

Ruth M. Horton
Tennessee Valley Authority
400 West Summit Hill Drive, WT8C
Knoxville, TN 37902-1499

June 12, 2003

Subject: Scoping comments regarding the Tennessee Valley Authority's proposed Environmental Impact Statement for the Koppers Coal Reserve management plan

Dear Ms. Horton,
Please accept the following comments for consideration in the scoping for the EIS being developed for the Koppers Coal Reserve management Plan.

Terrestrial Wildlife and Vegetation

Surveys

In order to adequately assess the environmental impacts of coal mining on the Koppers Coal Reserve which encompasses all of Royal Blue Wildlife Management Area, thorough and comprehensive surveys for all federal and state listed plant and animal species and species of conservation concern in Tennessee need to be conducted. Sampling suitable habitat for each species, both inside and outside Royal Blue WMA, will be necessary to assess the relative biological importance of potential areas of impact. A list of rare species to be included in these surveys is attached (Attachment 1 and 2).

Reptiles and amphibians: Seven species of rare amphibians and reptiles are known to or potentially occur within the boundaries of Royal Blue Wildlife Management Area. Both diurnal and nocturnal surveys need to be conducted in appropriate habitat for the presence of listed species. All major watersheds on the Koppers Reserve need to be surveyed.

Mammals: 15 species of rare mammals are known to or potentially occur within the boundaries of Royal Blue WMA. Two are Federally Endangered and the rest are state listed In Need of Management. Surveys using standard collection methods such as Sherman live traps, snap traps, pitfall traps, mist nets and large-size live traps need to be conducted.

Fish and Mussels: Ten species of rare fish and seven species of rare mussels are known to occur or potentially occur within the boundaries of Royal Blue WMA. All streams within as well as downstream of the watersheds on Royal Blue WMA need to be surveyed. Methods should include standard electro fishing and seining techniques. Sample lengths should average 300 feet and include both riffle and pool habitats. Mussels should be sampled using wading and snorkeling techniques.

Plants: The Cumberland Mountains and adjacent Cumberland Plateau are well known as centers of high floristic diversity in Tennessee. Fourteen state listed rare vascular plants and twelve non-vascular plants are known to occur or potentially occur within Royal Blue WMA. Suitable habitats where these species are likely to occur and specific sites (if any) where rare taxa were previously known to occur on Royal Blue need to be intensively surveyed. Surveys need to be timed to maximize the potential to detect these listed species.

Birds: Four species of state listed birds and several species of conservation concern are known to occur or potentially occur within the boundaries of Royal Blue WMA (see Attachments 1 and 2). Breeding bird surveys for these listed species need to be conducted in appropriate habitats. Methods should include timed searches per unit area and a series of standardized 10-minute 50-m radius point counts to document all avian species using a given site. Detection of state listed species should be enhanced by use of playback vocalizations to elicit additional singing from territorial males.

Cerulean Warbler

The Cerulean Warbler is currently the subject of a great deal of conservation attention both because of long term declining population trends and because it has been petitioned for listing under the Endangered Species Act. Concern over this species has led to the formation of a Cerulean Warbler Technical Working Group composed of researchers, federal and state agencies, conservation groups and members of the forest products industry.

The two primary threats to this species are incompatible silvicultural practices and surface coal mining affecting the species' breeding grounds. While a dialogue has been established with the forest products industry on ways to reduce threats to this species, an effective strategy for establishing a similar dialogue with the coal industry has not yet been developed with the coal industry. It is estimated that current mining trends will result in a loss of breeding habitat for 10 to 20% of the global population of Cerulean Warblers (See Attachment 3). This level of habitat loss is unacceptable for a species that has experienced steep population declines over the last 30 years and is facing other major threats.

Recent regulatory changes have allowed TVA and other electric utilities to construct flue gas desulfurization units (scrubbers) at existing coal-fired generating plants. This will allow TVA and other utilities to burn a higher sulfur coal and will result in a substantial increase in the marketability of the high sulfur content coal found in of Tennessee and elsewhere in the Southeastern.

