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BULL RUN FOSSIL PLANT DECONTAMINATION AND DECONSTRUCTION FINAL ENVIRONMENTAL ASSESSMENT

Anderson County, Tennessee

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Symbols, Acronyms, and Abbreviations

AADT	annual average daily traffic
ACHP	Advisory Council on Historic Preservation
ACM	asbestos containing materials
APE	Area of Potential Effect
ARAP	Aquatic Resource Alteration Permit
BMP	best management practice
BRF	Bull Run Fossil Plant
CAA	Clean Air Act
CBG	census block group
CCR	coal combustion residuals
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CO₂	carbon dioxide
CO₃	carbonate
CRM	Clinch River Mile
CWA	Clean Water Act
dB	decibel(s)
dBA	a-weighted decibel
DO	dissolved oxygen
EA	environmental assessment
EIS	environmental impact statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EPT	<i>Ephemeroptera</i> , <i>Plecoptera</i> , and <i>Trichoptera</i>
ESA	Endangered Species Act
ETSZ	East Tennessee Seismic Zone
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FFCA	Federal Facilities Compliance Agreement
FHWA	Federal Highway Administration
FONSI	finding of no significant impact
FR	Federal Register
FTA	Federal Transit Administration
GHG	greenhouse gas
HPA	Habitat Protection Area
HUD	U.S. Department of Housing and Urban Development
Hz	hertz
IPaC	Information for Planning and Consultation
IRP	Integrated Resource Plan
L_{dn}	day-night sound level
L_{eq}	equivalent sound level
MOA	Memorandum of Agreement
MW	megawatt
MWe	megawatt electric
NAAQS	National Ambient Air Quality Standards
NCA5	Fifth National Climate Assessment
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLCD	National Land Cover Dataset
NMSZ	New Madrid Seismic Zone
NO₂	nitrogen dioxide
NPDES	National Pollution Discharge Elimination System

NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O₃	ozone
OSHA	Occupational Safety and Health Administration
PEM	palustrine, emergent
PFO	palustrine, forested
Pb	lead
PCB	polychlorinated biphenyl
PM	particulate matter
PM_{2.5}	particle sizes less than or equal to 2.5 microns
PM₁₀	particle sizes less than or equal to 10 microns
POL	petroleum, oils, and lubricants
PUB	palustrine, unconsolidated bottom
RCRA	Resource Conservation and Recovery Act
RFFA	reasonably foreseeable future action
RM	river mile
SASZ	Southern Appalachia Seismic Zone
SCSZ	South Carolina Seismic Zone
SEA	supplemental environmental assessment
SHPO	State Historic Preservation Officer
SO₂	sulfur dioxide
SR	State Route
SSSP	Site-Specific Safety Plan
SWPPP	Stormwater Pollution Prevention Plan
TENORM	Technologically Enhanced Naturally Occurring Radioactive Materials
TCA	Tennessee Code Annotated
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TPO	Transportation Planning Organization
TVA	Tennessee Valley Authority
TVAR	Tennessee Valley Archaeological Research
TWRA	Tennessee Wildlife Resources Agency
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VdB	vibration decibels
WMA	Wildlife Management Area
WOTUS	Waters of the U.S.
WQC	Water Quality Certification
WWC	wet weather conveyance

CHAPTER 1 – PURPOSE AND NEED FOR ACTION

1.1 Introduction

The Bull Run Fossil Plant (BRF) is located in Anderson County, Tennessee, approximately 5 miles east of downtown Oak Ridge and 13 miles west of Knoxville (Figure 1-1). BRF is operated by the Tennessee Valley Authority (TVA) on a 750-acre reservation on the east side of Melton Hill Reservoir near Clinch River Mile (CRM) 48.

Construction of BRF began in April 1962 and was completed in June 1967 with commercial operation beginning that same month. Nameplate generating capacity (maximum capacity) for the single unit is 950 megawatts (MW) with a net generating capacity of approximately 889 megawatt electric (MWe). BRF is the only single-generator coal-fired power plant in the TVA system. BRF generates over 6 billion kilowatt-hours of electric power in a typical year, which is enough electrical energy to meet the needs of approximately 430,000 homes.

TVA entered into a Federal Facilities Compliance Agreement (FFCA) with the United States Environmental Protection Agency (EPA) that resolved a dispute over how the Clean Air Act's (CAA) New Source Review program applied to maintenance and repair activities at TVA's coal-fired power plants. TVA also entered into a judicial consent decree with the States of Alabama, Kentucky, Tennessee, and North Carolina, and three environmental advocacy groups: 1) the Sierra Club, 2) the National Parks Conservation Association, and 3) Our Children's Earth Foundation. The consent decree is substantively similar to the FFCA. These agreements (collectively called the "EPA Agreements") require TVA to reduce emissions across its coal-fired generating system and take other actions at its coal plants, including retiring some of its units.

In June 2019, TVA published the *2019 Integrated Resource Plan (IRP)*, which was developed with input from stakeholder groups and the general public. The 2019 IRP evaluated six scenarios (possible futures) and five strategies (potential TVA business decisions or directions that TVA could employ in each scenario) and identified a range of potential resource additions and retirements throughout the TVA power service area, which encompasses approximately 80,000 square miles for the majority of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia. The target power supply mix adopted by the TVA Board through the 2019 IRP recommended to continue with announced plans to retire BRF and Paradise Fossil Plant in Drakesboro, Kentucky, and to evaluate retirements of up to 2,200 MW of additional coal capacity if cost-effective by 2038 (TVA 2019a).

As a large, inflexible coal unit with medium operating costs and a high forced outage rate, BRF does not fit current and likely future portfolio needs. While BRF was designed to provide baseload generation, increases in nuclear generation which produce power at a lower cost per megawatt-hour have displaced BRF for baseload generation. The retirement in 2023 of this inflexible unit with high maintenance costs would facilitate TVA's statutory mission to provide reliable power at the lowest system cost.

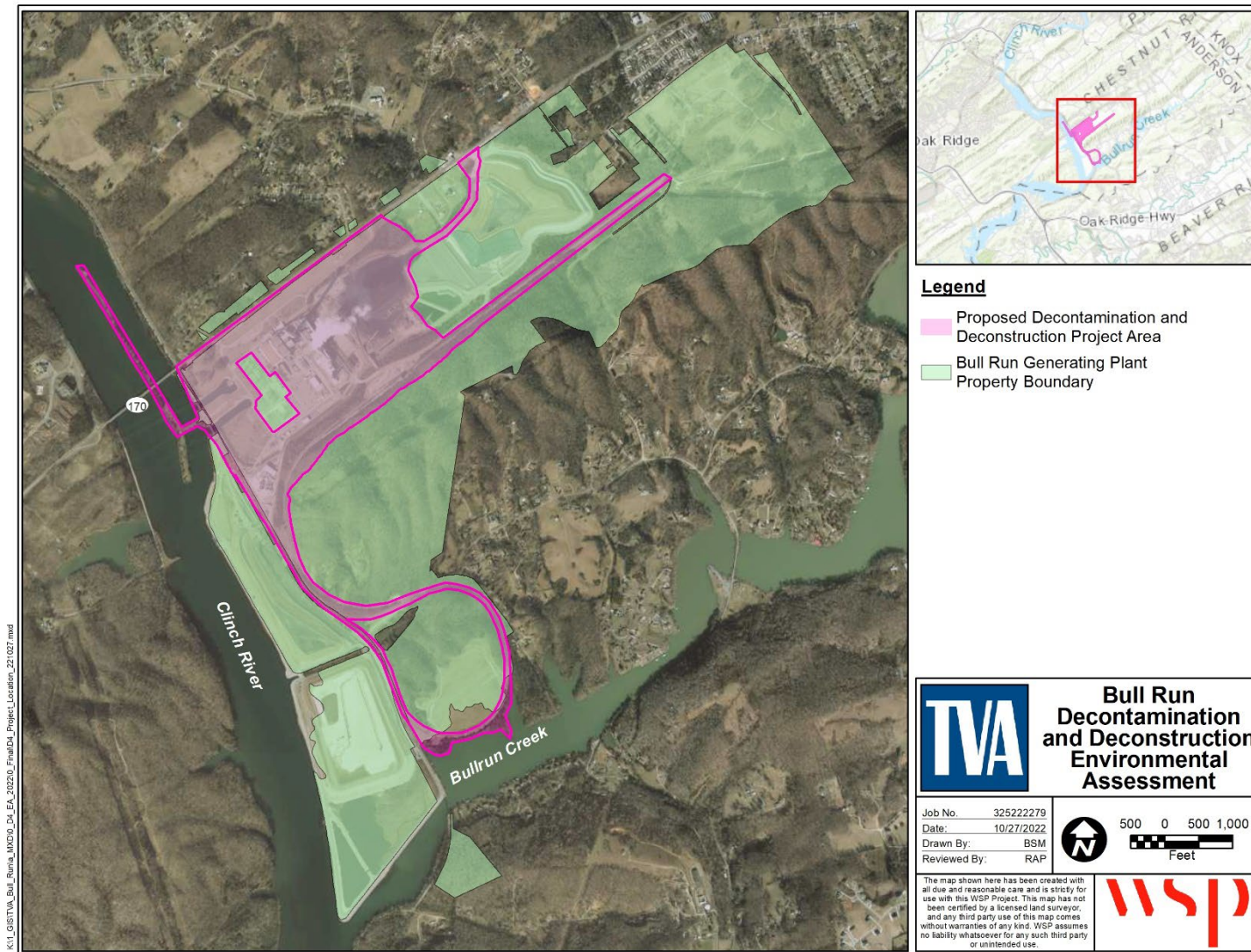


Figure 1-1. BRF Decontamination and Deconstruction Project Location

TVA evaluated the environmental impacts associated with the retirement of BRF in the *Potential Bull Run Fossil Plant Retirement Environmental Assessment* (TVA 2019d) and identified retirement of BRF as the preferred action in the Finding of No Significant Impact (FONSI) published in February 2019. In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023.

TVA is now investigating options for the future disposition of BRF including securing and maintaining the plant, securing and maintaining portions of the plant, deconstructing and demolishing the plant, or leaving the plant as is and taking no actions. Securing and maintaining part or all of the plant entails de-energizing the facilities and placing BRF in an “idle and vacant” status during which basic maintenance is continued to prevent safety and environmental issues. The decontamination and deconstruction project area for BRF is shown on Figure 1-2. The project area covers approximately 252 acres within the 750-acre BRF reservation. All or most of the buildings and structures within the project area are being considered for removal. Decommissioning activities would begin upon unit shutdown in preparation for deactivation and demolition. Decommissioning includes removal of components that may be used at other TVA sites, draining of oil/fluids from equipment, removal of ash from the boilers, removal of information technology assets, removal of plant records, etc.

TVA has prepared this Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) and TVA’s procedures for implementing NEPA to assess the environmental impacts of alternatives for the future disposition of BRF, including its potential decontamination and deconstruction. This EA was prepared consistent with 2020 Council on Environmental Quality’s (CEQ) regulations for implementing NEPA at 40 Code of Federal Regulations (CFR) 1500-1508 (85 Federal Register [FR] 43304-43376, July 16, 2020). TVA’s 2020 NEPA regulations at 18 CFR 1318 were also applied (85 FR 17434, Mar. 27, 2020). Further, the EA is consistent with CEQ’s recently finalized rule (87 FR 23453, April 20, 2022) amending certain provisions of its 2020 regulations.

