



*Shaping the future for birds*

January 25, 2016

Earl D. Bandy Jr.  
Director-Knoxville Field Office  
Office of Surface Mining Reclamation and Enforcement  
Knoxville, TN 37902

Dear Director Bandy:

On behalf of American Bird Conservancy, we are writing in support of the State of Tennessee petition to designate over 67,000 acres within the Royal Blue Wildlife Management Area as unsuitable for coal mining. We agree with OSMRE that surface coal mining in the area would be incompatible with the 2015 Tennessee State Wildlife Action Plan and the 2005 Tennessee Comprehensive Wildlife Conservation Strategy.

We support the OSMRE finding, "Given the record related to the cerulean warbler, Ozark bunchflower, and pale corydalis, the OSMRE has concluded that the petition area provides valuable habitat for fish and wildlife. In addition, this habitat could be significantly damaged by surface coal mining operations, thus qualifying it as fragile lands." (Chapter 2, page 33) We strongly agree that this area qualifies as fragile lands because surface coal mining, even when properly permitted and current reclamation methods used, would significantly damage wildlife habitat and impact forest-dependent birds such as Cerulean Warbler.

American Bird Conservancy supports a modified version of Alternative 4 that would designate 569 miles of ridgeline covering 76,133 acres plus connect the descending ridgeline corridors all the way to the stream corridors. In addition, limitations must be put in place to ensure that remaining is only employed in the designated area where both the State of Tennessee and OSMRE agree that the benefit of environmental remediation justifies the sites exclusion from the area.

American Bird Conservancy strongly supports the petitioner and supporting intervenor's statements about the importance of this area for many species of birds, and the likely negative impacts coal development would have on species of conservation concern and habitats.

For example, the DEIS says:

Tennessee is one of the most biologically-diverse states in the United States with over 340 species of birds and the area is rated "very high" for habitat and special-status species protection by Tennessee's Comprehensive Wildlife Conservation Strategy. Bird species presence in the region varies seasonally, 115 species have been reported during spring, 93 during summer, 105 in autumn, and 66 in the winter (NPS 2011b). Thirty-seven species were reported in all seasons.

The Tennessee Cumberland Mountains are an important breeding area for migratory birds such as the Cerulean Warbler. Designating lands as unsuitable for mining would result in less habitat modification or removal, less potential for erosion, and less impact on surface water resources, resulting in beneficial impacts on special-status species residing in and around the proposed petition area. Conversely, mining and mining-related activities within the proposed petition area may result in adverse impacts on special-status species from habitat loss and fragmentation, increased erosion, and potential contamination of surface waters (DEIS 1 – 14).

The U.S. Fish and Wildlife Service lists 22 birds of conservation concern for the four affected counties. These include Cerulean Warbler, Bald Eagle, Bewick's Wren, Black-billed Cuckoo, Black-capped Chickadee, Blue-winged Warbler, Canada Warbler, Fox Sparrow, Golden-winged Warbler, Henslow's Sparrow, Kentucky Warbler, Least Bittern, Loggerhead Shrike, Louisiana Waterthrush, Northern Saw-whet Owl, Prairie Warbler, Prothonotary Warbler, Red Crossbill, Red-headed Woodpecker, Rusty Blackbird, Short-eared Owl, Swainson's Warbler, Wood Thrush, and Worm-eating Warbler. The petitioner states that lands within the petition area have a concentration of ecologic and aesthetic features such as corridors of unfragmented forest, scenic vistas, and superb biological diversity. As an example, the petitioner states that Royal Blue and Sundquist Wildlife Management Areas serve as a corridor of vital habitat for priority songbirds. The petitioner points out that the American Bird Conservancy has designated the Royal Blue Wildlife Management Area as a Globally Important Bird Area in Tennessee. The petitioner states that surface mining would destroy valuable wildlife habitat. (DEIS 2-23, 2-24)

The petitioner states that the public lands of the petition area are popular outdoor recreation destinations. Recreational activities that take place in the petition area include hiking, fishing, biking, camping, hunting, and wildlife viewing. The petitioner contends that this area offers unique opportunities for bird watching and that the Royal Blue and Sundquist Wildlife Management Areas are popular destinations among birdwatchers. The petitioner contends that surface mining in the petition area would interfere with these recreational opportunities. Visual impacts and noise impacts would deplete the scenic quality of the petition area, reducing its appeal for these activities. Further, rock and debris from blasting, and potential landslides from mining sites and haul roads, could present significant hazards to recreational users. The petitioner states that surface mining conflicts with recreational activities because public safety considerations will require closing areas near mining operations to recreational uses. (DEIS 2-24)

