluation of slope failure potential.

Among the factors related to slope failure potential in the proposed pipeline corridor are soil mineralogy, slope steepness, bedrock structure, hydrology, and the presence of previous slope failures. The pipeline study corridor in the GWNF includes many sections with slopes exceeding 35%, 50%, and 70% (see **Appendix III**). Soil maps are available, but additional high-resolution soil surveys are needed to produce soil maps with the level of detail needed to reliably evaluate

[3] Prellwitz, Rodney W.; Koler, Thomas E.; and Steward, John E., coords. 1994. **Slope Stability Reference Guide for National Forests in the United States**. Publication EM-7170-13. Washington, DC: U.S. Department of Agriculture, U.S. Forest Service, Engineering Staff. 3 volumes, 1091 p

slope failure potential. Bedrock and hydrologic studies are probably not available at the needed scale, and previous slope failure information may not have been compiled. Additional data collection is needed. Here again, the survey permit application submitted by ACPLLC to the Forest Service is incomplete. It addressed none of these data needs and it should be rejected.

Forest Fragmentation

The central Appalachian mountain forest region, including the GWNF, is notably rich in biological diversity. This is due in large part to the extent of continuous interior-forest habitat. Construction of roads and utility corridors fragments forest habitat and threatens this biodiversity.

Interior forest is critical for a number of species. It's well known, for example, that many forest nesting birds are dependent on interior forests and that they do not thrive near forest edge due to nest parasitism and increased predation. Among these are species whose populations are currently in decline due in part to habitat fragmentation, including the Cerulean Warbler, Canada Warbler, Wood Thrush, and others.[4]

Many amphibians are also dependent on interior forest conditions. Many salamanders, for example, are unable to cross roads or other open areas, and thus, fragmentation of forests effectively divides and isolates populations making them less viable. Among the species of concern are the Cow Knob, Shenandoah Mountain, and Big Levels salamanders.[5] See comments below concerning the Cow Knob salamander (CKS).

Ecologists with the Virginia Natural Heritage Program have conducted forest integrity analysis for all of Virginia. Identification of areas with high-integrity forest is largely based on the presence of interior forest (specifically distance from cleared land and roads). **Figures 1** and **2** depicts the proposed ACP corridor in the GWNF in relation to mapped high-integrity forest. The 300-foot-wide-survey corridor and the 2000-foot-wide-study corridor are indicated.

The proposed pipeline construction will result in the permanent loss of interior forest. The pipeline construction will involve clearing and bulldozing of a 125-foot-wide construction corridor and permanent maintenance of a cleared 75-foot right of way. It will also involve construction of access roads for construction and maintenance and clearing and excavation of staging areas. All of this will happen somewhere within or near the proposed study corridors. There will be unavoidable, but thus far unstudied and unquantified, impacts to interior-forest-dependent species in the GWNF.

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[4] American Bird Conservancy. The United States Watch List of Birds of Conservation Concern (http://www.abcbirds.org/abcprograms/science/watchlist/index.html)

[5] The GWNF contains most of the known occurrences of these salamanders in the world. (GWNF Management Plan, page 1-7)

