USDA United States Department of Agriculture | Forest Service | George Washington and Jefferson National Forests | 5162 Valleypointe Parkway Roanoke, VA 24019 540-265-5100

File Code: 2720; 1900
Date: September 17, 2015

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., N.E., Room 1A
Washington, DC 20426

Subject: Atlantic Coast Pipeline Project
OEP/DG2E/Gas 4
Atlantic Coast Pipeline, LLC
Docket No. PF15-6-000

Dear Ms. Bose:

The Forest Service submits information regarding two species of salamanders that would be affected by the proposed Atlantic Coast Pipeline (ACP) Project (Docket No. PF15-6-000) crossing National Forest System lands in West Virginia and Virginia. Herein, we reiterate our previous comments and document additional information to substantiate our concerns about the effects of the proposed ACP Project on the Cow Knob and the Cheat Mountain salamanders. The attached document contains more detailed and lengthy information that is supportive of and relevant to this discussion.

We reiterate comments concerning the Cow Knob and Cheat Mountain salamanders as stated in our July 30, 2015 filing consisting of the Forest Service comments and information and data requests for draft resource reports for the ACP Project. Comment #128 states to develop alternatives that avoid impacts to the salamander such as completely avoiding Cow Knob salamander habitat and using horizontal directional drilling to reduce direct take and habitat loss and fragmentation; comment #129 identifies the need for Atlantic Coast Pipeline, LLC (ACP) to adequately describe the Conservation Agreement (discussed below); and comment #130 identifies necessary analysis. Concerning the Cheat Mountain salamander, comments #115 and #312 indicate the proposed route crosses known habitat of the Cheat Mountain salamander; comment #116 identifies necessary analysis; and comment #321 identifies the need to avoid the Cheat Mountain salamander populations recently discovered within the proposed pipeline route and populations potentially occurring in habitats identified as suitable but not yet surveyed.

In our July 30, 2015 filing, we discussed concerns about the Cow Knob salamander, referring to the 1994 Conservation Agreement between the Forest Service and the Fish and Wildlife Service. The Conservation Agreement identifies a Conservation Team and states that the team will review management activities that may affect the Cow Knob salamander or its habitat. On August 24, 2015, the Conservation Team met to discuss effects of the proposed ACP Project on the Cow Knob salamander. The Conservation Team was very clear in its assessment that the

proposed location of the ACP Project on Shenandoah Mountain is not in compliance with the Conservation Agreement.

In addition, we reference the Virginia and West Virginia Draft State Wildlife Action Plans (2015). The Wildlife Action Plans clearly state that the Cow Knob salamander is a species that needs protection, for the salamanders themselves and the habitat upon which they depend. We provide excerpts below from the Draft State Action Plans.

> Virginia
> Cow Knob salamander is proposed as a Tier I species, with a Critical Conservation Need. It faces an extremely high risk of extinction or extirpation. As such, it is recommended that this species be prioritized as Tier 1c.
>
> West Virginia
> Cow Knob salamander and Cheat Mountain salamander are proposed as a Priority 1 Species of Greatest Conservation Need. Fragmentation and loss of forest cover is a primary concern. Roads and utility corridors fragment forest salamander populations. Conservation actions must focus on preserving core areas of intact habitat, restoring areas of impaired habitat, and re-establishing populations in appropriate locations.

Furthermore, we provided a copy of the Conservation Agreement for the Cow Knob salamander to Atlantic Coast Pipeline, LLC and extensively discussed our concerns about both the Cow Knob and Cheat Mountain salamanders during a June 30, 2015 meeting. We clearly stated that project effects on Cow Knob and Cheat Mountain salamanders must be avoided and cannot be mitigated. We re-emphasized our concerns during a July 7, 2015 meeting.

The rarity and sensitivity of these species have resulted in federal listing of the Cheat Mountain salamander and in a Conservation Agreement to protect the Cow Knob salamander. Because of the potential for serious project-related impacts to the populations and habitats of the Cow Knob and Cheat Mountain salamanders, and also because these impacts could not be mitigated, it is essential to evaluate alternatives to avoid adverse effects on these two species.

