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COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

September 4, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Docket PF15-6-000, Supplemental EIS for Dominion Atlantic Coast Pipeline Project Alternatives
(Brunswick, Boykins and Franklin)

Dear Ms. Bose:

Division of Planning and Recreation Resources

The Department of Conservation and Recreation (DCR), Division of Planning and Recreational Resources (PRR), develops the *Virginia Outdoors Plan* and coordinates a broad range of recreational and environmental programs throughout Virginia. These include the Virginia Scenic Rivers program; Trails, Greenways, and Blueways; Virginia State Park Master Planning and State Park Design and Construction.

We have reviewed the **one mile swath of the potential alignment of the Atlantic Coastline Pipeline** for Planning and Recreational Resources (PRR) as well as properties that are protected under the Land and Water Conservation Fund. The following PRR resources may be impacted by the project:

Chesapeake

- proposed Tobacco Heritage Trail
- proposed East Coast Greenway

Suffolk

- proposed Tobacco Heritage Trail

Southampton

- Designated Scenic Rivers - Blackwater River and Nottoway River (also a water trail)
- Potential Scenic River - Meherrin River

Greensville

- The Meherrin River Trail
- Potential Scenic River - Meherrin River

Brunswick

- potential Scenic river – Nottoway River

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*State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*

- proposed Virginia Southside trail
- proposed Tobacco Heritage Trail
- proposed East Coast Greenway Trail

Nottoway

- US Bike Route 1

Prince Edward

- DCR's High Bridge Trail State Park (the route is within ¼ mile of the park)
- Scenic Byway – Lee's Retreat (Historic Routes 619 & 600)
- potentially Scenic River – Appomattox River

Buckingham

- proposed Cumberland-Appomattox Trail
- Scenic Byway – Lee's Retreat (Historic Route 636)
- qualified Scenic River and water trail – Middle James River
- proposed James River Heritage Trail

Nelson & August

- potentially Scenic River – Rockfish River North fork
- Scenic Byway – Route 20
- Federal resource – The Appalachian Trail
- Nationally Scenic Byway - The Blue Ridge Parkway
- proposed Clifton Forge – Staunton-Waynesboro Rail Trail

Highland:

- potentially Scenic River - Laurel Fork River

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR-DNH) has searched its Biotics Data System for occurrences of natural heritage resources within a half mile of the centerline of the proposed alternatives. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

The following comments are provided by 1:24,000 quadrangles for the Franklin, Boykins, and Brunswick Atlantic Coast Pipeline alternatives including the centerline and ½ mile study corridor on each side of the centerline:

Brunswick Alternative

Warfield Quad

According to DCR botanist John Townsend, DCR recommends a survey for Michaux's sumac (*Rhus michauxii*, G2G3/S1/LE/LT) in the ½ mile pipeline study corridor north and west of Route 1 (See Map 1). Michaux's sumac is a dioecious shrub that grows from 0.3 – 0.6 m tall (NatureServe 2011). This plant occurs in sandy or rocky, open, hardwood-dominated forests and savannas (Van Alstine and Smith, 1995), sometimes in association with

circumneutral soils. It is dependent upon some form of disturbance to maintain its open habitat (NatureServe 2011). Periodic, naturally occurring fires provided such disturbance historically; however, today many of this plant's occurrences are in areas artificially disturbed such as highway, powerline and railroad rights-of-way, edges of cultivated fields, and other cleared lands. In Virginia, there are currently four known locations of Michaux's sumac in the Southern Piedmont. The major threats to Michaux's sumac include fire suppression and habitat degradation (NatureServe 2011). The optimal survey time period for Michaux's sumac is during the period of flowering / fruiting from June 1 – October 31 when the plant has higher visibility, but the plant can be identified as long as the leaves are present from May 1 – October 31.

Please note that this species is currently classified as endangered by the United States Fish and Wildlife Service (USFWS) and listed as threatened by the Virginia Department of Agriculture and Consumer Services (VDACS).