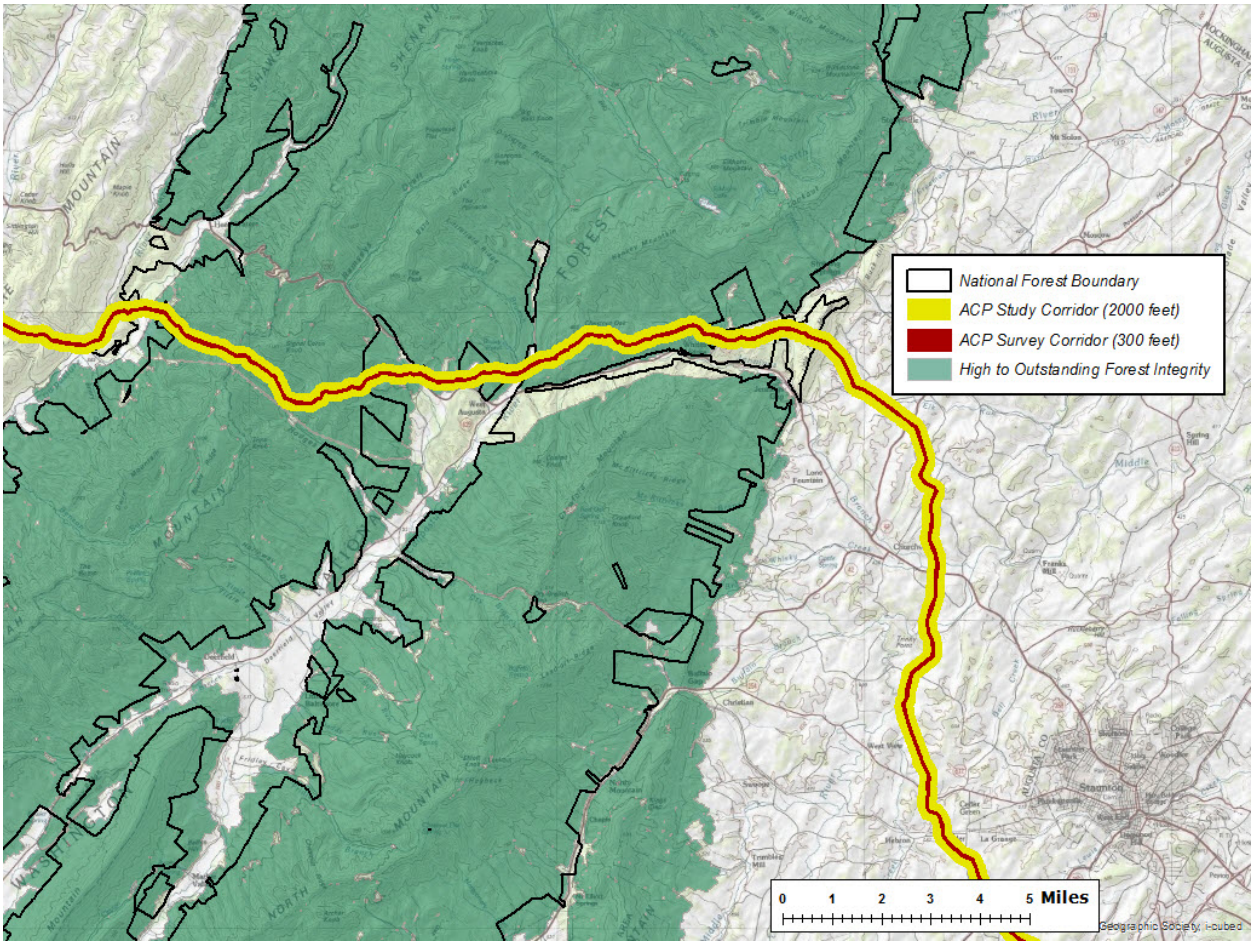

FIGURE 1 – Proposed Atlantic Coast Pipeline study and survey corridors in relation to high-integrity forest in the George Washington National Forest – Shenandoah Mountain area. Forest integrity classification based on analysis by Virginia Division of Natural Heritage (see http://www.dcr.virginia.gov/natural_heritage/vaconvisvnla.shtml).