The impact of activities associated with the closure of the ash disposal areas were addressed in the separate NEPA reviews as described in Section 1.4, since all such activities would occur independent of the deconstruction of BRF.

1.2 Purpose and Need

The purpose of the Proposed Action is to appropriately manage disposition of the buildings and physical structures at BRF that are no longer needed for their original purpose of power generation. TVA needs to manage the disposition of the BRF site to provide necessary structures and facilities for ongoing site activities while considering capital costs, long-term operations and maintenance costs, environmental risks, safety, and security at the plant site, and making the land available for future economic development.

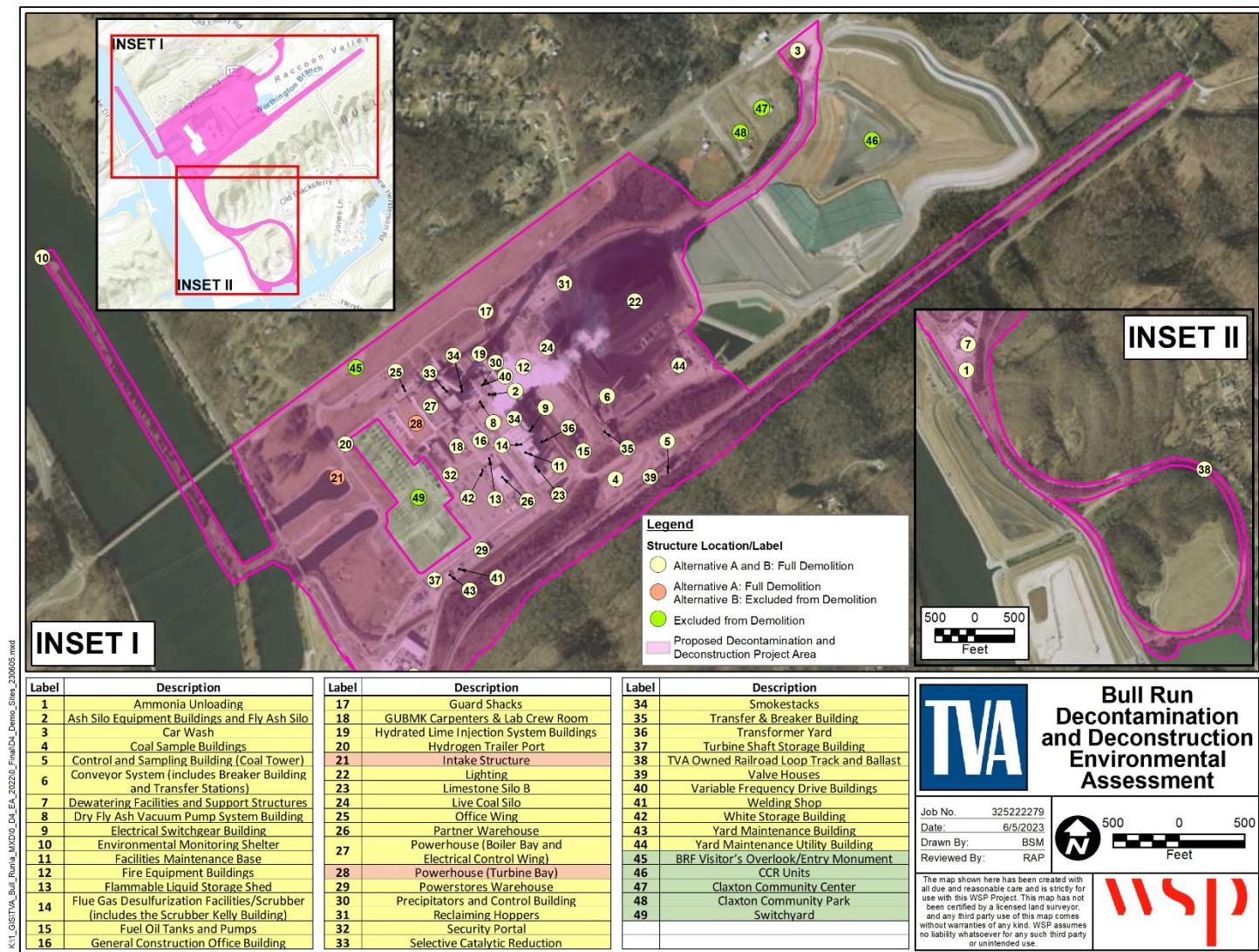


Figure 1-2. BRF Decontamination and Deconstruction Project Area and Demolition Sites

1.3 Decision to be Made

This EA is being prepared to inform TVA decision makers and the public about the environmental consequences of the Proposed Action. The decision TVA must make is whether to fully demolish the facility, partially demolish the facility, or take no action.

1.4 Related Environmental Reviews

Various environmental documents and materials were reviewed concerning this EA and are listed below. The contents of these documents help describe the affected environment and are incorporated by reference as appropriate.

- *Potential Bull Run Fossil Plant Retirement Final EA* (TVA 2019d) – This EA evaluated the potential retirement of BRF. TVA's proposed action was consistent with TVA's 2015 IRP and supports a low cost, reliable, risk-informed, diverse, environmentally responsible, and flexible power system.
- *Bull Run Fossil Plant Landfill Final Environmental Impact Statement (EIS)* (TVA 2016c) – This EIS was prepared to address alternatives for the future disposal of Coal Combustion Residuals (CCR) produced at BRF. It describes the need for additional storage capacity for the long-term disposal of the dry CCR materials to enable TVA to continue operations at BRF beyond 2024. In its Record of Decision, TVA decided to construct and operate a new, 120-acre landfill a short distance east of BRF.
- *Ash Impoundment Closure Final EIS Part I Programmatic NEPA Review* (TVA 2016a) – This programmatic EIS was prepared to address the closure of impoundments at all of TVA's fossil plants to support the implementation of TVA's goal to eliminate all wet CCR storage at its fossil plants.
- *Ash Impoundment Closure Final Programmatic EIS, Part II Site-Specific NEPA Review Bull Run Fossil Plant* (TVA 2016b) – In this EIS, TVA considered closure of the BRF Sluice Channel and Fly Ash Impoundment, which are part of BRF's wet CCR disposal area. The preferred closure method was closure in place.
- *Bull Run Fossil Plant Ash Impoundment Closure Project, Supplemental Environmental Assessment (SEA)* (TVA 2017b) – Subsequent to the completion of the 2016 Programmatic EIS, TVA determined that there is a long-term need for wastewater treatment at BRF and revised the closure plan to support the wastewater treatment system at BRF. This supplemental document studied the expansion of the 2016 original proposed impoundment closure area and repurposing of the Stilling Impoundment.
- *Bull Run Fossil Plant Ash Impoundment Closure Project, SEA* (TVA 2019c) – This SEA was developed to assess an installation of a temporary cover on a portion of the Main Ash Impoundment at BRF, which would eliminate wet CCR storage and provide a facility for stormwater and wastewater treatment. This SEA also evaluated the closure of the Fly Ash Stilling Pond and repurposing the area into a process water basin.
- *2019 Integrated Resource Plan* (TVA 2019a) – TVA's 2019 IRP provides direction for how TVA will meet the long-term energy needs of the Tennessee Valley region while fulfilling its mission of serving the Tennessee Valley by providing low-cost reliable power, environmental stewardship, and economic development.

- *Integrated Resource Plan, EIS* (TVA 2019b) – This EIS accompanied the 2019 IRP and assessed the natural, cultural, and socioeconomic impacts associated with the implementation of the IRP. The report identified the closure of BRF as part of its strategy to provide low-cost, reliable, and clean power in an environmentally responsible manner while promoting economic development across the Tennessee Valley.

1.5 Scope of the Environmental Assessment

TVA considered the possible environmental effects of the Proposed Action and determined that potential effects to the environmental resources listed below were relevant to the decision to be made; thus, the following environmental resources are addressed in detail in this EA.

- | | | |
|-------------------------------|---|--|
| • Land Use and Prime Farmland | • Threatened and Endangered Species | • Natural Areas, Parks, and Recreation |
| • Geology and Groundwater | • Air Quality and Climate Change | • Cultural and Historic Resources |
| • Surface Water | • Hazardous Materials and Solid and Hazardous Waste | • Utilities and Service Systems |
| • Floodplains | • Transportation | • Public Health and Safety |
| • Wetlands | • Noise | • Socioeconomics and Environmental Justice |
| • Aquatic Ecology | • Visual Resources | |
| • Wildlife | | |
| • Vegetation | | |

TVA's action would satisfy the requirements of Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands), EO 12898 (Environmental Justice), and EO 13751 (Invasive Species); and applicable laws including the National Historic Preservation Act (NHPA), Endangered Species Act (ESA), Clean Water Act (CWA), and CAA.

1.6 Public and Agency Involvement

The Draft EA was released for a 60-day public comment period on December 4, 2022, and was posted on TVA's website (<http://tva.com/nepa>). Comments on the Draft EA were accepted through February 2, 2023. To solicit public input, the availability of the Draft EA was announced in newspapers that serve the Anderson County, Tennessee, area. A news release was also issued to the media. TVA's agency involvement included notification of the Draft EA to local, state, and federal agencies and federally recognized tribes, as part of the review.

In response to comments received by TVA from the public, agencies and other interested parties, TVA has revised text within the Final EA and has included a response to comments in Appendix A.

1.7 Necessary Permits or Licenses and Consultation Requirements

TVA would obtain all necessary permits, licenses, and approvals required for the alternative selected. TVA anticipates the following permits or approvals would likely be required for implementing the proposed alternative:

- National Pollutant Discharge Elimination System (NPDES) permit No. TN0005410.

- Air Construction Permit and modification of existing Title V Air permit for air emissions.
- Permits associated with disposal of sewage and sanitary wastewater into a nearby municipal wastewater treatment facility.
- Aboveground storage tank registrations and permits would require updating, provided the tanks are abandoned or removed.
- Oil Spill Prevention, Control, and Countermeasure Plan or Integrated Pollution Prevention and Spill Response Plan would be updated to reflect the removal of BRF.
- Stormwater discharges from BRF are permitted under TDEC's General Permit for Stormwater Discharges associated with Industrial Activity, Permit No. TNR053185 (expiration 06/20/2025). During project demolition activities, TVA would modify the site operational stormwater pollution prevention plan (SWPPP) or best management practices (BMPs) plan as necessary to reflect current site conditions.
- Any work conducted in jurisdictional waters may require a CWA Section 404 permit administered by the U.S. Army Corps of Engineers (USACE) and Section 401 Water Quality Certification (WQC) administered through an Aquatic Resources Alteration Permit (ARAP) by TDEC depending on the project impacts and location.
- Notification of Demolition (State of Tennessee and/or Anderson County).
- Consistent with the Federal Emergency Management Agency (FEMA) National Flood Insurance Program, the local floodplain administrator would be contacted, when appropriate, to determine the actions necessary to ensure substantive compliance with local floodplain regulations, and thereby minimize adverse impacts to floodplains and their natural and beneficial values.

No permits or licenses would be required specifically for solid or hazardous materials transportation-related activities under any of the potential alternatives with the exception of hauling hazardous materials for the purpose of disposal offsite. The selected contractor would be responsible for ensuring necessary permits are obtained and implemented, manifests completed, and hazardous waste disposal properly reported. Other necessary permits would be evaluated based on site-specific conditions. Additionally, if new hazardous waste streams are generated during demolition, notification and registration of these must be made to TDEC.