Relevant to the intervenors' concern about important songbird habitat, the intervenors identify the presence of numerous songbird species in this area of the Northern Cumberland Plateau that are designated by Partners in Flight as "priority species for conservation." Discussion of these species of concern is largely limited to information on the cerulean warbler. The intervenors contend that "designation of the ridgelines in the Petition Area is essential to protect the habitat" of the cerulean warbler. The intervenors cite data and a number of studies that they contend confirm the imperiled status of this bird and that directly or indirectly demonstrate the importance of the petition area in protecting this species. The intervenors conclude by stating that "the Surface Mining Control and Reclamation Act regulations do not require reforestation" and "the [approximate original contour] provision cannot and does not recreate the ridges, steep slopes, and mature forest habitat that existed prior to mining, the serious long-term impacts of coal mining on the large blocks of mountain forests that Cerulean warblers and other wildlife require for survival" are not addressed and "mining in the Petition Area would be devastating for the Cerulean warbler and other vulnerable bird species..." Intervenors suggest 80% of the cerulean warblers in the NCWMA fall within the State petition area and 85% of the high-density areas occur within the petition area. When this area is expanded by a 100-foot buffer, those numbers increase to 91% and 95%, respectively. (DEIS – 2-25)

As described by the petitioner, the American Bird Conservancy designated the Frozen Head State Park and Royal Blue Unit of the NCWMA as a globally important bird area (ABC 2010) due to several breeding neotropical migrant bird species. Partners in Flight published conservation priorities and objectives for terrestrial bird species that breed in the United States (Partners in Flight 2004). The USFWS (2014a) listed 22 birds of conservation concern for the four counties. Birds of conservation concern (USFWS 2014b) are the highest conservation species (apart from those already listed under the Endangered Species Act) identified by the USFWS that could be listed under the Endangered Species Act without additional conservation actions. Nine bird species that inhabit eastern deciduous forests have been identified as priority species for conservation by Partners in Flight (2004). Although the petitioner refers merely to priority migratory songbirds, the intervenors in support of the petition identify six of these species that are known to occur within the petition area: cerulean warbler, Louisiana water thrush, worm-eating warbler, wood thrush, Acadian flycatcher, and Kentucky warbler. The intervenors focus on the cerulean warbler, which can be considered a surrogate species for other forest-dependent bird species, meaning that impacts to the cerulean warbler would be similarly experienced by other forest-dependent species that require similar habitat conditions.

**Cerulean Warbler:** The cerulean warbler is a USFWS bird of conservation concern species and a state species deemed In Need of Management. This species has faced extensive habitat loss over the last century (Robbins, Fitzpatrick, and Hamel 1989). The cerulean warbler is a small neotropical migrant songbird that feeds primarily on insects (USFWS 2007a). It breeds in mature deciduous forests in the eastern United States, primarily in the Ohio and Mississippi River Valleys and areas of the Appalachians, New England and Southern Canada, and the Great Lakes region (USFWS 2007a). The core breeding range of the warbler is primarily in the Ohio Hills and Northern Cumberland Plateau (Wood, Bosworth, and Dettmers 2006). This species population has experienced a negative trend with an overall 3–4% decline in the last 30 years (USFWS 2007a).

The cerulean warbler was proposed for listing as threatened under the Endangered Species Act. However, the USFWS determined that the listing was not warranted (USFWS 2007a). As part of the review of the species status, the USFWS identified four primary mechanisms contributing to the species decline. Each of these contributors is caused by habitat loss. 1. Reduction in available nesting sites and suitable breeding territory characteristics because of loss or degradation of habitat. 2. Reduction in foraging success resulting from decreased prey abundance, primarily on the wintering grounds in South America. 3. Increased predation throughout the species annual range and nest parasitism of cerulean warblers in their breeding grounds, resulting from habitat fragmentation. 4. Loss of migration habitat (USFWS 2007a). In Tennessee, the cerulean warbler requires large tracts of mature deciduous forests (Robbins, Fitzpatrick, and Hamel 1989).

In addition, in Tennessee these warblers are more apt to occur higher up slopes along ridgelines rather than in bottomlands (Wood, Bosworth, and Dettmers 2006) and on north- to east-facing slopes. Buehler and others (2006) found when comparing five breeding areas that three out of five areas were population sinks—areas that contain no or low populations with little increase due to poor quality habitat. In this study, the petition area was found to be one of two areas in the Cumberland Mountains capable of sustaining a stable population in good years (Buehler et al. 2006). The authors suggested that in order to allow for a stable population, habitat loss should be minimized. (DEIS 2 – 31)

Edge effect and forest fragmentation limit cerulean warbler abundance and distribution (Wood, Bosworth, and Dettmers 2006). In a review of the literature, Wood and others (2006) found that cerulean warblers were tolerant of forest gaps such as roads, trails, and minimal silvicultural treatments, whereas they were negatively affected by “extensive hard edge of reclaimed mines.” The presence of a forest edge can result in increased predation, brood parasitism, and species competitions and the effect can extend up to 150 feet into the forest (Wood, Bosworth, and Dettmers 2006). In 2005, Wood and others documented lower

cerulean warbler territory density adjacent to reclaimed mine edges (Wood, Bosworth, and Dettmers 2006). Wood, Bosworth, and Dettmers (2006) found that the edge effect of reclaimed mines extended over 1,000 feet into the forest.