The Nottoway River – Sturgeon Creek – Hardwood Creek Stream Conservation Unit (SCU) is also located within the Brunswick Alternative project centerline. SCUs identify stream reaches that contain aquatic natural heritage resources, including 2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. The Nottoway River – Sturgeon Creek – Hardwood Creek SCU has been given a biodiversity ranking of B1, which represents a site of outstanding significance. The natural heritage resources associated with this site are:

<i>Elliptio lanceolata</i>	Yellow lance	G2G3/S2S3/SOC/NL
<i>Fusconaia masoni</i>	Atlantic pigtoe	G2/S2/SOC/LT
<i>Lampsilis cariosa</i>	Yellow lampmussel	G3G4/S2/NL/NL
<i>Lampsilis radiata</i>	Eastern lampmussel	G5/S2S3/NL/NL
<i>Percina rex</i>	Roanoke logperch	G1G2/S1S2/LE/LE

In addition the Nottoway River and Wauga Creek have been designated by VDGIF as “Threatened and Endangered Species Waters “ which intersect or are downstream of the Brunswick alternative ½ mile study corridor. Wauga Creek is designated as a T & E water for the Roanoke logperch and the Nottoway River for the Dwarf wedgemussel (*Alasmidonta heterodon*, G1G2/S1/LE/LE), Roanoke logperch and the Atlantic pigtoe.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulation. Due to the legal status of the Roanoke Logperch, Atlantic pigtoe and Dwarf wedgemussel DCR recommends coordination with the USFWS and Virginia's regulatory authority for the management and protection of these species, the Virginia Department of Game and Inland Fisheries (VDGIF), to ensure compliance with protected species legislation.

McKenney Quad

The Nottoway River – Sturgeon Creek – Hardwood Creek SCU is located downstream of the ½ mile project study corridor. DCR recommends avoidance of this conservation site and documented natural heritage resources. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. Due to the legal status of the Roanoke Logperch and Atlantic pigtoe, DCR recommends coordination with the USFWS and Virginia's regulatory authority for the management and protection of these species, the VDGIF, to ensure compliance with protected species legislation.

Lawrenceville Quad

Biotics historically documents the presence of natural heritage resources within the pipeline study corridor. However we do not anticipate that this project will adversely impact these natural heritage resources.

Smoky Ordinary Quad- Brunswick Pipeline Alternative and Greenville M&R Facility

The Reedy Creek – Webbs Mill SCU is within the centerline of the proposed Brunswick pipeline alternative and downstream of the Greenville M & R facility. The Reedy Creek – Webbs Mill SCU has been given a biodiversity ranking of B4, which represents a site of moderate significance. The natural heritage resource associated with this site is:

Freshwater Mussel Concentration Area

G3/SNR/NL/NL

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

DCR recommends avoidance of this conservation site and documented natural heritage resources. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. DCR also recommends development of an oil spill emergency plan for all stream crossings to avoid impacts to aquatic resources. Mussel survey work is currently being conducted in Reedy Creek by DCR. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer other specific protection recommendations for minimizing impacts to the documented resources.

In addition, Sturgeon Creek, which has been designated by the VDGIF as a “Threatened and Endangered Species Water” is within the Brunswick alternative ½ mile study corridor for the Smoky Ordinary quad. The species associated with this T & E Water is the Atlantic pigtoe. Therefore, DCR recommends coordination with Virginia's regulatory authority for the management and protection of this species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

Ante Quad

The Reedy Creek – Webbs Mill SCU is crossed multiple times by the proposed Brunswick Alternative pipeline centerline. DCR recommends avoidance of this conservation site and documented natural heritage resources. To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. DCR also recommends development of an oil spill emergency plan for all stream crossings to avoid impacts to aquatic resources. Mussel survey work is currently being conducted in Reedy Creek by DCR. With the survey results we can more accurately evaluate potential impacts to natural heritage resources and offer other specific protection recommendations for minimizing impacts to the documented resources.

Boykins Alternative

Courtland Quad

According to the information currently in our files, the Eastern Big-eared bat (*Corynorhinus rafinesquii macrotis*, G3G4/S2/NL/LE) is documented within the Boykins alternative pipeline centerline.

The Eastern Big-eared bat named for its enormous ears twice the length of its head, is extremely rare in Virginia and is currently known only the southeastern portion of the state. Although widespread throughout the southeast, they are never found in large numbers. These bats roost singly or in small groups in hollow trees or abandoned

buildings. They forage only after dark primarily in mature forests of both upland and lowland areas along permanent bodies of water (NatureServe, 2009). The details of this bat's feeding behavior and much of its natural history remain a mystery. Lack of information regarding the ecology of the eastern big-eared bat, and their sensitivity to disturbance, make them particularly vulnerable to destruction of roost sites and feeding areas where their presence goes undetected (Handley and Schwab 1991, Harvey 1992).