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CHAPTER 2 – ALTERNATIVES

This chapter describes the alternatives analyzed in this EA, summarizes the environmental impacts associated with each alternative, identifies potential mitigation measures, and presents the preferred alternative.

2.1 Description of Alternatives

2.1.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Alternative A includes the proposed decontamination and demolition of the powerhouse and buildings and structures within the proposed decontamination and deconstruction project area to 3 feet below final grade. All environmental issues associated with identified structures would be assessed and abated, including the decontamination of all buildings, structures, conveyers, and tunnels associated with plant operations, to remove hazardous materials. Demolition could be conducted via mechanical deconstruction and/or explosives. Alternative A could create approximately 7,000 cubic yards of demolition debris and approximately 9,000 cubic yards of asbestos-containing materials (ACM) that would be hauled offsite by truck for disposal at an appropriate facility in accordance with all federal, state, and local laws and regulations. Alternative A could also create approximately 55,000 net tons of scrap metal that could be transported offsite by either truck or rail. Scrap metal could also be sold to local or regional vendors. No specific disposal or recycle sites have been identified at this time, and ultimate disposition site selection would be determined by the contractor.

All buildings and structures with below grade features would be backfilled, using concrete and masonry from the demolished facilities and, if needed, fill from an offsite borrow source. If there is a need for borrow material from an offsite location, borrow would be obtained from one or more previously developed or permitted commercial borrow site(s) within 100 miles of BRF; the selection of the borrow site would be left up to the contractor. TVA would perform any necessary due diligence and reviews in association with the use of such an offsite borrow source.

Temporary parking and laydown areas would all be located within the project area footprint. Laydown areas would be located within paved or graveled areas to the extent practicable, and parking of construction and personal vehicles would be within existing parking areas and within other paved or graveled areas as structures are removed. All buried utilities would be cut and capped at each building boundary within the project area and abandoned in place if they do not interfere with other ongoing projects that overlap the project footprint. The cooling water intake structure would be decommissioned and sealed. The site would be restored to grade to provide proper drainage. All disturbed areas would be covered with topsoil and seeded to establish a permanent vegetative cover or otherwise permanently stabilized.

Buildings and structures proposed for demolition include but are not limited to:

- Ammonia Unloading
- Ash Silo Equipment Buildings and Fly Ash Silo
- Car Wash

- Coal Sample Buildings
- Continuous Emissions Monitoring Systems
- Control and Sampling Building (Coal Tower)
- Conveyor System (includes Breaker Building and Transfer Stations)
- Dewatering Facilities and Support Structures
- Dry Fly Ash Vacuum Pump System Building
- Electrical Switchgear Building
- Environmental Monitoring Shelter
- Facilities Maintenance Base
- Fire Equipment Buildings
- Flammable Liquid Storage Shed
- Flue Gas Desulfurization Facilities/Scrubber (includes the Scrubber Kelly Building)
- Fuel Oil Tanks and Pumps
- General Construction Office Building
- Guard Shacks
- GUBMK Carpenters & Lab Crew Room
- Hydrated Lime Injection System Buildings
- Hydrogen Trailer Port
- Intake Structure (equipment only)
- Lighting
- Limestone Silo B
- Live Coal Silo
- Office Wing
- Partner Warehouse
- Powerhouse (includes Turbine Bay, Boiler Bay, and Electrical Control Wing)
- Powerstore's Warehouse
- Precipitators and Control Building
- Reclaiming Hoppers
- Security Portal
- Select parking lots, slabs, and roadways
- Selective Catalytic Conduction
- Smokestacks
- Trailer
- Transfer & Breaker Building

- Transformer Yard
- Turbine Shaft Storage Building
- TVA owned railroad loop track, ties, and ballast
- Utility Building
- Valve Houses
- Variable Frequency Drive Buildings
- Welding Shop
- White Storage Building
- Yard Maintenance Building
- Yard Maintenance Utility Building
- Miscellaneous unnamed structures

Although impacts of the removal of the TVA owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.

The following structures and facilities are not part of this Alternative and would remain in place. Any future actions for these structures or facilities would be evaluated under a separate NEPA analysis, if necessary:

- Claxton Community Park
- Claxton Community Center
- CCR units
- BRF Visitor's Overlook/Entry Monument
- Switchyard

Under Alternative A, approximately three full time workers would be required to perform all necessary site maintenance and environmental compliance activities at BRF once the facility has been decommissioned. Personnel from other TVA facilities may be used, as necessary, to assist with performing operations and maintenance activities.

2.1.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Alternative B includes the actions described under Alternative A, except the turbine bay of the powerhouse and the intake structure would remain in place (Figure 1-2). The plant staff and regular maintenance activities would be greatly reduced under this alternative from current levels for the active plant, and personnel from other TVA sources would be used, as necessary, to assist with performing operations and maintenance activities for the remaining powerhouse and associated structures.

2.1.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any deconstruction or other disposition activities at BRF. If the facility is left in the “as-is” condition, it likely would present a higher risk than Alternatives A or B for the potential to contaminate soil and groundwater as systems and structures degrade. As such, this alternative is not a reasonable alternative. However, being the No Action Alternative, it is discussed in the EA and used as a basis for comparison to the Action Alternatives.

2.1.4 Alternatives Considered but Eliminated from Further Discussion

TVA conducted a preliminary analysis of options for disposition of BRF including securing and maintaining the plant, deconstructing/demolishing the plant, or leaving the plant as-is and taking no actions. The following alternatives were considered but eliminated for the reasons discussed below. These alternatives did not meet the purpose and need of TVA’s proposed action or were otherwise unreasonable.

2.1.4.1 Assess, Close, and Secure BRF and Establish an Ongoing Operations and Maintenance Program

TVA considered closing, securing, and maintaining BRF. This alternative would entail de-energizing the plant and placing it in an “idle and vacant” status during which basic maintenance would continue to prevent safety and environmental issues. The primary objective of this alternative would be to de-energize all systems at BRF and minimize environmental and safety risks. All existing buildings, structures, and equipment within the decontamination and deconstruction project area (Figure 1-2) would remain in place. Retirement, decommissioning, and operations and maintenance activities associated with this alternative would include:

- Periodic roof and structural evaluations.
- Fire monitoring.

Hazardous Materials Activities:

- Initial decontamination, including abatement of asbestos containing materials in poor to fair condition and removal of loose and flaking lead-based paint, if any.
- Periodic hazardous materials condition monitoring.
- Periodic hazardous materials removal as materials deteriorate over time.

Electrical Activities:

- Maintenance of aircraft obstruction lighting required by Federal Aviation Administration regulations on the stacks.
- Maintenance of select sump pumps to prevent below-grade spaces (basements) from becoming flooded.
- Monitoring and maintenance of the power for the powerhouse electrical needs.

Leaving all structures in place with minimal decontamination could result in degradation of the facilities over time. As materials deteriorate, there is a potential for release of contaminated materials to the environment. Additionally, leaving the structures in place

prevents the site from being utilized for other purposes. Therefore, for these economic and environmental considerations, TVA has eliminated this alternative from consideration.

2.2 Comparison of Alternatives

The environmental impacts of each of the alternatives under consideration are summarized in Table 2-1. These summaries are derived from the information and analyses provided in the Affected Environment and Environmental Consequences sections of each resource in Chapter 3.

Table 2-1. Summary and Comparison of Alternatives by Resource Area

Impacts¹ from Alternatives			
Resource Area	Alternative A: Full Demolition	Alternative B: Selective Demolition	Alternative C: No Action Alternative²
Land Use and Prime Farmland	No adverse impacts to and no alteration of future land use. Negligible impacts to prime farmland.	Similar to Alternative A.	No impacts.
Geology and Groundwater	No impacts to geology. Short-term, minor impacts to shallow groundwater during decontamination and deconstruction activities. Long-term, beneficial impacts associated with the removal of potential environmental contamination sources relative to Alternative C.	Similar to Alternative A.	Long-term, minor impacts due to potential contamination from degradation of structures remaining onsite.
Surface Water	Short term, minor impacts due to potential stormwater runoff during demolition activities. No impacts as a result of sealing the cooling water intake and discharge. Although alteration or fill of onsite surface waters is not expected, any potential impacts would be mitigated, and the impacts would be minor with the implementation of BMPs as well as compliance with requirements of the USACE and TDEC permitting process.	Similar to, but reduced, impacts as compared to Alternative A due to less land disturbance. No sealing of the intake under this alternative; therefore, no impacts related to the installation of bulkheads.	Long-term, minor impacts due to potential contamination from degradation of structures remaining onsite.
Floodplains	Negligible impacts.	No changes to current conditions.	Same as Alternative B.
Wetlands	Short term, minor impacts due to potential stormwater runoff during demolition activities. To the extent practicable, TVA would establish an average 30-foot buffer around the onsite delineated wetlands.	Similar to Alternative A.	No impacts.
Aquatic Ecology	Short-term, minor impacts due to potential stormwater runoff during demolition activities.	Similar to Alternative A.	Long-term, minor impacts due to potential contamination from degradation of structures remaining onsite.

Impacts ¹ from Alternatives			
Resource Area	Alternative A: Full Demolition	Alternative B: Selective Demolition	Alternative C: No Action Alternative ²
Wildlife	Short-term, minor impacts during deconstruction activities. Coordination with U.S. Department of Agriculture (USDA) – Wildlife Services may be required to ensure compliance with federal migratory bird protections regarding birds nesting in buildings and structures proposed for demolition. Long-term, minor beneficial impacts to some species due to removal of potential contamination sources and site restoration.	Similar to or less than Alternative A.	No adverse impacts.
Vegetation	Short-term, minor impacts to common plant communities during deconstruction activities. Long-term, minor beneficial impacts due to site restoration.	Similar to or less than Alternative A.	No impacts.
Threatened and Endangered Species	Coordination with USDA – Wildlife Services may be required to ensure compliance with federal migratory bird protections regarding osprey nests near proposed actions. With implementation of conservation measures and BMPs as described in Section 3.9.2.2, no significant impacts would occur to federally listed bats, birds of conservation concern, or listed aquatic species. No impacts to protected plant species. ESA Section 7 compliance related to federally listed bats is addressed by TVA's bat programmatic consultation with USFWS.	Similar to or less than Alternative A.	Potential for long-term, minor impacts to threatened and endangered aquatic species due to potential soil and groundwater contamination as a result of degradation of structures remaining onsite.
Air Quality and Climate Change	Short-term, minor impacts would result from fugitive dust and emissions from equipment and vehicles during decontamination and deconstruction activities and transport of debris on public roadways. Increased carbon dioxide (CO ₂) emissions associated with deconstruction and trucking operations would not increase regional greenhouse gas (GHG) levels and, therefore, would not contribute to climate change.	Similar to or less than Alternative A.	Long-term, minor impacts to air quality due to potential degradation of structures remaining onsite. No impacts on regional climate.