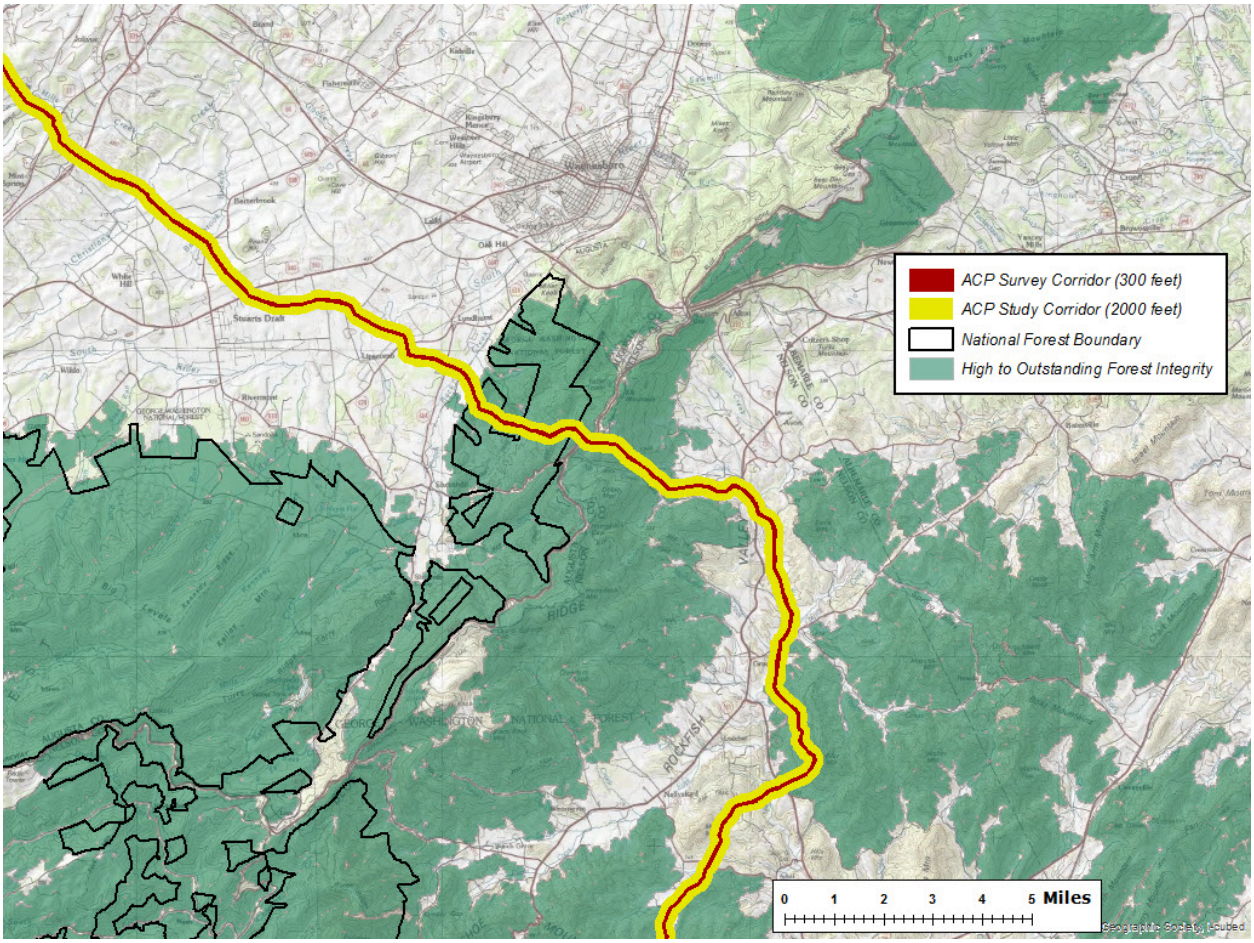

FIGURE 2 – Proposed Atlantic Coast Pipeline study and survey corridors in relation to high-integrity forest in the George Washington National Forest – Blue Ridge Mountain area. Forest integrity classification based on analysis by Virginia Division of Natural Heritage (see http://www.dcr.virginia.gov/natural_heritage/vaconvisvnla.shtml).

The Forest Service should not approve the ACPLLC application for a surveying permit until the applicant has provided a design for surveying activities that describes a process whereby the loss of interior forest will be quantified, the impact on wildlife species that depend on interior forest will be evaluated, and options for minimizing these losses and impacts will be identified. This design should include the associated roads and staging areas, as well as the construction corridor. The Forest Service should take advantage of the opportunity to obtain this critical information that will be essential when the eventual construction permit is reviewed and the environmental review process required by NEPA is conducted.

A failure on the part of the Forest Service to require collection of this critical information during the study phase of the ACP pipeline project will have the effect of thwarting meaningful implementation of NEPA.

Cow Knob Salamander

The CKS has special management status in the GWNF. Although spokesmen for the ACPLLC have reportedly stated that the proposed pipeline route through the GWNF has been adjusted to avoid the CKS, the proposed route would, in fact, cross and fragment documented CKS habitat (**Figure 3)**.