The recent Cornell University Cerulean Warbler Atlas Project confirmed that the core of the Cerulean breeding range extends from West Virginia to the Cumberland Mountains of Tennessee. Royal Blue WMA was specifically highlighted as one of the most important publicly owned breeding locations in that range. Unique conditions at Royal Blue WMA include both topography and a relatively mature, intact forest that is partially an artifact of the low incidence of surface mining occurring there over the past 20 years. This contrasts with the former International Paper property to the south (now Sundquist WMA) and private lands to the north where surface mining is currently ongoing.

One way to adequately incorporate Cerulean Warbler breeding habitat conservation in this plan would be to designate high quality Cerulean nesting areas on Royal Blue WMA as "Lands Unsuitable for Mining". A computer model currently being developed by Dr. David Buehler, University of Tennessee, and Randy Dettmers, USFWS, based upon several datasets of Cerulean Warbler locations on the Royal Blue WMA and other nearby tracts will identify high quality sites.

Surface coal mining represents the largest threat facing Ceruleans and this threat is only going to increase if the increased demand for high sulfur coal increases. Changes in current surface mining practices need to be made to ensure the long-term survival of the Cerulean Warbler. This EIS is for a plan to manage federally owned mineral rights on publicly owned land in a high density Cerulean Warbler breeding area of national significance. TVA has an important opportunity here to address this issue and be a model for others in the coal

industry to follow. If adjustments cannot be made to mineral rights access on Royal Blue WMA to accommodate Cerulean Warblers, there is little chance that industry changes can be expected elsewhere.

A rigorous assessment of the cumulative impacts of the surface mining alternatives needs to be done. This is critical for, not only the Cerulean Warbler but for other forest dwelling species facing population declines. It is the potential for large, population-level negative impacts on these species at the cumulative level that is the most threatening aspect of surface mining.

Executive Order 13186, Responsibilities of Federal Agencies To Protect Migratory Birds. Although the Memorandum of Understanding between the USFWS and TVA has not been written, TVA remains subject to its provisions and should implement the conservation measures set forth in this order. Loss of forest habitat to surface mining and access road construction represents an unintentional take. Practices need to be developed, in cooperation with the USFWS, to lessen the amount of this take.

The EIS needs to evaluate the amount of unintentional take that the different alternatives will have on state listed birds and birds of conservation concern (see Attachments 1 and 2).

Reforestation

There has been much recent discussion about reforestation on surface mine sites as a means to mitigate for the loss of forest habitat. While this method is theoretically appealing, it needs to be considered experimental at best.

No research on this technique has been done in the Cumberland Mountains where slopes are steep, topsoil is thin and forest regeneration is naturally slower than more fertile areas. Recontoured slopes constructed from unconsolidated material will not have the hydrologic attributes of the original bedrock. Even with amended soils applied to the surface, the microbes, seed and rootstock of the native vegetation will be dramatically altered or lost.

It is unknown if conditions can be created to allow a forest to regenerate that will function ecologically like the forest that is removed. It is unknown how long such a process would take. While reforestation alternatives should be included as part of restoring any sites proposed for mining, these reclaimed areas should not be valued equally against the loss of the present forest when determining net loss. Further, all means to reduce surface disturbance need to be explored.

Surface and Ground Water

Antidegradation

The water quality of all streams within Royal Blue WMA need to be assessed. The EIS should assess the existing designation of these waters under the antidegradation provisions of the Clean Water Act and the Tennessee Water Quality Control Act and consider affording such streams a higher designation and greater protection under the antidegradation requirements. Updated policies and procedures at the Tennessee Department of Environment and Conservation's Water Pollution Control Office may dictate that the streams on Royal Blue Wildlife Management Area should receive greater protection. Portions of the Big South Fork River are designated as an Outstanding National Resource Water (ONRW), and the implication of such designation for potential mining on Royal Blue should be examined, since a cumulative impact analysis should include consideration of the impacts on the Big South Fork National Recreation Area.