The USFWS made a similar conclusion, stating that the “introduction of hard edges may result in greater local population declines” and that the continued “degradation or removal of suitable mature and old-growth hardwood forestland will result in reductions in nesting opportunities, and that accumulation of habitat losses is likely to result” in overall species decline (USFWS 2007a). USFWS cautioned that “[e]ffects in a relatively small portion of the species range... could contribute disproportionately to the population decline” (USFWS 2007a). The USFWS stated that large-scale habitat losses in the Kentucky and West Virginia from surface coal mining was predicted to occur through 2012 resulting in a 10–20% loss of the warbler population occurring in that part of its core area.

Although reclamation of surface coal mining operations is required for SMCRA-permitted sites, Welton (2014) suggests that the methods would be “insufficient to replace [the] habitat in a biologically relevant timeframe.” Threats to cerulean warbler habitat include forest timber activities and land clearing for other activities. The TWRA has been developing a habitat conservation plan that establishes reserves of core breeding and foraging habitat and sets management strategies above elevations of 1,800 feet, such as no harvesting more than 10% of the habitat above 2,100 feet (Welton 2014). In 2005, Buehler, Welton, and Beach (2006) estimated that the Cumberland Mountains in Tennessee provide over 80,000 hectares of potential cerulean warbler habitat.

Buehler and others studied potential warbler habitat for the Royal Blue Unit Wildlife Management Area and Sundquist Unit Wildlife Management Area, and predicted that 59% of the Royal Blue Unit was suitable habitat and that the unit could support approximately 1/3 of the Cumberland Mountains cerulean warbler populations (approximately 13,000 breeding pairs). Similarly, the study found that 50.5% of the Sundquist Unit was suitable cerulean warbler habitat that could support approximately 3,500 breeding pairs (Buehler, Welton, and Beach 2006). The study also found that the coal reserves on the Royal Blue Unit generally overlap the same area as warbler habitat. A recent study documented that of 365 cerulean warblers detected in the NCWMA, 91% of the birds and 95% of the high-density sites were located in the petition area or within 100 feet of the petition area boundary (Welton 2014). Buehler, Welton, and Beach (2006) found that the 2005 Cumberland Mountain population “may compose >20% of the range-wide population.” Buehler and others predict that surface coal mining could displace upwards of 8,000 breeding pairs in the NCWMA or roughly 4% of the overall species population.

The presence of this species and the importance of this particular area (breeding habitat) to the life cycle of the species in part prompted the state to identify in its draft habitat conservation plan an area of approximately 6,300 acres within the NCWMA as a high elevation conservation area, intended to reduce or prevent the adverse impacts associated with logging from adversely affecting species of concern to the state including the cerulean warbler (Welton et al. 2012). The state also designated forest and woodland reserves encompassing almost 12,000 acres. Management in these reserves and conservation areas would be limited to “invasive plant and animal control; disease, parasite and pathogen control; fire management; or other forest health concerns.” The OSMRE has determined that approximately 2,800 acres of the 1,200-foot petition boundary corridors would fall within the forest high elevation conservation area. (DEIS 2 -31, 2-32)

**Birds** The evaluation area provides breeding, wintering, and migration stopover habitat for a variety of birds. Historically, approximately 180 species have been reported in the NCWMA, although many of those are rare or transient (O’Connell, Jackson, and Brooks 2000). Bird species presence in the region varies seasonally, 115 species have been reported during spring, 93 during summer, 105 in autumn, and 66 in the winter in Big South Fork National River and Recreation Area (NPS 2011b). Thirty-seven

species were reported as year round residents. The relatively high numbers of species observed during spring and fall result, in part, from the presence of transient migrants during these seasons (NPS 2011b). A high abundance of birds present were forest habitat specialists and neotropical migrants (NPS 2011b). Stedman and Stedman (2007) noted that the diversity of breeding neotropical migrants is good to excellent due to the fairly mature forest throughout the region. Of the 93 species reported during the summer season for a survey conducted in Big South Fork National River and Recreation Area, 68 (72%) were neotropical migrants (Stedman and Stedman 2007).

On behalf of American Bird Conservancy, thank you for accepting these comments. If you have any questions or if I can be of further assistance please contact me at 202 888 7490 or [sholmer@abcbirds.org](mailto:sholmer@abcbirds.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Holmer", with a long horizontal flourish extending to the right.

Steve Holmer  
Senior Policy Advisor  
American Bird Conservancy