Protection of the CKS and CKS habitat are addressed in the following excerpts from the GWNF Management Plan:

1. CHAPTER 4 – FORESTWIDE STANDARDS:

- COW KNOB SALAMANDER MANAGEMENT (page 4-5)
  FW-45: If Cow Knob salamanders are found in areas outside the Shenandoah Mountain Crest management prescription area, those areas will be subject to the same management measures as described in the Shenandoah Mountain Crest Management Prescription Area 8E7.

2. CHAPTER 4 – MANAGEMENT PRESCRIPTION AREAS:

- 8E7 - SHENANDOAH MOUNTAIN CREST (page 4-113)
  Nearly the entire known range of the Cow Knob salamander (Plethodon punctatus) occurs on the George Washington National Forest. This area is located on the North River Ranger District along the crest of Shenandoah Mountain and Great North Mountain, largely above 3,000 feet elevation. Cow Knob salamanders typically reach their highest population densities in older age hardwood forests with abundant large down wood and rock. The U.S. Fish and Wildlife Service and the George Washington National Forest were the first federal agencies in the Nation to enter into a Conservation Agreement in 1994, under a multi-agency Memorandum of Understanding, designed to keep an at-risk species from needing to be listed

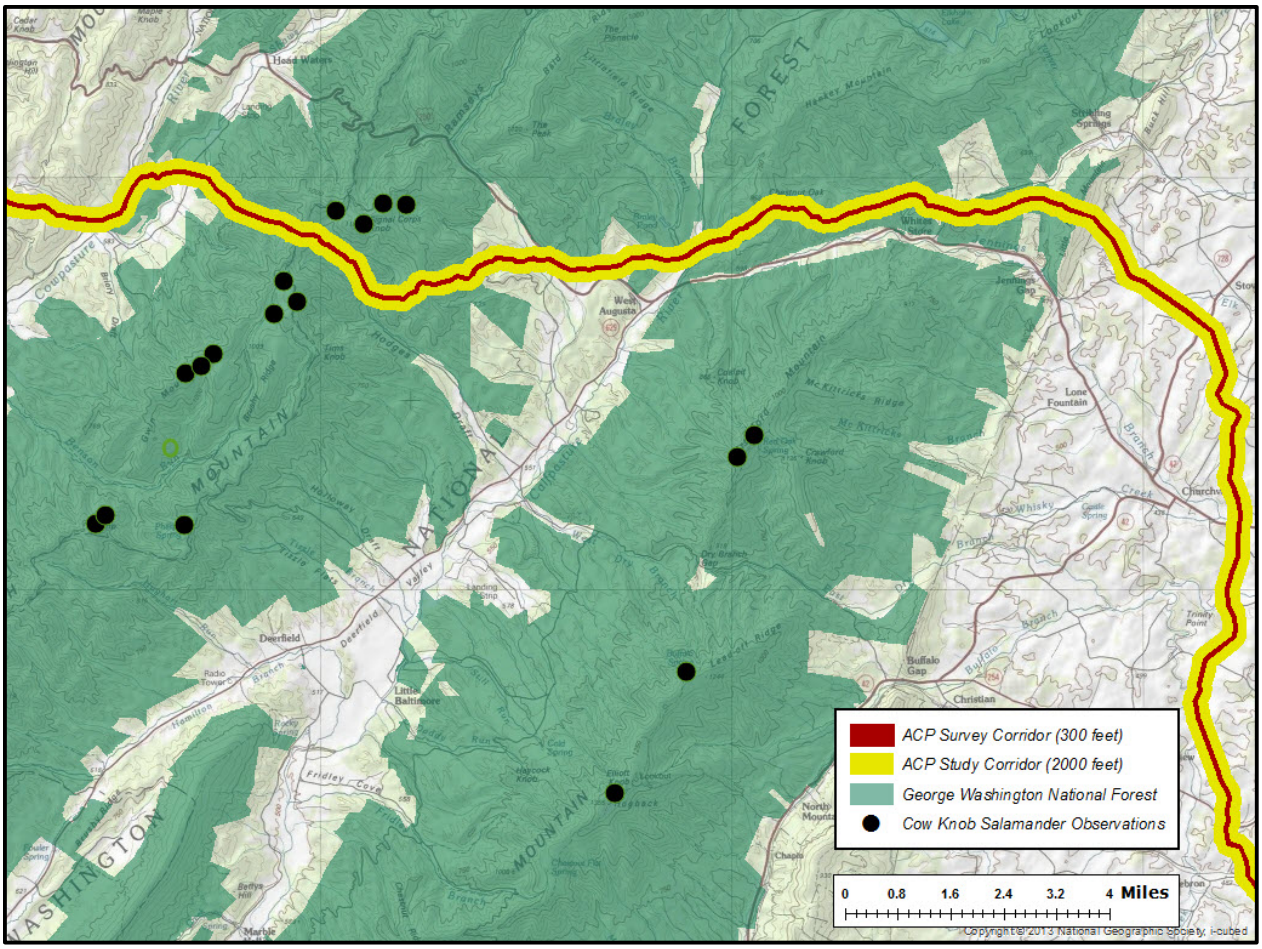

FIGURE 3 – Proposed Atlantic Coast Pipeline study and survey corridors in relation to approximate locations of Cow Knob Salamander observations in the George Washington National Forest – Shenandoah Mountain and Crawford Mountain area. The location data were obtained in 2008 by Dr. Reid N. Harris, Professor, Department of Biology, James Madison University, Harrisonburg, Virginia.

under the Endangered Species Act. This Conservation Agreement, and accompanying Habitat Conservation Assessment, serves as the guide for management of the Cow Knob salamander. . .

- DESIRED CONDITIONS FOR 8E7- SHENANDOAH MOUNTAIN CREST (page 4-114) DC 8E7-06: Management activities limit negative impacts to Cow Knob salamander populations from permanent and long-term fragmentation, isolation, and edge effects (such as drying from increased insolation, impacts from edge predators, invasion of non-native invasive plants, and increased competition from other salamander species). No new permanent roads are constructed. Restoration of canopy and cover along temporary and decommissioned roads occurs quickly. . .