Sincerely,

H. THOMAS SPEAKS, JR.
Forest Supervisor

NEWLY SUBMITTED INFORMATION

In addition to previous comments submitted by the George Washington and Jefferson National Forests regarding the effects on the Cow Knob salamander from the siting of the proposed Atlantic Coast pipeline on National Forest land (see scoping comments (I) and draft resource report comments (II) below), the Forest Service has new information to provide that further substantiates the need for an alternative route that completely avoids Cow Knob salamander habitat:

1) The Virginia and West Virginia Draft State Wildlife Action Plans both clearly state that the Cow Knob salamander is a species that needs protection, for the salamanders themselves and the habitat upon which they depend. We provide excerpts from the Draft State Action Plans below.

   DRAFT Virginia State Wildlife Action Plan 2015, Virginia Department of Game and Inland Fisheries:

   Cow Knob salamander is proposed as a Tier I species, with a Critical Conservation Need. It faces an extremely high risk of extinction or extirpation. Populations of these species are at critically low levels, face immediate threat(s), or occur within an extremely limited range. Intense and immediate management action is needed. VDGIF staff have indicated this species will always face a significant threat of extinction due to its limited range. However, no additional conservation actions or research have been identified to help conserve this species, most of the habitat is protected via conservation agreements between the U.S. Forest Service and the U.S. Fish and Wildlife Service. As such, it is recommended that this species be prioritized as Tier 1c.

   DRAFT 2015 West Virginia State Wildlife Action Plan, June 10, 2015, West Virginia Division of Natural Resources:

   Cow Knob salamander and Cheat Mountain salamander are proposed as a Priority 1 Species of Greatest Conservation Need.

   Fragmentation and loss of forest cover is a primary concern for the Appalachian endemic salamanders. The largest and most extensive populations tend to occur in areas with extensive forest cover. Maintaining an extensive forest canopy is important to maintaining suitable within forest microclimates. Roads and utility corridors fragment forest salamander populations and changes in forest floor structure, especially downed woody debris and leaf litter accumulation, can substantially reduce salamander populations. Poor culvert placement and road drainage fragments salamander populations in headwater streams. Loss or reductions of woody debris and leaf litter can also reduce populations of salamanders in headwater streams. Some endemic forest salamanders also are displaced by more widespread salamanders following changes in forest structure and increased fragmentation. Amphibians can best respond to external stressors when their habitat is intact and functioning. Maintaining ecosystem integrity ensures amphibian life zones are also present and functioning. Conservation actions must focus on preserving core areas of intact habitat, restoring areas of impaired habitat, and re-establishing populations in appropriate locations.

2) On August 24, 2015 the Conservation Team for the Cow Knob salamander met to review the proposed Atlantic Coast pipeline effects on the Cow Knob salamander. Relevant background information and a meeting summary are provided below.

Background

On January 25, 1994 the U.S. Fish and Wildlife Service, the U.S. Forest Service, and other federal agencies entered into a Memorandum of Understanding (MOU) the purpose of which was to "establish a general framework for cooperation and participation among the cooperators in the conservation of species that are tending toward federal listing as threatened or endangered under the Endangered Species Act (ESA), 16 U.S.C." Under this MOU, "The cooperators propose to work together to achieve a common goal of conservation of selected species, agreed upon by the cooperators, that are tending toward federal listing, through protection and management of their habitats and ecosystems upon which they depend. Conservation Agreements will be developed for species and/or habitats selected by the cooperators using an agreed upon method of priority setting and in full consideration of budgetary feasibility and respective Agency missions." On the date day this MOU was put into effect the U.S. Fish and Wildlife Service and the U.S. Forest Service signed a Conservation Agreement (Agreement) for the Cow Knob salamander.

The Agreement for the Cow Knob salamander states that: "The signatory parties to this agreement affirm the mutual goal of securing and protecting the Cow Knob salamander (Plethodon punctatus) within its known and potential range in the states of Virginia and West Virginia. To attain this goal, these parties further agree to implement the actions delineated in the Cow Knob Salamander Conservation Assessment (Assessment) to conserve this species and its occupied and potential habitat on the George Washington National Forest (Forest). The Agreement specifies that: "A Conservation Team (Team) with representatives from the Virginia Department of Game and Inland Fisheries, Virginia Division of Natural Heritage, West Virginia Department of Natural Resources, U.S. Fish and Wildlife Service, and U.S. Forest Service will advise the Forest on the implementation of the Assessment and management of the Cow Knob salamander's habitat. The Conservation Assessment, the standards delineated in the George Washington National Forest Land and Resource Management Plan, and the advice of the Team have as their goal ensuring the long-term viability of the salamander on the Forest." Regarding the Team the Agreement says that it will specifically: "evaluate all proposed activities that could be detrimental to the salamander or its habitat and render such opinions that will be considered and made part of the public record by the U.S. Forest Service in its decision-making process as to whether to proceed with a given activity."