Threats to this species include forest destruction, particularly hollow tree removal, decreasing availability of abandoned buildings, and possibly, insecticides. Please note that this species is currently classified as endangered by the VDGIF.

Due to the legal status of the Eastern Big-eared bat, DCR recommends coordination with Virginia's regulatory authority for the management and protection of this species, the VDGIF, to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

Capron Quad

Biotics historically documents the presence of natural heritage resources within the pipeline study corridor. However we do not anticipate that this project will adversely impact these natural heritage resources.

Boykins Quad

Biotics historically documents the presence of natural heritage resources within the pipeline study corridor. However we do not anticipate that this project will adversely impact these natural heritage resources.

Margarettsville Quad

The Branchville Powerline Conservation Site is within the proposed Boykins alternative pipeline centerline. Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support. They are polygons built around one or more rare plant, animal, or natural community designed to include the element and, where possible, its associated habitat, and buffer or other adjacent land thought necessary for the element's conservation. Conservation sites are given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain; on a scale of 1-5, 1 being most significant. The Branchville Powerline Conservation Site has been given a biodiversity significance ranking of B5, which represents a site of general significance. The natural heritage resources of concerns associated with this site are:

<i>Steinchisma hians</i>	Gaping Panic Grass	G5/S1/NL/NL
<i>Solidago stricta</i>	Southern Bog Goldenrod	G5/S2/NL/NL

Gaping panic grass is a state rare plant species that inhabits streams, pond and lake shores, low woods, cypress-gum ponds, alluvial bottomlands, marshes, ditches and seepage slopes. This species is primarily located in Virginia's piedmont region but can be found in the coastal plain as well. This plant blooms from May to October (Weakley, in prep.).

Southern Bog Goldenrod is a rhizomatous goldenrod that can grow to 2 meters tall. The stems are leafy with the leaves much reduced above; giving it a unique appearance as opposed to other goldenrods it may co-occur with. The inflorescences range from linear, narrowly elongate, paniculiform arrays to elongate pyramidal-second or thyriform-paniculiform arrays and bloom in late summer and early fall. Within Virginia, this species is only known from boggy powerline clearings though it was formerly found in bogs, wet flatwoods, and acidic swamps. As of 2014, the Virginia Natural Heritage Program documented 3 extant occurrences of this state rare plant, all within the Virginia's southern Coastal Plain region. Like many plants in this region, a primary threat is loss of habitat due to development or the lack of fire and other disturbance needed for habitat maintenance (J.C. Ludwig, personal communication, July 29, 2015)

DCR recommends avoidance of the Branchville Powerline Conservation Site and associated natural heritage resources.

Franklin Alternative

Buckhorn Quad

The Lummis Flatwoods Conservation Site is located within the proposed Franklin alternative pipeline centerline and has been given a biodiversity significance ranking of B2, which represents a site of very high significance. The natural heritage resources of concern at this site are:

<i>Scleria minor</i>	Slender nutrush	G4/S2/NL/NL
<i>Cleistesopsis divaricata</i>	Large spreading pogonia	G4/S1/NL/NL
<i>Ludwigia ravenii</i>	Raven's seedbox	G1G2/S1/SOC/NL
<i>Gentiana autumnalis</i>	Pine barren gentian	G3/S1/NL/NL
<i>Rhynchospora debilis</i>	Savannah beaksedge	G4?/S1/NL/NL
<i>Sarracenia flava</i>	Yellow pitcher-plant	G5?/S1/NL/NL
<i>Gentiana autumnalis</i>	Pine barren gentian	G3/S1/NL/NL
<i>Xyris platylepis</i>	Tall yellow-eyed grass	G5/S2/NL/NL
<i>Rhexia petiolata</i>	Fringed meadow beauty	G5?/S1/NL/NL

DCR recommends avoidance of the Lummis Flatwoods Conservation Site and associated natural heritage resources. DCR also recommends a survey be conducted for Raven's seedbox in the area identified on Map 2.

Holland Quad

See recommendation for Buckhorn Quad above and Map 2 concerning survey area for Raven's seedbox along proposed Franklin alternative pipeline route.

ACP Compressor Station 2-Primary Site, Alternative Site 1, Alternative Site 2

Saint Joy Quad

According to the information currently in our files, natural heritage resources have not been documented within the ½ mile project area. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

M & R Facilities

Norfolk South Quad - Elizabeth River M & R Facility

According to the information currently in our files, natural heritage resources have not been documented within the ½ mile project area. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

Smoky Ordinary Quad - Greenville M & R Facility

See Brunswick Alternative-Smoky Ordinary Quad comments above.