- STANDARDS FOR 8E7 – SHENANDOAH MOUNTAIN CREST (page 4-116) 8E7-026: These areas are unsuitable for designation of new utility corridors, utility rights-of-way, or communication sites unless there is an over-riding demonstrated public need or benefit. Existing uses may continue unless removal is necessary to protect threatened, endangered, sensitive, and locally rare species.

The GWNF Management Plan is unambiguous, the CKS and CKS habitat are to be protected from disturbance within the Shenandoah Mountain Crest management prescription area and in all other GWNF areas where it is found. Pipeline construction through CKS habitat is impermissible except in the case of over-riding demonstrated public need or benefit.

ACPLLC does not mention the GWNF Management Plan or management prescriptions in its application. It does not mention the CKS. And it does not provide any argument that over-riding public need or benefits requires sacrifice of the CKS and its habitat. It would be inappropriate and inconsistent with statutory requirements for the Forest Service to permit survey activities that are preliminary to actions that are clearly inconsistent with the Forest Management Plan.[6]

Watershed and Water Resource Impacts

The GWNF Management Plan emphasizes protection of water quality and quantity both within and downstream of the Forest. Water-resource-related data collection described in the ACPLLC survey permit application, however, is mainly limited to wetland and waterbody delineation surveys.[7] Substantially more water-resource-related data collection and analysis is needed to adequately inform pipeline construction planning and Forest Service permitting decisions. The

[6] All projects and activities authorized by the Forest Service must be consistent with the Forest Plan [16 USC 1604(i)].

[7] The ACPLLC permit application to the GWNF further indicates that the surveys will assess the values and functions of those waters. In addition, visual observations of biological characteristics of wetlands, adjacent water bodies, and adjacent uplands will be obtained. Details or protocols for this assessment and data collection, however, are vague or missing.

following topics are among the additional watershed and water-resource-related issues that need to be addressed in the survey design:

1. **Effects on priority watersheds**

   The GWNF Management Plan prioritizes watersheds for evaluating any new proposals for special uses that could affect water quality.[8] The designation of priority watersheds is based on the presence of sensitive aquatic species, water quality concerns, and public water supplies. The proposed pipeline corridor crosses three such priority watersheds.