Impacts ¹ from Alternatives			
Resource Area	Alternative A: Full Demolition	Alternative B: Selective Demolition	Alternative C: No Action Alternative ²
Hazardous Materials and Solid and Hazardous Waste	Minor impacts, as hazardous wastes would be managed in accordance with all applicable state and federal regulations.	Similar to or less than Alternative A.	Long-term, moderate impacts due to potential degradation of structures remaining onsite.
Transportation	Short-term, minor impacts would result from increased traffic during decontamination, demolition, and site restoration activities. Similar impacts from potential closure of local roadways and navigation on the Clinch River/Melton Hill Reservoir during blasting events.	Similar to Alternative A.	No impacts.
Noise	Short-term, minor impacts would result from decontamination and demolition activities, including the drop removal of the stacks. Short-term, minor indirect impacts to noise receptors along haul routes for transport of debris.	Similar to Alternative A.	No impacts.
Visual Resources	Short-term, minor impacts during deconstruction activities. Long-term, beneficial impacts would result from the removal of the stacks and powerhouse.	Similar to Alternative A.	Long-term, minor impacts due to potential degradation of structures remaining onsite.
Natural Areas, Parks and Recreation	Short-term, minor indirect impacts to natural areas, parks, and recreational facilities located along haul routes for debris and borrow. Short-term, minor impacts to recreational boating and fishing during decontamination and deconstruction activities.	Similar to Alternative A.	No impacts.
Cultural and Historic Resources	No impacts to National Register of Historic Places (NRHP)-listed or -eligible archaeological sites as none have been identified in the Area of Potential Effect (APE). Adverse effect on NRHP-eligible BRF. Mitigation measures have been identified through consultation with the State Historic Preservation Officer (SHPO) and listed in the Memorandum of Agreement (MOA) for this project.	Similar to Alternative A.	No impacts.

Impacts¹ from Alternatives			
Resource Area	Alternative A: Full Demolition	Alternative B: Selective Demolition	Alternative C: No Action Alternative²
Utilities and Service Systems	Short-term, minor localized impacts.	Similar to Alternative A.	No impacts.
Public Health and Safety	Short-term, minor impacts would result from demolition blasting activities. Long-term beneficial impacts from removal of potentially unsafe facilities.	Similar to Alternative A.	Long-term, minor impacts would result from the site remaining in an “as-is” condition.
Socioeconomics and Environmental Justice	Short-term, minor beneficial economic impacts would result from a temporary increase in employment, income, and population during deconstruction activities. Short-term, minor impacts to nearby communities if routes to haul construction debris and borrow utilize surrounding local roadways. Environmental justice populations in proximity to the project area may bear greater impacts from air and noise emissions due to the location of the project area within a low-income block group. However, these impacts would be temporary and limited to the deconstruction and decommissioning phase of the project.	Similar to or less than Alternative A.	No impacts.
Cumulative	Moderate impacts to transportation and environmental justice communities due to potential for CCR removal and other construction activities to occur concurrently.	Similar to Alternative A.	No impacts.

¹ Unless otherwise stated, impacts listed in the table are adverse effects.

² Impacts under the No Action Alternative are described based on leaving the facility in the “as-is” condition.

2.3 Summary of BMPs and Mitigation Measures

This section provides a summary of BMPs and mitigation measures that TVA would employ to avoid or reduce adverse impacts from the alternatives analyzed. TVA's analysis of potential impacts includes consideration of BMPs and mitigation measures implemented as required to reduce or avoid adverse effects. BMPs and mitigation measures are discussed in Chapter 3 and summarized below.

2.3.1 Mitigation Measures

- TVA would conduct extensive presence/absence surveys at least one month prior to demolition of the structures to determine if migratory birds or listed bat species are utilizing these buildings. If active nests of migratory birds are present and demolition activities must occur within the active nesting season, coordination with the USDA-Wildlife Services would be required for guidance to ensure compliance under EO 13186 [Responsibilities of Federal Agencies to Protect Migratory Birds].
- A number of activities associated with the proposed action are addressed in TVA's programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with the ESA Section 7(a)(2), originally completed in April 2018 and updated in May 2023. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures. Conservation measures required for this project are identified on pages 5-7 of the TVA Bat Strategy Project Review Form (Appendix B) and would be implemented as part of the proposed action.
- If colonies of bats or other protected wildlife species are observed in buildings proposed for demolition, TVA would strive to (and in most cases anticipates being able to) accommodate seasonal modification or removal. Risk to human safety, however, would take priority. For project-specific cases in which TVA is unable to accommodate seasonal modification or removal, and federally listed bat species or other protected species are present, TVA would consult with the appropriate state and federal agencies to determine the best approach in the context of the project-specific circumstance. This may include establishment of artificial roosts before demolition of structures with bats present.
- TVA executed a Memorandum of Agreement (MOA) with the Tennessee State Historic Preservation Officer (SHPO) in April 2023 for the mitigation of adverse effects on BRF, which is eligible for listing in the National Register of Historic Places (NRHP). Per the MOA, TVA will complete Historic American Engineering Record-equivalent documentation and will install interpretative signage at a public location near BRF.
- If there is a need for borrow material from an offsite location, borrow would be obtained from one or more previously developed and permitted commercial borrow site(s) within 100 miles of BRF; the selection of the borrow site would be left up to the contractor. However, TVA would perform all necessary due diligence and consultation as required under Section 106 of the NHPA related to any offsite borrow areas.
- If determined necessary, TVA may mitigate traffic impacts by implementing measures such as controlled timing of entry and exit to the facility, establishing alternate ingress/egress routes and possible busing of workers.

- To minimize adverse impacts on natural and beneficial floodplain values, demolition and deconstruction material would be disposed of outside of the 100-year floodplain, and concrete and masonry used as backfill in the floodplain would be placed at-grade or below.
- To minimize potential adverse cumulative impacts to environmental justice communities if other projects in the vicinity (see Table 3-20) occur concurrently with the proposed action, careful consideration would be made by the contractor to identify and select haul routes and borrow site locations that are not within environmental justice communities, when possible.

2.3.2 Best Management Practices

The following BMPs have been identified to reduce potential environmental impacts:

- TVA would minimize one-time emissions of fugitive dust from facilities expected to produce large volumes (such as demolition of the stacks) by working with the demolition contractor on a site-specific plan. The demolition contractor would be required as practicable, to remove ash and coal and limestone dust from the facilities proposed for deconstruction and demolition, prior to removal of that facility and implement dust control measures during demolition to prevent the spread of dust, dirt, and debris. These methods may include wetting equipment and demolition areas, covering waste or debris piles, using covered containers to haul waste and debris, and wetting unpaved vehicle access routes during hauling. TVA also requires onsite contractors to maintain engines and equipment in good working order. TVA would continue to follow dust control BMPs in accordance with its Title V permit and SWPPP.
- Surface water quality indirect impacts resulting from disturbance during demolition would be minimized by the use of stormwater pollution prevention BMPs to reduce the extent of disturbance and erosion as described in the project-specific SWPPP, the *Tennessee Erosion and Sediment Control Handbook-4th Edition*, 2012 (TDEC 2012), and by compliance with the requirements of the USACE permitting process. The installation of bulkheads would be conducted in accordance with BMPs intended to avoid release of sediments or contaminants to surface water. BMPs and wastewater treatment would be employed, as needed, to mitigate any pollutant discharge. The implementation of BMPs, protocols to respond to onsite spills prior to discharge, and site clean-up would help to reduce the potential for any releases to surface waters.
- To the extent practicable, TVA would establish an average 30-foot buffer around delineated wetlands and streams within and adjacent to the project area and preclude any ground disturbing actions within the buffer to avoid placing fill material into the resource and to minimize sedimentation.
- Any temporary or permanent outdoor lighting would be angled downward and away from suitable bat habitat to minimize light pollution impacts to listed bats.
- TVA would notify Anderson County prior to any demolition activities that have the potential to mobilize dust offsite. Notifications to the public would be issued prior to the use of explosives for demolition. Prior to the demolition, the area would be prepared, and the explosives contractors would establish a fall exclusion zone. During the blast event, no personnel would be allowed in the fall exclusion zone.

- To mitigate the potential for impacts to public safety, TVA would work with the demolition contractor to create a detailed site-specific plan for explosive demolition activities.
 - The demolition plan would include procedures for notifications to Anderson County for demolition activities that have the potential to mobilize dust offsite. It would also include procedures for notifications to the public, including emergency personnel and appropriate agencies, prior to the use of explosives.
 - The demolition plan may include areas of temporary closure, which could include public roads, the BRF Visitors Overlook/Entry Monument. Additionally, boat traffic could be restricted in the area during explosive demolition activities for safety.
 - The plan would be designed in accordance with all applicable safety standards and requirements and with the intent to minimize effects of vibration in the vicinity.
 - Explosives would be managed under the direction of a licensed blaster; 24-hour security would be provided to monitor the explosives.
 - Detailed security plans related to the transport and storage of explosives and site security would be implemented in accordance with all applicable regulations.
- TVA would ensure the proper management of all solid waste and hazardous wastes generated from construction activities in accordance with applicable federal, state, and local laws and regulations. For example, TVA would use secondary containment for storage and handling of petroleum, oils, and lubricants (POL). Additionally, any spills would be managed in accordance with site specific procedures for spill prevention and cleanup.
- Construction debris and wastes would be managed in accordance with federal, state, and local requirements. Efforts would be made to divert any recyclable materials (e.g., concrete, steel, and asphalt) away from landfills and repurpose the material when possible. Prior to demolition activities, hazardous materials would require special removal, handling, and disposal by appropriately trained and licensed personnel and contractors. Dust suppression and environmental control BMPs would be employed to minimize or prevent releases of hazardous materials.
- Though not anticipated, if deconstruction activities have the potential to emit pollutants greater than acceptable thresholds in BRF's existing Title V permit, mitigation could include a request to modify the permit.

2.4 Preferred Alternative

TVA's preferred alternative is Full Demolition of All Structures to Three Feet Below Final Grade (Alternative A). Under this alternative, all environmental issues associated with identified structures would be assessed and abated, including the decontamination of all buildings, structures, conveyers, and tunnels associated with plant operations, to remove hazardous materials, and all buildings and structures would be demolished. Implementation of this alternative would meet the purpose and need of the project to enhance future economic development in the area and would avoid the potential environmental and public safety impacts associated with leaving BRF in the "as-is" condition.

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the baseline environmental conditions (affected environment) of environmental resources in the project area and the anticipated environmental consequences (or impacts) that would occur from implementation of the alternatives described in Chapter 2. The affected environment descriptions below are based on surveys conducted by TVA, published and unpublished reports, and personnel communications with resource experts.

3.1 Land Use and Prime Farmland

3.1.1 Affected Environment

3.1.1.1 Land Use

The BRF facility is located in southern Anderson County, Tennessee, just east of the City of Oak Ridge, Tennessee. The BRF facility is in an area which has been zoned for heavy industrial use by Anderson County (Anderson County Assessor 2022). According to the Anderson County zoning code, a heavy industrial district is intended primarily for heavy manufacturing or closely related industrial uses and regulations for this zone are intended to protect against effects potentially harmful to other zones (Anderson County, TN 2015).

Residential areas to the north and northwest are within the immediate vicinity of BRF facilities, including Claxton Community Park to the northeast. The nearest single-family residential areas are located along Edgemoor Road approximately 140 feet from the northwest boundary of the project area.

As illustrated in Figure 1-1, the project area, approximately 251.8 acres on which decontamination and deconstruction activities may take place, is located entirely within the BRF boundary. Using the National Land Cover Database (NLCD) with interpretation of aerial photographs and findings of past field surveys, TVA created a map of dominant vegetation communities and other land cover types on the project area (Figure 3-1). Based on this map, the project area is characterized by industrial development (55.2 percent), herbaceous (20.9 percent), deciduous forest (20.7 percent), and open water (3.1 percent) (Dewitz 2019).