Overall Recommendations for Pipeline Alternatives

There is the potential for the Northern Long-eared bat (*Myotis septentrionalis*, G1G3/S3/LT/NL) to occur within the project area. The Northern Long-eared bat is a small insect-eating bat characterized by its long-rounded ears that when folded forward extend beyond the tip of the nose. Hibernation occurs in caves, mines and tunnels from late fall through early spring and bats occupy summer roosts comprised of older trees including single and multiple tree-fall gaps, standing snags and woody debris. Threats include white nose syndrome and loss of hibernacula, maternity roosts and foraging habitat (NatureServe, 2014). Due to the decline in population numbers, the Northern Long-eared bat has been federally listed as “threatened” by the USFWS.

DCR recommends coordination with the USFWS regarding potential impacts upon federally Threatened northern long-eared bats associated with tree removal.

DCR supports the development and implementation of an Invasive Species Management Plan for the project and will provide comments on the draft plan separately to FERC.

Under a Memorandum of Agreement established between the VDACS and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. Survey results for Michaux’s Sumac should be coordinated with DCR-DNH and USFWS. Upon review of the results, if it is determined the species is present, and there is a likelihood of a negative impact on the species, DCR-DNH will recommend coordination with VDACS to ensure compliance with Virginia’s Endangered Plant and Insect Species Act.

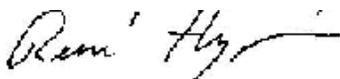
There are no State Natural Area Preserves under DCR’s jurisdiction in the pipeline study ½ mile corridor for the alternative routes.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The VDGIF maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Gladys Cason (804-367-0909 or Gladys.Cason@dgif.virginia.gov).

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,



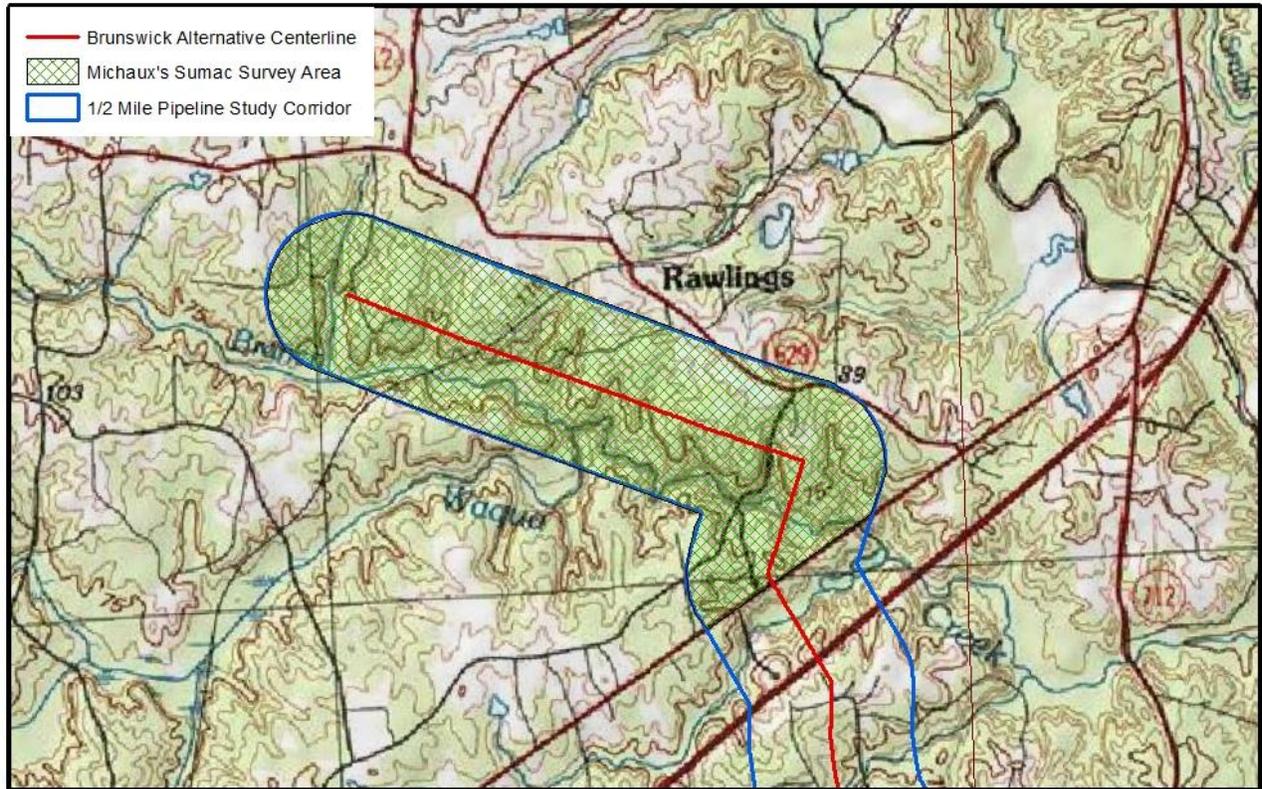
S. René Hypes
Project Review Coordinator