   The Laurel Fork watershed (**Figure 4**) is a designated priority watershed that would be crossed by the proposed pipeline. This watershed on the West Virginia-Virginia border is a uniquely valuable National Forest asset. The listing of priority watersheds in the GWNF Management Plan indicates that there are 19 Threatened and Endangered, Sensitive, or Locally Rare Species present in the watershed. This is more than twice the number indicated for any of the other 38 priority watersheds included in the list. Laurel Fork is also a native brook trout stream. It has been assigned the highest rating in the Forest Service's Watershed Condition Framework process, and it is one the streams assigned Exceptional Water Status by the state of Virginia.

   The GWNF Management Plan describes Laurel Fork as ". . . a unique area in the state of Virginia that has given rise to a forest of northern hardwoods and red spruce, unlike the Appalachian oak forest that dominates the rest of the George Washington National Forest. This area contains one of the finest examples of northern boreal natural community complexes in Virginia and is the only representative of the Alleghany Plateau Ecoregion within the Commonwealth."[9]

   The Canada Run-South River and Inch Branch-Back Creek watersheds (**Figure 5**) are also designated priority watersheds that would be crossed by the proposed pipeline. These high quality watersheds (Watershed Condition Class 2) are located on the eastern flank of the Blue Ridge Mountains and close to population centers.

2. **Slope stability**

   Slope stability is a major issue for pipeline construction in steep mountain landscape. As evidenced by the recent Dominion Transmission, Inc. experience in West Virginia, slope failure can results in sedimentation of downslope streams. The slope stability problem is addressed in a previous section of these comments, and recommendations for collection of data needed for evaluation of slope failure risk are provided.

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[8] See Appendix D Priority Watersheds in the GWNF Management Plan.

[9] GWNF Management Plan, page 15.