3.1.1.2 Prime Farmland

The 1981 Farmland Protection Policy Act (7 CFR Part 658) requires all federal agencies to evaluate impacts to prime and unique farmland prior to permanently converting to land use incompatible with agriculture. Prime farmland soils have the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. These characteristics allow prime farmland soils to produce the highest yields with minimal expenditure of energy and economic resources. In general, prime farmlands have an adequate and dependable water supply, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. Prime farmland soils are permeable to water and air, not excessively erodible or saturated for extended period, and are protected from frequent flooding.

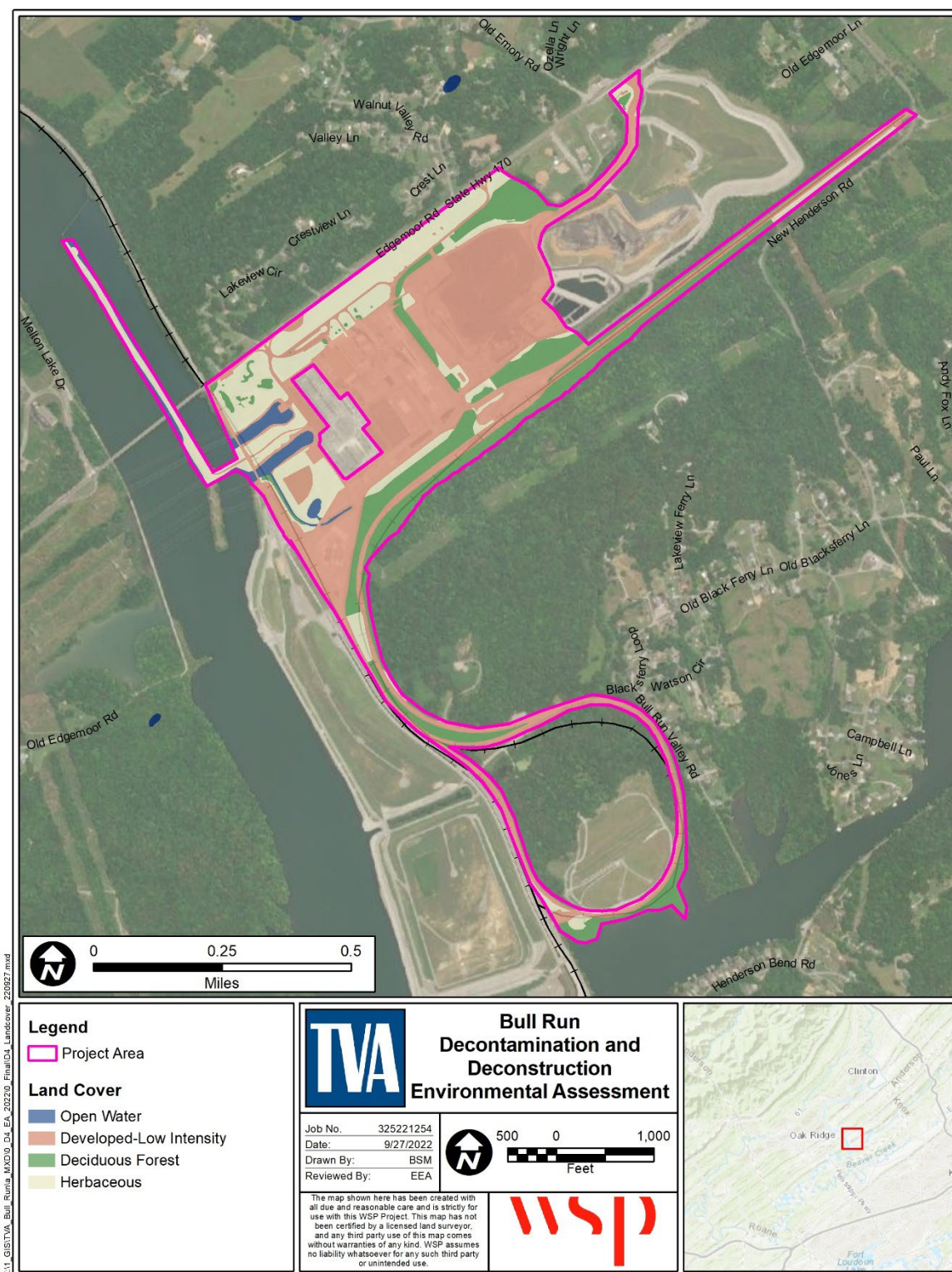


Figure 3-1. Land Cover within the BRF Decontamination and Deconstruction Project Area

Prime farmland soils within the proposed decontamination and deconstruction project area and within a 1-mile radius of BRF are summarized in Table 3-1. Of the 251.8 acres that make up the proposed project area, which includes temporary use areas, approximately 7.8 acres (3.1 percent of the total area) are considered prime farmland soils. The only mapped prime farmland soil within the project area is Whitwell loam, 1 to 4 percent slopes, occasionally flooded (USDA NRCS 2022). Overall, the prime farmland soils within the proposed project area comprise 3.1 percent of the total prime farmland soils found within a 1-mile radius of the project area.

Although some of the soils within the proposed decontamination and deconstruction project area have the physical characteristics of prime farmland, the site is federal property and the area has been zoned for heavy industrial use, thereby removing them from the prime farmland category under the Farmland Protection Policy Act and its implementing regulations.

Table 3-1. Acres of Prime Farmland Soils Mapped Within the Project Area

	Decontamination and Deconstruction Project Area	1-Mile Radius of BRF
Prime Farmland		
Prime Farmland Soils (acres)	7.8	251.8
Non-Prime Farmland Soils (acres)	244.0	6,048.7
Total (acres)	251.8	6,300.5

Source: USDA NRCS 2022

Note: Numbers are rounded to the nearest tenth digit, accounting for slight discrepancy between total and the sum of the individual items.

3.1.2 Environmental Consequences

3.1.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

3.1.2.1.1 Land Use

Under Alternative A, all buildings and structures within the proposed project area, shown on Figure 1-2, would be decontaminated and demolished to 3 feet below final grade. All buildings and structures with below grade features would be backfilled, using concrete and masonry from the demolished facilities in addition to fill from an existing, permitted, offsite borrow source. The site would be restored to grade to provide proper drainage. The land use in the project area would be changed from a heavy industrial use to a vacant vegetated area and would become available for potential redevelopment, allowing for future industrial or other economically beneficial use. While the extent of the potential future development is unknown, it is assumed that any future development would comply with uses allowed under the current zoning designation. No adverse impacts to land use within the proposed project area are anticipated under Alternative A.

Demolition debris removed from the decontamination and deconstruction project area would be transported to an existing offsite permitted landfill or to an offsite recycling facility. Additionally, fill material used during site restoration would be obtained from a previously permitted offsite borrow area. Therefore, there would be no changes to existing land use at the disposal or borrow sites. The haul routes to the offsite landfill and borrow area would utilize previously constructed roads or rail lines which are already subjected to traffic and no

new roads would need to be constructed. Therefore, there would be no indirect impacts to land use associated with disposal of demolition debris or obtaining and transporting borrow material to BRF.

3.1.2.1.2 Prime Farmland

Based on USDA Natural Resources Conservation Service (NRCS) soil mapping, there are a total of approximately 7.8 acres of prime farmland with the potential to be impacted by the proposed project. However, these prime farmland soils mapped within the proposed decontamination and deconstruction project area likely have been previously impacted by the construction and operation of existing BRF facilities and therefore, would no longer be considered prime farmland.

Areas within the BRF project area that are currently undeveloped could be temporary impacted; however, deconstruction activities on undeveloped areas would not include substantial ground disturbance activities. Upon completion of the decontamination and deconstruction activities, the area would be restored. Impacts to prime farmland under Alternative A would be insignificant due to the short-term nature of the actions, the minimal acreage affected, and the zoning of the land for industrial use.

3.1.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Impacts to land use under Alternative B would be similar to those under Alternative A. Land use would change from industrial to mostly vacant; however, the turbine bay of the powerhouse and the intake structure would remain and would be available for alternative industrial uses. Impacts to prime farmland under Alternative B would also be similar to those under Alternative A.

3.1.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination, deconstruction or other disposition activities and the site would remain in its current condition. Therefore, there would be no impacts to land use or prime farmland.

3.2 Geology and Groundwater

3.2.1 Affected Environment

3.2.1.1 Geologic Setting

BRF is located within the Valley and Ridge Physiographic Province, a northeast-southwest trending series of parallel ridges with elevations up to 3,000 feet and valleys composed of folded and faulted Paleozoic sedimentary rock. The primary geomorphological features are mainly the result of differential weathering of various rock types, which include limestone, dolomite, shale, sandstone, and siltstone. Residual soil typically ranges in thickness from about 10 to 150 feet (TVA 2016b).

Major units present in the area include, from youngest to oldest, the Chickamauga Group, the Knox Group, the Conasauga Group, and the Rome Formation. All are composed primarily of Ordovician and Cambrian carbonate rocks. The Chickamauga Formation underlies the main plant area. Commonly, the bedrock of this formation consists of a heterogeneous assemblage of limestone, shaly limestone, calcareous shales, and calcareous siltstones. In this case, the bedrock below the site consists of gray, mostly fine-

to medium-grained, thin- to medium-bedded, part shaly and nodular limestone. Shallow fractures, enlarged by carbonate dissolution, are more common in this formation than any other at the site. Residuum produced from the Chickamauga is a silty clay containing variable amounts of chert. In the main plant area, most of this clayey soil has been removed and the remaining residuum is expected to range in thickness from 0 to about 25 feet (Stantec 2009).

3.2.1.2 Geologic Hazards

U.S. Geological Survey (USGS) information and geologic studies conducted by TVA indicate that the proposed site and surrounding area is known to be subject to minor to moderate seismic events; faulting and karst topography are common to the area (TVA 2016c).

3.2.1.2.1 Karst Topography

“Karst” refers to a type of topography that is formed when rocks with a high carbonate (CO_3) content, such as limestone and dolomite, are dissolved by groundwater to form sink holes, caves, springs, and underground drainage systems. Karst features such as sinkholes and springs are numerous in the Valley and Ridge province, and sinkholes have been documented throughout Anderson County (TDEC 2020). As such, BRF is located in an area known to contain karst terrain. Karst features have not been identified within the project area. In addition, no significant voids or sinkholes were encountered during a hydrogeologic investigation of the proposed BRF landfill footprint (located on TVA property approximately 0.4 miles east of BRF) in 2014, and no caves or sinkholes were observed in the vicinity of the project area during field surveys conducted in 2014 (URS 2014).

3.2.1.2.2 Seismic Events

Seismic events affecting eastern Tennessee, which includes the area within the vicinity of BRF, primarily emanate from three zones of earthquake activity: 1) the New Madrid Seismic Zone (NMSZ); 2) Southern Appalachia Seismic Zone (SASZ); and 3) South Carolina Seismic Zone (SCSZ). The most active subzone of the SASZ, the East Tennessee Seismic Zone (ETSZ), extends from northwestern Georgia through east Tennessee and is situated near the plant. Most earthquakes emanating from this subzone are low in magnitude, with the largest known event in the ETSZ registering a magnitude of 4.6, suggesting a moderate risk of damage from a seismic event (Stantec 2009). The Geologic Hazards Map of Tennessee – Environmental Geology Series No. 5 shows the plant to be in Seismic Risk Zone 2 on a scale of 1 to 3, with Zone 3 being the most active risk of seismic activity (Miller 1977).