Acid mine drainage

Some seams in the Koppers Reserve are known to contain high concentrations of pyrite, which when mixed with air and water results in acid mine drainage from both surface and underground mines. The cost of developing and maintaining water control structures should be evaluated when considering the economic impacts of any decision to mine. Although the soils in some areas are acidic because there are occasional outcroppings of acid producing seams, TVA should consider setting a threshold above which acid producing shales will not be mined or will be avoided in an effort to protect the watershed. An alternative needs to be developed designating these areas with acid producing shales as Lands Unsuitable for Mining

Sediment control

Numeric water quality limitations on sediment treatment units need to be set in order to protect endangered fish under all flow conditions.

Alternatives

Lands Unsuitable for Mining

Royal Blue WMA is in a region of high biodiversity and is especially important for its large breeding population of Cerulean Warblers. Because of the potential devastating impacts from surface mining, it is incumbent on TVA to fully assess and identify areas of high biological value and designate them as Lands Unsuitable for Mining.

Other areas to assess for designation as Lands Unsuitable for Mining would include potential acid mine drainage sites, the Cumberland Trail corridor and view shed and Braden Mountain (Attachment 4).

Reduced surface disturbance

An alternative needs to be developed that would reduce surface mining if eliminating surface mining is not feasible. All technologies to achieve this need to be evaluated.

Relative economic impacts

The economic impacts of the different alternatives need to be evaluated and compared. The EIS should focus not simply on the potential economic benefits from coal mining but should also examine the negative economic impacts arising from decreases in recreational use by sportsmen, hikers, birdwatchers, ATV riders etc., as a result of increased mining.

Cumulative Impacts

In addition to direct and indirect impacts, this EIS needs to evaluate cumulative impacts of leasing the mineral rights on Royal Blue WMA and these need to be addressed with the utmost seriousness and rigor. This evaluation needs to take into consideration recent regulatory changes that will likely result in an increase in regional high sulfur surface coal mining. This impact needs to be evaluated with other forces causing habitat loss in the region from activities like silvicultural and development.

We recognize the obligation of TVA to provide its ratepayers with affordable electricity but we also believe that certain biological and esthetic resources, including intact native forest communities, have an incalculable economic value to current and future citizens. We agree with the statement made by Ike Zeringue, Chief Operating Officer for TVA, when TVA transferred the mineral rights under the Daniel Boone National Forest to the US Forest Service, "Our role as a public steward requires a higher standard for protecting the land and the overall public interest."

We appreciate the opportunity to submit comments during the scoping period for the Environmental Impact Statement for the Koppers Coal Reserve Management Plan. If there are questions about any of the material included, please contact Melinda Welton, Conservation Chair, Tennessee Ornithological Society (615) 799-8095, <weltonmj@earthlink.net>.

Gerald W. Winegrad,
Vice President for Policy,
American Bird Conservancy

Virginia Reynolds President
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Will Callaway, Executive Director
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CC. Betsy Child, Commissioner, TN Department of Environment and Conservation
Gary Meyers, Director, TN Wildlife Resources Agency
Lee Barclay, Field Supervisor, US Fish and Wildlife Service

Attachments:

- 1) Rare species known to occur or possible occur in the Southern Cumberland Mountains and their designated status.
- 2) Birds of Conservation Concern, US Fish and Wildlife Service, December 2002
- 3) NEPIF Draft comments to be submitted to for consideration in the EIS being developed for mountaintop removal mining/valley fill activities in West Virginia, Kentucky, Tennessee, and Virginia.
- 4) Comments submitted February 3, 2003 to TVA regarding the Draft Environmental Assessment for the Braden Mountain Surface Mine