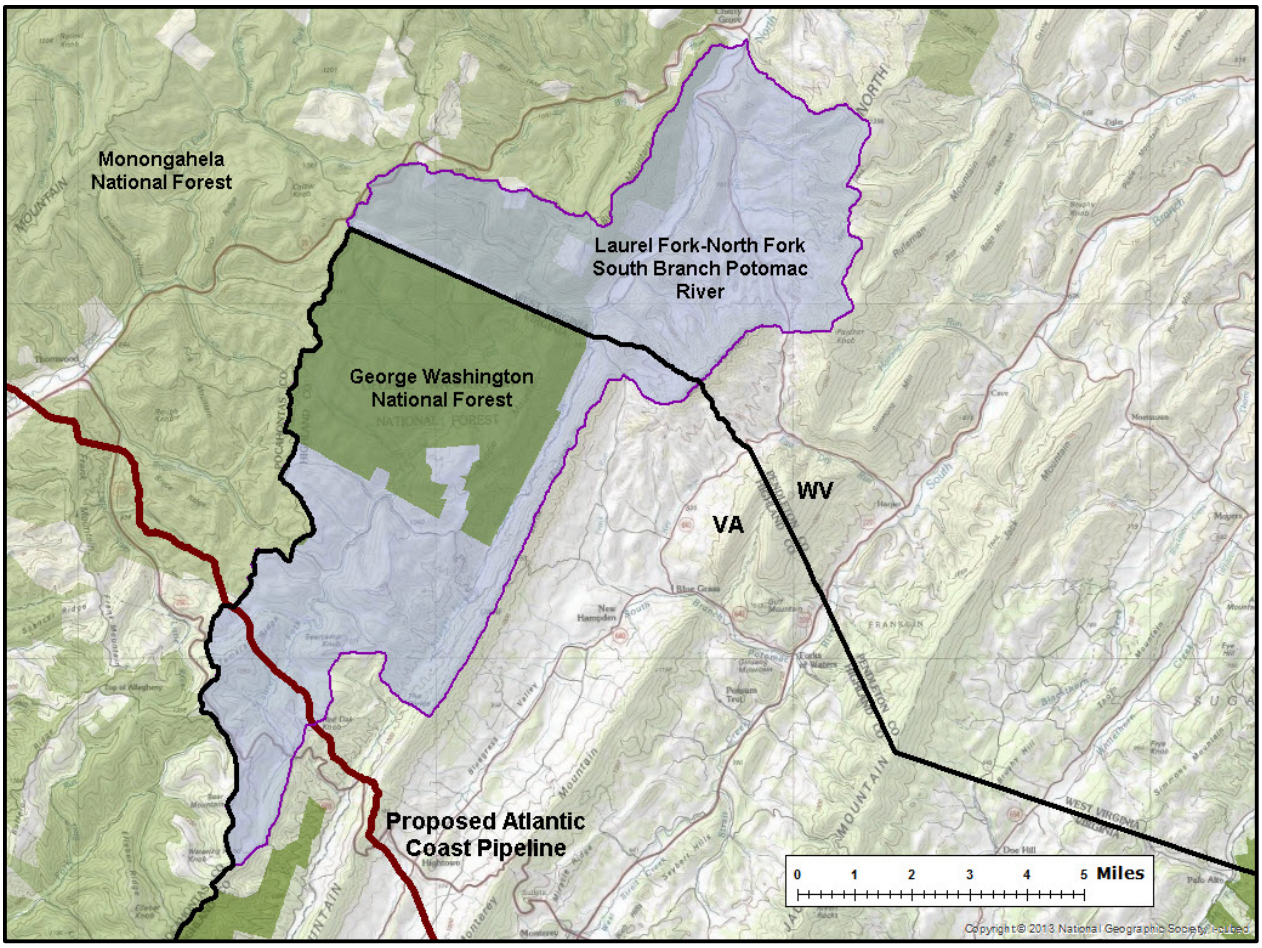

FIGURE 4 – Proposed Atlantic Coast Pipeline route in relation to the Laurel Fork-North Fork South Branch Potomac River designated priority watershed.