3.2.1.2.3 Seismicity and Slope Stability

While the CCR units at BRF are not included in the project area for the decontamination and deconstruction project, they are located adjacent to the project. TVA ensures that all impoundment dikes are stable under static and seismic conditions and meet appropriate safety factors through continued safety inspections of structural elements to maintain stability. All CCR units at BRF are subject to continued care and maintenance activities. The CCR units are not expected to be impacted by decontamination and deconstruction activities.

3.2.1.2.4 Faults

A fault is “a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side” (TVA 2016a). Faults in the bedrock units throughout the region are responsible for the ridge and valley topography of the area (Stantec 2009). The Bull Run Thrust Fault is located southeast of BRF and the Worthington Branch, at the top of the ridgeline.

Based on a review of the USGS Quaternary Fault Map, there are no known faults or folds producing magnitude 6 or greater earthquakes during the Quaternary Period (the past 1,600,000 years, including Holocene Epoch) within or in the vicinity of BRF (USGS 2022a).

3.2.1.3 Groundwater Hydrology

There are a total of eight principal aquifers in the state of Tennessee and none are sole source aquifers (EPA 2022c). The East Tennessee Aquifer system is composed of the Valley and Ridge and Blue Ridge aquifers and is separated from other aquifer systems in Tennessee by faulting present in the western portion of the Valley and Ridge physiographic province (Brahana et al. 1986).

Groundwater flow below BRF occurs in two zones, upper bedrock and clayey sand and gravel observed overlying bedrock. Shallow groundwater underlying BRF is derived from the infiltration of precipitation and from lateral inflow along the northern boundary of the reservation (TVA 2017b). Data from past investigations and sampling at BRF indicates that the Worthington Branch, Bullrun Creek, and Clinch River/Melton Hill Reservoir are the principal receptors of shallow groundwater flow from the plant area (TVA 2016c). Groundwater at the bedrock interface of the Cambrian-Ordovician carbonate aquifer primarily occurs in solution openings in carbonate rocks and in fractures in sandstones and shale, up to a depth of approximately 300 feet (Brahana et al. 1986). Similarly, the groundwater flow through the Chickamauga limestone beneath the main BRF plant area is controlled by fractures that have been enlarged by the dissolution of carbonates and shales. These fractures store and transmit large volumes of water. Because the many fractures and faults in the geologic units of the Valley and Ridge province influence the flow of ground water, there is no regional groundwater flow system.

3.2.1.4 Groundwater Use

The largest use of groundwater in the TVA region is for public water supply, although it is also used for industrial and mining purposes. Over half of the state’s reported daily groundwater withdrawals are for public water supplies. Sixty-six percent of the water used for irrigation and almost all the water used for domestic supply in the TVA region comes from groundwater (TDEC 2020).

TVA previously conducted a survey of domestic water supplies within 1 mile of the boundary of the BRF property in 1999 and a subsequent survey was conducted in 2014 centered on the eastern portion of the site. Under the TDEC Commissioner’s Order No. OGC15-0177, TVA will perform a water use survey and sampling of groundwater and surface water that may be affected by CCR constituents associated with BRF operations within 1 mile of the center of the BRF Plant. The schedule for this survey has not been established.

A review of the TDEC Water Well Desktop Application revealed that there are 13 water wells within a 1-mile radius of the project area and 63 wells within a two-mile radius

(Figure 3-2) (TDEC 2022f). Of the 13 wells reported in a one-mile radius of the project area, seven are residential, two are irrigation, and the remaining four are unclassified or “other”. TVA owns two of the four unclassified wells, which are located east of the BRF project area (TDEC 2022f). It is not known if these wells are currently being used as domestic water supplies. The upcoming water use survey will determine if there are any wells or springs that are being used for domestic purposes within the 1-mile radius of the center of the BRF Plant.

Well depths range from 500 to 700 feet below the ground surface, but most of the wells are producing water at shallow depths in the Chickamauga Formation, less than or equal to 300 feet below ground surface (TDEC 2022f). None of the residential wells are located downgradient of BRF. Most residences located northeast and northwest of BRF rely on public water provided by the Clinton Utility Board. There is no current potential for future residential development of groundwater supplies downgradient of the facility because of where the facility is situated next to the Melton Hill Reservoir; all property between the facility and surface water boundaries lies within the BRF property (TVA 2019d).

3.2.1.5 Groundwater Quality

The water quality within the East Tennessee aquifer system is generally very good throughout the area (Brahana et al. 1986). The groundwater quality at BRF is dependent on the chemical composition of the aquifer in which the water occurs. Cambrian-Ordovician carbonate rock associated with the Valley and Ridge province is known for its overall hardness, dissolved solids concentrations, and areas of high sulfide or sulfate concentrations (TVA 2016a). The fractures, solution openings, and bedding planes, developed in the carbonate rocks of the Valley and Ridge province allows for rapid local ground-water movement which can make the aquifers susceptible to contamination by human activities (Lloyd 1995).

TVA has been monitoring groundwater quality at BRF since the 1980s in accordance with TDEC requirements. TVA maintains a robust network of monitoring wells at BRF that are sampled regularly for groundwater quality, with more than 750 samples collected since 1988 (Pounds 2020). Groundwater sampling performed under TDEC or CCR Rule programs indicates exceedances of maximum contaminant levels or statistically derived upper prediction limits for one or more target analyses in wells sampled under these programs (TVA 2019d).

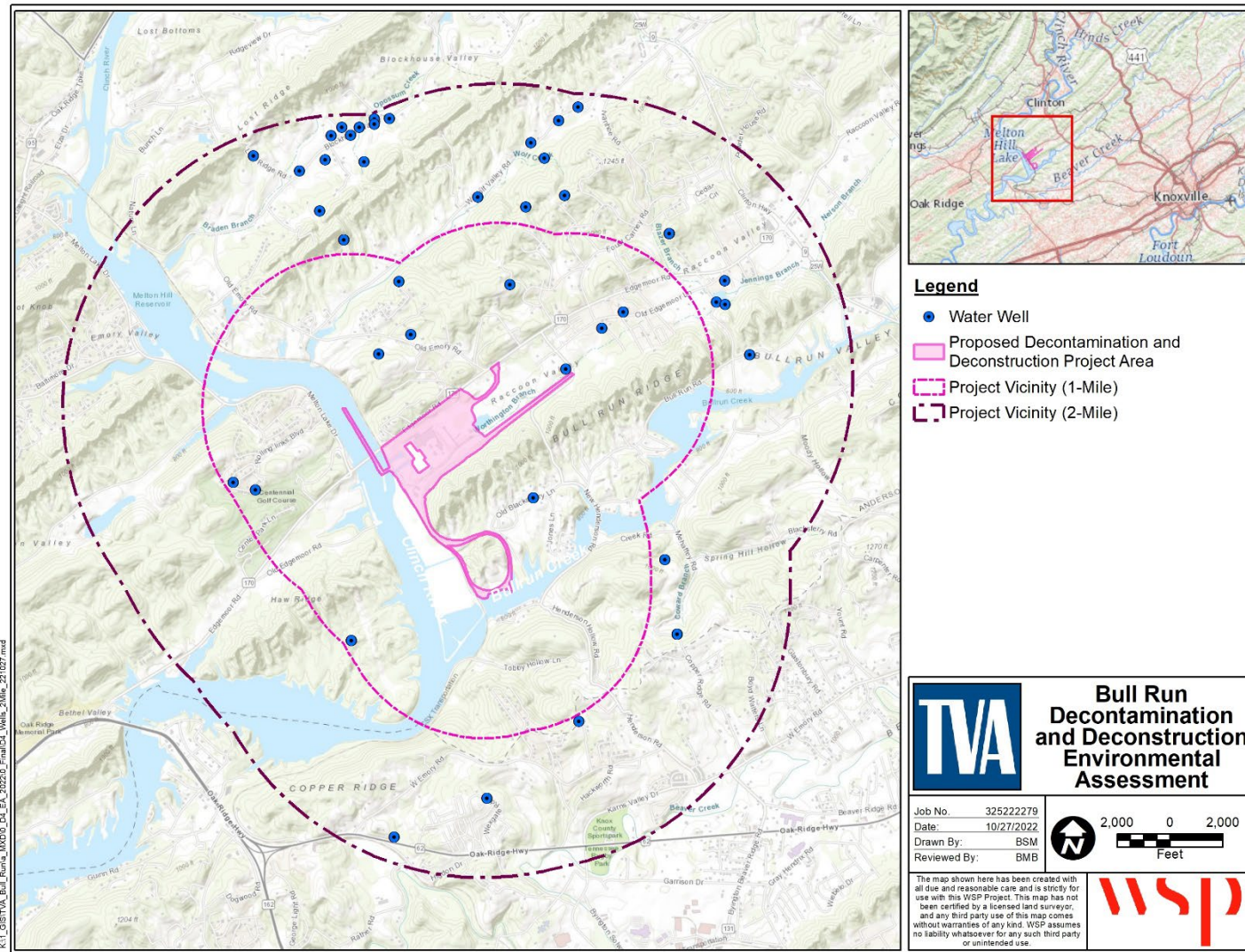


Figure 3-2. Water Wells in the Vicinity of BRF

3.2.2 Environmental Consequences

3.2.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, all identified aboveground structures would be deconstructed to a depth of approximately 3 feet below final grade employing mechanical deconstructive or explosive techniques. All below-grade building areas would be backfilled, and the site would be restored to grade while providing proper drainage.

Given the limited depth of excavation, bedrock at the site would not be impacted. All groundwater monitoring wells within the decontamination and deconstruction project area will be avoided. Deconstruction activities associated with decontamination and demolition at BRF have the potential to release constituents that may impact shallow groundwater. However, it is not expected to impact the deeper the Chickamauga limestone beneath the main BRF plant area. BMPs would be used in accordance with the *Tennessee Erosion and Sediment Control Handbook* (TDEC 2012) during the decontamination and deconstruction activities to limit potential impact to the groundwater. In the long term, potential sources of environmental contamination associated with the buildings and structures at BRF would be removed through the decontamination and demolition of BRF. Decontamination and demolition would therefore limit the potential for contamination of groundwater from these sources and would have a positive impact on groundwater quality relative to Alternative C. Therefore, the impact to groundwater would be minor.

3.2.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, impacts to groundwater and geology would be the same as those described for Alternative A and would be minor. As described for Alternative A, removal of structures on BRF even with the retention of the turbine bay of the powerhouse and the intake structure would have a positive impact on groundwater relative to Alternative C.

3.2.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination or deconstruction activities and the site would remain in its current condition. There would be no impacts to geology associated with Alternative C. However, as all structures would remain in place, there would be a higher potential for long-term impacts to groundwater quality because of the higher risk of contamination as the structures degrade. Overall, the potential impacts of this alternative on groundwater would be minor, but they would be greater than those under Alternatives A and B.

3.3 Surface Water

3.3.1 Affected Environment

3.3.1.1 Surface Water

BRF is located on a 750-acre reservation on the east side of Melton Hill Reservoir at CRM 48. The site is located in Anderson County, Tennessee, in the Lower Clinch River (06010207) 8-digit hydrologic unit code subbasin. The project area boundary borders the Clinch River on Melton Hill Reservoir to the west and Bullrun Creek to the south along the rail loop.