Conservation Team Discussion and Comments

The proposed Atlantic Coast pipeline goes through known Cow Knob salamander habitat and, indeed, field surveys for the pipeline have found Cow Knob salamander along the proposed right-of-way. Cow Knob salamanders were found from the highest point down to 2500', although they have been seen as low as 2,000' in more protected habitat. The pipeline route ACP has chosen is poor because it traverses a long ridge at higher elevations with good Cow Knob salamander habitat.

It was pointed out that the Agreement does not allow take of Cow Knob salamander. Pipeline construction in the present location would kill numerous Cow Knob salamanders. Impacts to Cow Knob salamander habitat were discussed. It was estimated that the loss of habitat from direct clearing and the indirect effect of exposing the forest edge to sunlight, wind, etc. would result in a swath approximately 750' wide through Cow Knob salamander habitat. This swath would also be a corridor for edge predators, such as raccoons, to access the heart of the Cow Knob salamander habitat resulting in increased predation. Illegal ATV access along the ROW is a real possibility that would likely result in degradation of habitat resulting from loss of vegetation, sedimentation, and soil compaction. The pipeline corridor will eliminate gene flow between the north and south part of the populations. This will isolate the southern extent of the population making it susceptible to stochastic events. Climate change is a threat, and that could realistically wipe out this southern population, because much of it is at lower elevation and on driest sites. In addition, the population north of pipeline is isolated due to the habitat fragmentation by Rt. 250.

The Agreement states that no new rights-of-way will be permitted in Cow Knob salamander habitat and the Forest Plan states that Cow Knob salamander habitat is unsuitable for designation of new utility corridors and utility rights-of-way. Team consensus was that there needs to be a pipeline alternative that avoids Cow Knob salamander habitat completely.

The Conservation Team felt the proposed right-of-way is inconsistent with the Agreement and Assessment and the Forest Plan. The items below would correct the inconsistency.

- Select a new pipeline route. The route would have to go south of Chestnut Ridge and South Sister Knob, or North of Romney, WV.

- Bore through Shenandoah Mountain (Dominion can directionally drill up to 4000 horizontal feet). This would leave the mountain ridge intact for salamanders, recreation, and reduce illegal ATV traffic. Dominion has not said they can do this at this location. It would not avoid all impacts to habitat and salamanders because it would not completely avoid salamander habitat.

The U.S. Fish and Wildlife Service (Service) stated it has been petitioned to list the Cow Knob salamander under the Endangered Species Act. They said that the petition has been found to be substantial and is on the review schedule for 2016, although that was prior to proposal to construct the pipeline through its habitat. The Forest not adhering to the Agreement and Assessment by allowing pipeline construction in Cow Knob salamander habitat would be an important factor when evaluating this species for federal listing.

PREVIOUSLY SUBMITTED COMMENTS

I. Scoping Comments, filed on April 27, 2015

Cow Knob Salamander

The Cow Knob salamander is a globally rare species protected under a Conservation Agreement with U.S. Fish and Wildlife Service and the agreement is incorporated into Forest Plan standards, and the Cow Knob salamander is also a MIS. Concerns include direct habitat damage and indirect habitat damage from things like microclimate changes or increased predation. Potential mitigation measures include:

- avoidance of areas Cow Knob salamanders or its habitat occur;
- restoration of currently disturbed habitat;
- acquisition of more habitat;
- minimization of pipeline length and width across suitable salamander habitat; and
- investigation of optimum vegetation cover of pipeline corridor for Cow Knob salamanders.