CC: Ernie Aschenbach, VDGIF
Troy Anderson, USFWS

Literature Cited

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Suggested Survey Area Maps

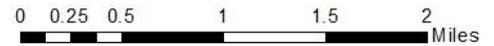


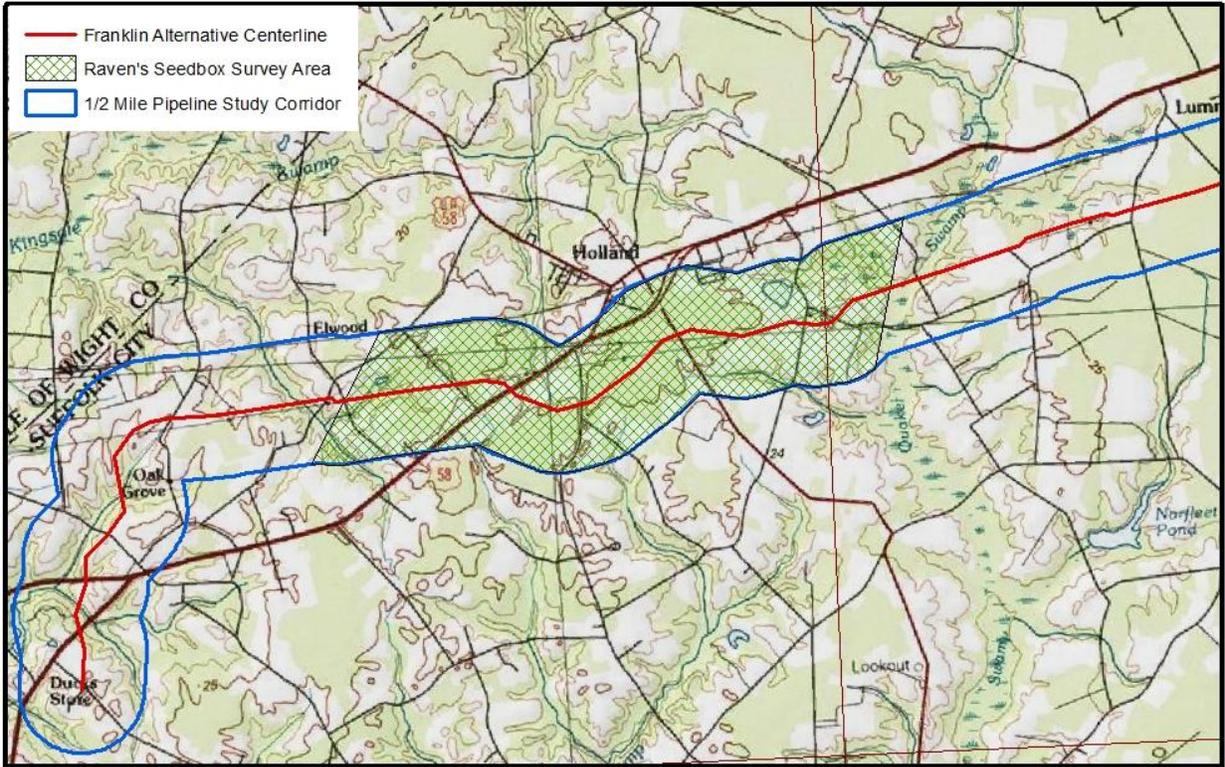
Atlantic Coast Pipeline-Brunswick Alternative
Suggested Survey Areas



July 30, 2015

Map 1 of 2





**Atlantic Coast Pipeline-Franklin Alternative
Suggested Survey Areas**



July 30, 2015
Map 2 of 2