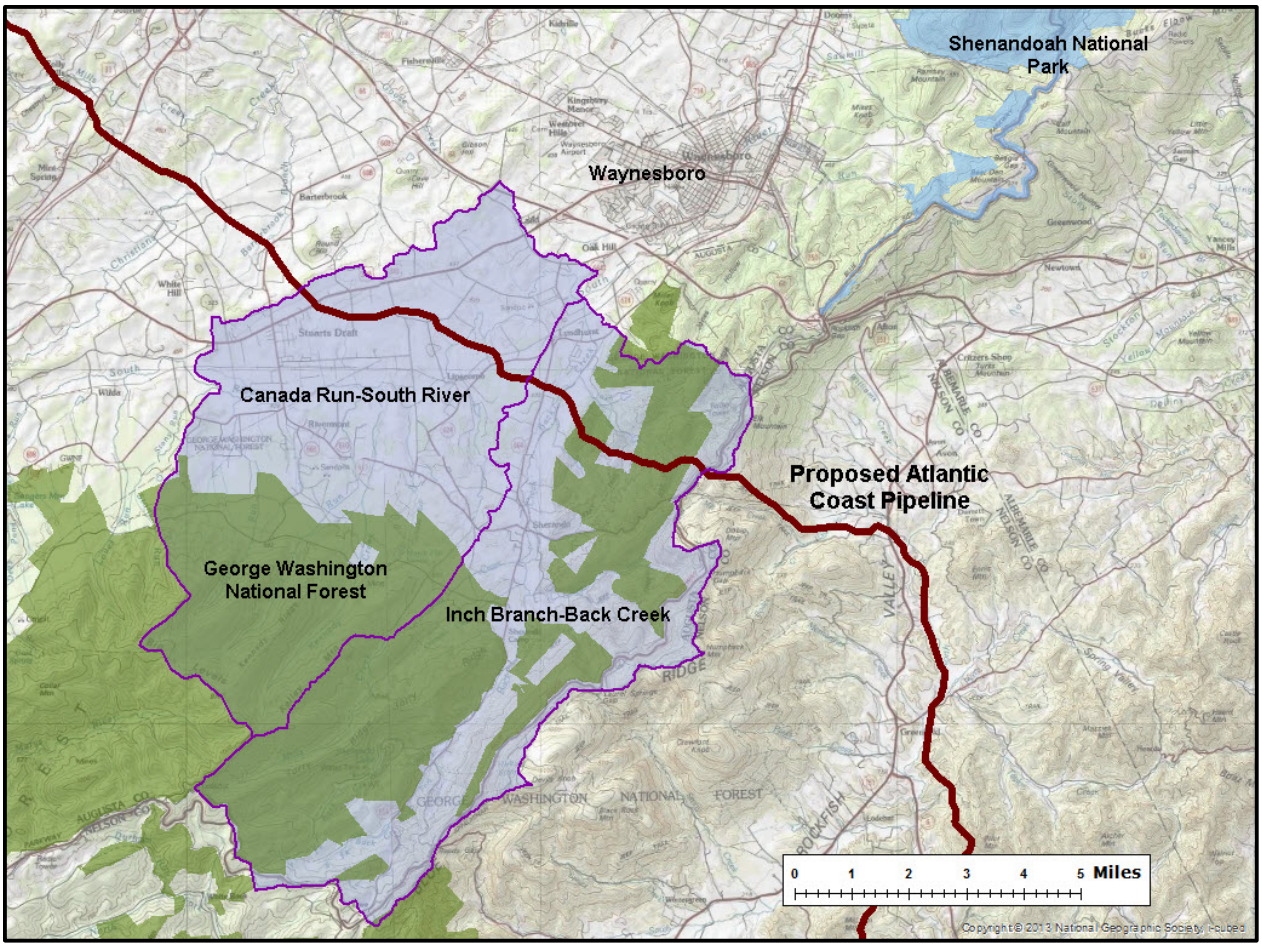

FIGURE 5 – Proposed Atlantic Coast Pipeline route in relation to the Canada Run-South River and Inch Branch-Back Creek designated priority watersheds.

3. **Erosion and sediment control and stormwater management**

Based on observations and reports concerning construction of smaller pipelines in other areas, it seems highly unlikely that construction of a 42-inch pipeline over steep mountain landscape in the GWNF can be done without significant erosion and sedimentation problems. A far greater level of care and management control will need to be maintained than has been seen on other pipeline construction projects studied by the Dominion Pipeline Monitoring Coalition.

Detailed data collection and analysis of soil and hydrologic factors within and adjacent the construction corridor will be required to determine the adequacy of even the most carefully implemented best management practices to prevent erosion, sediment transport, and alteration of runoff properties on the extremely long, steep, rugged, and complex slopes that will be subject to clearing and excavation. This data collection and analysis will need to be done for each of the large number of individual watershed areas that will receive runoff from the disturbed construction corridor, access roads, and staging areas.

This data collection and analysis will need to be conducted both to design temporary runoff control measures for use during construction and to design long-term runoff control measures for use post-construction. Long-term alteration of drainage patterns will need to be evaluated and carefully planned in order to avoid damage to the channel and habitat structure of receiving surface waters and wetlands.

As the largest Federal land manager in the Chesapeake Bay watershed, the GWNF has a particular and high-profile responsibility for implementation of Federal strategy to protect and restore the Bay watershed consistent with the Chesapeake Bay Total Maximum Daily Load for Nitrogen, Phosphorus, and Sediment.[10]

If the ACP project goes forward, it will be one of the largest single construction projects undertaken in the Chesapeake Bay watershed in recent years. The Forest Service cannot allow the ACP project to proceed with anything less than the strictest adherence to requirements of Virginia Erosion and Sediment Control and Stormwater Management Programs. The Forest Service will not be able to meet this obligation if it permits preliminary surveys by ACPLLC without requiring the collection of the data that are necessary for informed development of Erosion and Sediment Control and Stormwater Management Plans.

[10] See Guidance for Federal Land Management in the Chesapeake Bay Watershed, Executive Order 13508. EPA841-R-10-002, B

In conclusion, for all of the above-stated reasons, the Dominion Pipeline Monitoring Coalition believes the Forest Service should reject the ACPLLC application for a special use permit to conduct preliminary surveys for the proposed ACP pipeline. The application is incomplete, it contains erroneous information, and the proposed survey will not collect the data that will be needed for responsible planning of the pipeline project and for informed decision making by the Forest Service.

ACPLLC (Dominion) indicated in its 09/29/14 special use permit application submission to the Forest Supervisor that the objective of the proposed surveys along the planned pipeline route is ". . . to collect information needed by FERC and other regulatory agencies to review and permit the ACP." The proposed surveys will fall substantially short of achieving that critical objective.

Thank you again for the opportunity to comment on this important topic.

Sincerely,

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