Melton Hill Reservoir extends almost 57 miles along the Clinch River, upstream from Melton Hill Dam to Norris Dam. The reservoir provides nearly 193 miles of shoreline and 5,470 acres of water surface for recreation. Melton Hill is a run-of-river reservoir, meaning that water is passed through the reservoir without being stored long term. The water level typically fluctuates less than two feet daily (between elevation 793 and 795) (TVA 2022d). Bullrun Creek flows into the Clinch River/Melton Hill Reservoir at approximate CRM 46.7. The portion of Bullrun Creek that is adjacent to the project area is impounded and part of the reservoir.

To identify surface waters within the project area boundaries, TVA completed onsite delineations in July 2022 to map streams and other surface waters that could be affected by the project. Streams and wet weather conveyances (WWCs) were identified and mapped based on applicable USACE and TDEC guidance, including TDEC Hydrologic Determination assessments.

Based on the field delineation, several surface waters are located within the project area. The Clinch River/Melton Hill Reservoir comprise the intake and discharge canals located along the western end of the BRF facility. Additionally, five perennial or intermittent streams and two WWCs were identified within the project area (Table 3-2 and Figure 3-3).

Table 3-2. Stream and WWC Features within the Project Area

Feature ID	Feature Type	Length within Project Area (feet)	Latitude & Longitude Start ¹ (decimal degrees)	Latitude & Longitude End ¹ (decimal degrees)
Clinch River/ Melton Hill Reservoir	River/ Reservoir	1,432	36.018853 -84.159244	36.017877 -84.161455
E001	WWC/Ephemeral Stream	1,563	36.024512 -84.152605	36.023008 -84.155456
E002	WWC/Ephemeral Stream	121	36.010888 -84.149960	36.010578 -84.150100
S001	Intermittent Stream	162	36.025555 -84.148720	36.025233 -84.149096
S002	Perennial Stream	1,651	36.023008 -84.155456	36.019625 -84.153635
S003	Perennial Stream	4,182	36.021215 -84.149534	36.015457 -84.159557
S004	Perennial Stream	466.40	36.009228 -84.153208	36.010050 -84.154643
S005	Intermittent Stream	125	36.010319 -84.153261	36.009883 -84.153486

¹Start and end refer to the locations where the features begin and end within the project area. These coordinates do not represent the entirety of the features unless the feature occurs entirely within the project boundary.

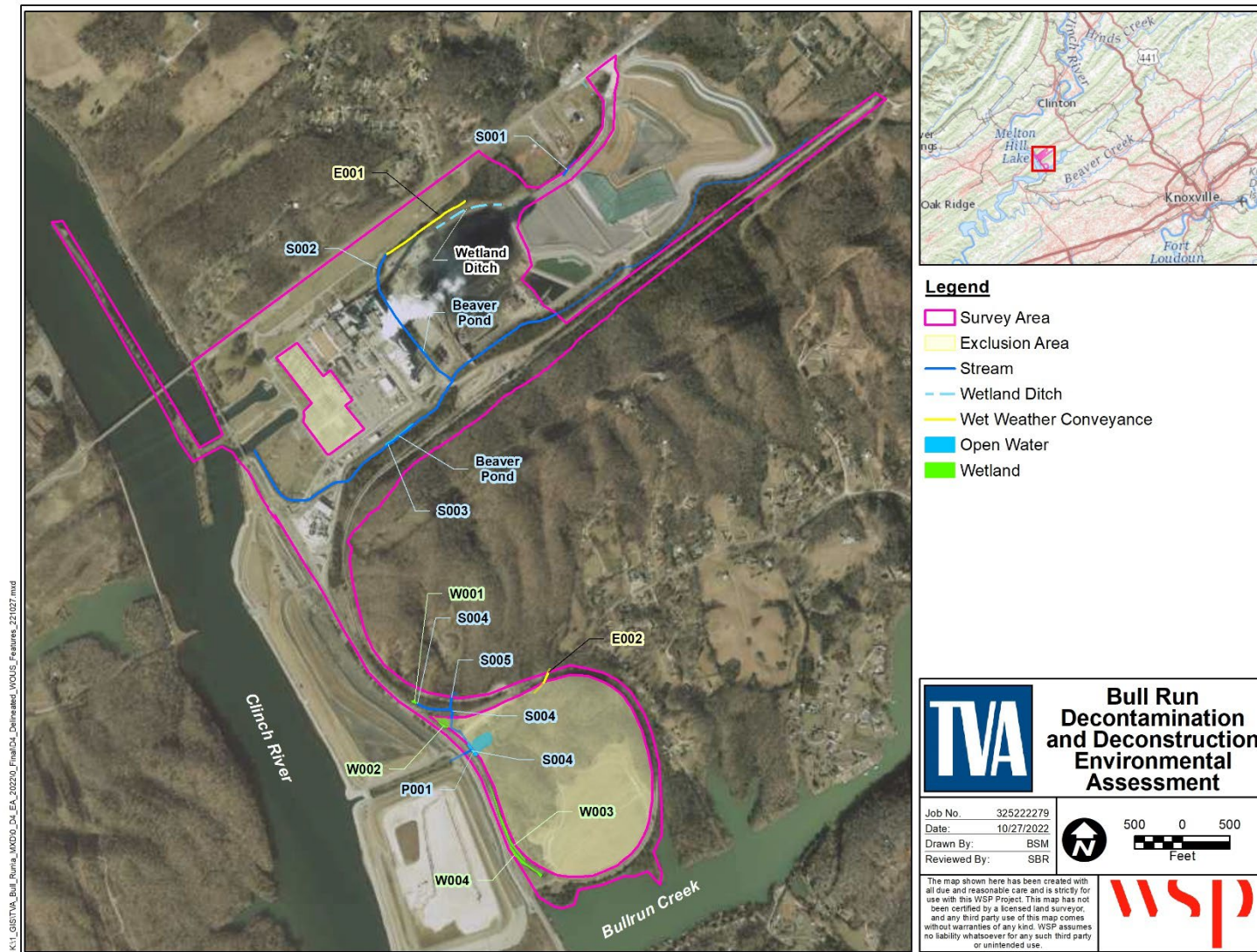


Figure 3-3. Surface Waters within the BRF Decontamination and Deconstruction Project Area

3.3.1.2 Water Quality

The Clinch River from CRM 46.7 to 50.7 is classified by TDEC for the following uses: domestic water supply, industrial water supply, fish and aquatic life, recreation, livestock watering and wildlife, irrigation, and navigation. Bullrun Creek from River Mile (RM) 0.0 (confluence with Clinch River) to RM 1.0 is classified by TDEC for the following uses: fish and aquatic life, recreation, livestock watering and wildlife, and irrigation (TDEC 2019b).

Water quality standards or criteria are established for each of these uses with the most stringent associated with domestic water supply and fish and aquatic life. TDEC assesses the water quality status of the streams, rivers, and lakes annually. Additionally, the federal CWA requires all states to identify all waters where required pollution controls are not sufficient to attain or maintain applicable water quality standards and to establish priorities for the development of limits based on the severity of the pollution and the sensitivity of the established uses of those waters. States are required to submit reports to the EPA. The term “303(d) list” refers to the list of impaired and threatened streams and water bodies identified by the state. Clinch River/Melton Hill Reservoir, including the lower portion of Bullrun Creek, is included in TDEC’s 303(d) list as impaired due to chlordane and polychlorinated biphenyls (PCBs). BRF does not discharge these compounds. This impairment is associated with legacy contaminated sediments (TDEC 2022b, TDEC 2022c).

TVA has assessed the ecological condition of Melton Hill Reservoir every two years since 1994. Ecological health evaluations focus on five indicators: dissolved oxygen (DO), chlorophyll, sediment quality, benthic macroinvertebrate community (bottom life), and the fish assemblage. TVA monitors three locations on Melton Hill Reservoir: the deep, still water near the dam (forebay, CRM 24.0); the middle part of the reservoir (CRM 45.0); and the riverlike area at the upper end of the reservoir (inflow, CRM 59.0). Only bottom life and the fish assemblage are assessed at the inflow monitoring location. The overall ecological condition of Melton Hill Reservoir rated at the upper end of the “fair” range in 2018. Melton Hill has rated “fair” most years. Higher ratings (“good”) in 2006, 2010, and 2016 were contributed to two indicators, chlorophyll and bottom life, scoring near the upper end of their historic ranges. In 2016, fish community scores were also at the upper end of their historic ranges, which contributed to the reservoir’s higher overall score (TVA 2022e).

3.3.1.3 Industrial and Stormwater Discharges

BRF’s existing wastewater streams are permitted under NPDES Permit TN0005410 to discharge to the Clinch River at CRM 46.3. Treated effluent from the plant includes bottom ash transport water, flue gas desulfurization waste stream, coal yard runoff, dry ash stack stormwater runoff and leachate, and miscellaneous equipment cooling and site drainage sumps from Outfall 001. It also includes condenser cooling water and equipment cooling discharges from Outfall 002, and intake screen backwash water discharges through Outfall 004. Management of the onsite stormwater and process wastewater is currently routed to a new onsite non-CCR process water basin through the lined conveyance channel to enable the proper handling and treatment of the waste streams. Discharges are limited and monitored by TVA as outlined in the NPDES permit conditions (TN0005410).

TDEC issued a draft of a Modification of NPDES Permit No. TN0005410 on August 30, 2022, due to revisions to Steam Electric effluent limitation guidelines per 40 CFR 423, including additional subcategories and reporting requirements resulting from TVA’s decision in 2019 to retire BRF in 2023 (TDEC 2022b).

Following activities associated with the retirement of BRF in 2023, coal burning operations would cease resulting in a substantial reduction of wastewater discharges into the Clinch River/Melton Hill Reservoir from Outfalls 001 and 002. Discharge flows upon retirement would come from fire protection water, main station sumps/unwatering sumps, and stormwater flows. Additionally, withdrawals of cooling water would be eliminated. Stormwater discharges from BRF are permitted under TDEC's General Permit for Stormwater Discharges associated with Industrial Activity, Permit No. TNR053185 (expiration 06/20/2025). BRF's permitted outfalls discharge to the Clinch River and Worthington Branch.

3.3.2 Environmental Consequences

3.3.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

As discussed in Section 2.1.1, Alternative A includes the proposed decontamination and deconstruction of the buildings and structures within the proposed project area to 3 feet below final grade. Following these activities, disturbed areas would be covered with topsoil and seeded or otherwise permanently stabilized.

Wastewaters generated during the implementation of Alternative A may include construction stormwater runoff, dewatering of work areas, domestic sewage, non-detergent equipment washings, and dust control.

3.3.2.1.1 Potential Alteration of Surface Waters

The USACE regulates the placement of fill material into waters of the U.S. (WOTUS) pursuant to Section 404 of the CWA (33 United States Code [USC] 1344). Any work conducted in jurisdictional waters could trigger permitting requirements under the CWA and/or the Tennessee Water Quality Control Act. Actions may require a Section 404 permit administered by the USACE and/or Section 401 WQC or ARAP administered through TDEC's permitting program depending on the project impacts and location. However, no existing streams and other surface waters onsite would be altered or filled by project activities. To the extent practicable, TVA would establish an average 30-foot buffer around the delineated streams and preclude any ground disturbing actions within the buffer to avoid placing fill material into the streams and minimize sedimentation.

Minor indirect impacts could occur to surface waters within and adjacent to the project area. Mitigation measures, such as turbidity curtains in adjacent waters, would be considered to help mitigate any indirect impacts that may result from sedimentation in receiving streams. With the implementation of BMPs, as well as compliance with the requirements of the USACE and TDEC permitting programs, impacts to surface water would be minor. In the event CWA permits are required, any applicable compensatory mitigation for impacts to streams and/or other surface waters would be identified through the permitting process.