Cheat Mountain Salamander

Although the current proposed study corridor largely avoids known locations and known high probability habitat for the endangered Cheat Mountain salamander, it does cross areas that have been modeled as potential habitat. Undiscovered locations could occur where the corridor includes mature forest on Cheat Mountain-Back Allegheny Mountain. Thorough field surveys will be needed. Forest Plan direction requires avoidance of disturbance within 300 feet of occupied habitat unless analysis can show that activities would not adversely affect populations or habitat (standard TE59, page II-26).

II. Comments of the on Draft Resource Reports, filed on July 30, 2015

128. Update section 3.7.2.2 with Cow Knob salamander survey data showing the Cow Knob salamander occurs within the pipeline corridor. Virginia Department of Game and Inland Fisheries recommended that the route avoid Cow Knob salamander habitat and locations (J.D. Kleopfer, personal communication). Develop alternatives that avoid impacts to the salamander such as 1)

completely avoiding Cow Knob salamander habitat and 2) using horizontal directional drill to reduce direct take and habitat loss.

129. The following text appears in the draft resource report: "The Cow Knob salamander is recognized as a management indicator species within the GWNF. In 1994, the FWS and the USFS entered into a Conservation Agreement for the cow knob salamander resulting in protection of occupied habitats within the GWNF." This text does not adequately describe the purpose of the conservation agreement. Replace the text with the text below to adequately describe the purpose of the agreement.

Nearly the entire known range of the Cow Knob salamander (*Plethodon punctatus*) occurs on the GWNF. 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 GWNF 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 under the Endangered Species Act. This Conservation Agreement, and accompanying Habitat Conservation Assessment, serves as the guide for management of the Cow Knob salamander.

Regarding the Cow Knob salamander, the GWNF's Forest Plan includes the following standards and desired conditions:

- Forest-wide Standard-45 If Cow Knob salamanders are found in areas outside the Shenandoah Mountain Crest management prescription (MP) area, those areas will be subject to the same management measures as described in the Shenandoah Mountain Crest MP Area 8E7.

- Desired Condition 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. Canopy closure along road rights-of-way is common. New trails may be constructed if no adverse effect on Cow Knob salamander populations will occur.

- Trail and road reconstruction, minor relocation, and new parking facilities are permitted. All activities are conducted with full consideration of effects on Cow Knob salamander populations.

- Regarding 8E7 Standard-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 Conservation Agreement states: "Utility and Transportation Corridors - Because corridors of any size will fragment Cow Knob salamander habitat and isolate populations on either side, new utility corridors must be sited around the SMC-SIA. When opportunities exist, utility corridors should be closed and allowed to revegetate naturally."

130. Analyze cumulative effects for the Cow Knob salamander, at a minimum including the effects of roads, rights-of-way, habitat loss, habitat fragmentation, and population isolation.

115. Correct the text on page 3-82 to state that Cheat Mountain salamanders can occur in high-elevation forests that do not have a spruce component and have been found below 2,980 feet. The section fails to indicate the proposed route crosses through known habitat of the Cheat Mountain salamander.

116. A cumulative effects analysis should be prepared for the Cheat Mountain salamander, salamander, at a minimum including the effects of roads, rights-of-way, habitat loss, habitat fragmentation, and population isolation.

312. The first paragraph of "MNF Baseline Route and Alternatives" incorrectly states that MNF2 avoids sensitive habitats. As noted in our scoping comments, MNF2 would cross habitat for the Virginia northern flying squirrel (also known as the West Virginia northern flying squirrel), Cheat Mountain salamander, Cheat minnow, Appalachian darter, candy darter, New River shiner, eastern hellbender, elktoe, green floater, brook trout, and several sensitive plant species, as well as red spruce ecosystem restoration areas. Ongoing field surveys could identify additional sensitive habitats along MNF2. Please remove the incorrect statement.

321. The section Habitat for Cheat Mountain Salamander on page 10-62 states that MNF2 avoids mapped habitat areas on Cheat Mountain. Many areas within the proposed MNF2 corridor on Cheat-Back Allegheny Mountain have been modeled as potential habitat for Cheat Mountain salamander and undiscovered populations could occur in those areas. As of the date of this writing, one previously undiscovered population has been discovered in the survey corridor for MNF2. As noted in scoping comments, the Forest Plan requires avoidances of disturbance within 300 feet of occupied habitat unless analysis can show that activities would not adversely affect populations or habitat.