3.3.2.1.2 Construction-related Stormwater and Other Discharges

Demolition activities have the potential to temporarily affect surface water via stormwater runoff. TVA would comply with all appropriate state and federal permit requirements. TVA would obtain coverage under the General Permit for Stormwater Discharges Associated with Construction Activities (TDEC 2021) prior to beginning demolition. This permit requires the development of a project-specific SWPPP. Surface water impacts resulting from disturbances during demolition would be mitigated by the use of stormwater pollution

prevention BMPs to minimize the extent of disturbance and erosion. The Tennessee Erosion and Sediment Control Handbook would be referenced to ensure BMPs used during demolition are appropriate (TDEC 2012). Stormwater would discharge either to the existing permitted stormwater discharge points or designated construction stormwater outfalls.

BMPs would be installed, inspected, and maintained for the duration of demolition and restoration as needed to avoid contamination of surface water adjacent to the proposed decontamination and deconstruction project area. All proposed project activities would be conducted in a manner to ensure that waste materials are contained and the introduction of pollution materials to the receiving waters would be avoided. Monitoring of current industrial stormwater outfalls would continue throughout the demolition process, with modifications as necessary and approved by TDEC, if applicable. Therefore, only temporary, minor impacts to surface water quality would be expected due to surface water runoff from the demolition site.

Portable toilets would be provided for the additional construction workforce as needed. These toilets would be pumped out regularly, and the sewage would be transported by tanker truck to a publicly owned wastewater treatment works that accepts pump out. There would be no discharge to adjacent surface water, and therefore, no impacts to surface water quality are expected.

Alternative A would potentially release fugitive dust to adjacent surface waters during demolition activities. This action would result in the generation of fugitive dust and debris, which would then be subject to potential erosion and transport to adjacent surface water. BMPs to control and minimize fugitive dust would be described in the project's SWPPP.

To seal the cooling water intake and discharge, bulkheads may be installed, and the work would be conducted in accordance with BMPs intended to avoid release of sediments or contaminants to surface water. The installation process would not be expected to cause adverse impacts to surface water quality as long as the proper BMPs are utilized. Once decontamination and deconstruction are completed and deconstructed areas are restored, impacts associated with deconstruction activities and construction stormwater runoff would cease. With the implementation of appropriate BMPs and compliance with all federal, state, and local regulations and guidelines, only temporary, minor impacts to surrounding surface waters are expected from deconstruction and demolition activities.

3.3.2.1.3 Long-term Industrial and Stormwater Discharges

With the coal-fired units no longer in operation after December 2023, the only significant remaining flows at BRF would be stormwater flows and some ancillary process water flows, like sump discharges and equipment washdowns. Any remaining minor flows would be directed to treatment systems such as the non-CCR process water basin as necessary to comply with the BRF NPDES permit and the CCR Rule. BMPs and wastewater treatment would be employed, as needed, to mitigate any pollutant discharge.

Stormwater would continue to be discharged from current or new permitted stormwater outfalls. BMPs and mitigation measures would be employed, as needed, to mitigate any adverse pollutant discharges. The specific characteristics of future discharges are unknown at this time. However, the total loadings to the Clinch River would decrease from current generating conditions, which would lead to beneficial impacts.

Due to the decontamination and removal of all equipment and structures within the deconstruction area, there would be no ongoing potential for direct discharges of chemicals, hazardous waste, or solid waste associated with these features. With the use of proper BMPs and compliance with all federal, state, and local regulations and guidelines, surface water impacts associated with Alternative A would be expected to be short term and minor.

3.3.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Implementation of Alternative B would have similar impacts to surface waters as Alternative A. In the short term, potential runoff from these areas would not contribute to stormwater impacts, as there would be less land disturbance. Additionally, the cooling water intake and discharge would not be sealed; therefore, there would be no impacts related to the installation of bulkheads. Consequently, impacts under Alternative B would be short term and minor, and are expected to be less than those under Alternative A.

3.3.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, it is assumed that TVA would be required to continue operating some sumps and stormwater systems at the retired facility. TVA would continue to restrict access to BRF, perform periodic inspections and critical maintenance as needed, and conduct environmental monitoring and reporting as required by existing permits. Leaving the facility in place would present a higher risk of impacts to surface water than Alternatives A or B because the continued presence of site infrastructure would be anticipated to deteriorate, resulting in potential risk for release of sediment, chemicals, or solid waste.

Permits would continue to be renewed with applicable monitoring requirements included. Permits and associated pollution prevention plans would be modified to indicate the changes from current conditions. The scope of this document does not include the long-term management of the onsite surface water impoundments. Discharge of the sumps and stormwater would be appropriately handled through the TDEC NPDES permit program. Minor impacts are anticipated with this alternative as long as facilities are maintained.

3.4 Floodplains

3.4.1 Affected Environment

A floodplain is the relatively level land area along a stream or river that is subject to periodic flooding. The area subject to a one percent annual chance of flooding (100-year flood) in any given year is normally called the 100-year floodplain. It is necessary to evaluate development in the 100-year floodplain to ensure that the project is consistent with the requirements of EO 11988, Floodplain Management.

The proposed BRF decontamination and deconstruction project would be located on the Clinch River on Melton Hill Reservoir between CRM 46.7 to 48.5, left descending bank, and Bullrun Creek RM 0.5 to 1.0, right descending bank, in Anderson County, Tennessee.

At this location, the 100-year flood elevations vary along the Clinch River and are presented in Table 3-3. The drainage area of Bullrun Creek is approximately 104 square miles (USGS 2022b); the drainage area of the Clinch River just upstream of the confluence with Bullrun Creek is approximately 3,100 square miles (USGS 2022b). Because the drainage area of the Clinch River at Bullrun Creek is far greater than the drainage area of Bullrun Creek, the

100-year flood elevations on the Clinch River would govern water surface elevations in a 100-year flood.

Table 3-3. Flood Elevations along the Clinch River and Bullrun Creek

Stream Reach	100-Year Flood Elevation	500-Year Flood Elevation
Bullrun Creek Miles 0.5 to 1.0	797.2	797.9
Clinch River Mile 46.7	797.2	797.9
Clinch River Mile 48.5	797.3	798.2

Based on FEMA Flood Insurance Rate Map Panel number 47001C0245G, effective 5/4/2009, the intake channel, intake structure, and discharge channel, as well as the outlet of Worthington Branch where it drains into the discharge channel are located within the 100-year floodplain (Zone AE). The remaining facilities shown in Figure 1-2 are located outside the 100-year floodplain of the Clinch River and Bullrun Creek.

3.4.2 Environmental Consequences

As a federal agency, TVA adheres to the requirements of EO 11988 (Floodplain Management). The objective of EO 11988 is “to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative....” (EO 11988). The EO is not intended to prohibit floodplain development in all cases, but rather to create a consistent government policy against such development under most circumstances (U.S. Water Resources Council 1978). The EO requires that agencies avoid the 100-year floodplain unless there is no practicable alternative.

3.4.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Alternative A would include the decontamination and deconstruction to 3 feet below final grade of the powerhouse and buildings and structures within the project area shown in Figure 1-2. With the exception of portions of the intake structure (including a small fuel tank), intake tunnel, and discharge tunnel, all the facilities proposed to be removed under this alternative are located outside of 100-year floodplains. Demolition of the facilities outside the floodplain and above the 100-year flood elevation would have no effect on floodplains, which would be consistent with EO 11988.

The intake and discharge tunnels would be abandoned in place by most likely installing bulkheads inside the tunnels, which are located underground, inland of the intake structure. Capping underground tunnels inland of the intake and discharge channels would have no impact on flood elevations and would therefore be consistent with EO 11988.

Equipment removal from the top of the intake structure would be located above the 100-year flood elevation, which would have no impact on flood elevations, and would therefore be consistent with EO 11988. A fuel tank is located underneath and to the side of the intake structure. The exact elevation of the fuel tank and its adjoining containment wall are not known; however, should they be located within the 100-year floodplain, they are designed to be floodable, which minimizes adverse impacts. The tank, piping, and controls would be

removed as part of the decontamination and deconstruction project; therefore, it would be consistent with EO 11988. The traveling intake screens are located within the 100-year floodplain. The screens allow water to flow through, and their removal would have a de minimis impact on flood elevations, which would therefore be consistent with EO 11988.

Melton Hill Reservoir does not have flood storage; therefore, the TVA Flood Storage Loss Guideline does not apply.

To minimize adverse impacts on natural and beneficial floodplain values, the following mitigation measures would be implemented:

- Standard BMPs would be used during demolition and deconstruction activities
- Demolition and deconstruction material would be disposed of outside of 100-year floodplains

Based upon implementation of the above mitigation measures, the proposed deconstruction and demolition of BRF under Alternative A would have no significant impact on floodplains and their natural and beneficial values.

3.4.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Alternative B includes the actions described under Alternative A, except that the turbine bay of the powerhouse and the equipment on top of the intake structure and traveling screens would remain in place. The fuel tank would be removed as described in Alternative A.

The turbine bay of the powerhouse is located outside of 100-year floodplains; therefore, leaving it in place would cause no changes to current conditions within the floodplain. The equipment on top of the intake structure and traveling screens would remain in place, which would also cause no changes to current conditions within the floodplain. Fuel tank removal would have the same impacts as described in Alternative A.

3.4.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, all existing buildings, structures, and equipment within the proposed decontamination and deconstruction project area would remain in place and would result in no changes to the existing conditions found within the local floodplains. Therefore, there would be no physical changes to the current conditions found within the local floodplains. Therefore, the impacts to the floodplain would be the same as Alternative B.

3.5 Wetlands

3.5.1 Affected Environment

Wetlands are those areas inundated or saturated by surface or groundwater such that vegetation adapted to saturated soil conditions are prevalent. Examples include bottomland forests, swamps, wet meadows, isolated depressions, shallow embayments, and shoreline fringe wetland along the edges of watercourses, impoundments, or lake systems. Wetlands provide many societal benefits such as toxin absorption and sediment retention for improved downstream water quality, stormwater impediment and attenuation for flood control, shoreline buffering for erosion protection, and provision of fish and wildlife habitat for commercial, recreational, and conservation purposes.

The USACE regulates the placement of fill material into WOTUS including wetlands, pursuant to Section 404 of the CWA (33 USC 1344). Additionally, EO 11990 (Protection of Wetlands) requires federal agencies to avoid, to the extent possible, adverse impacts to wetlands and to preserve and enhance their natural and beneficial values.

TVA completed onsite delineations of wetlands with the project area in July 2022 to identify and map surface water resources, including wetlands, that could be affected by the project. Wetlands were identified and mapped in accordance with the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Regional Supplement) (USACE 2012).

Four potentially jurisdictional wetlands (W001, W002, W003, and W004), a wetland ditch feature, and one pond (P001) were identified and delineated during the field survey within the project area (see Figure 3-3 in Section 3.3 and Table 3-4).

Wetlands within the project area are located south of the main facility adjacent to the rail loop. Linear herbaceous wetlands are dominated by cattails, sedges, and rushes and occur within swales adjacent to the railroad bed along the rail loop. Additionally, two small, forested wetlands are located at the top of the rail loop, as shown in Figure 3-3. Dominant species include black willow, red maple, and green ash with an herbaceous layer of rushes, poison ivy, and Japanese stiltgrass. The wetland ditch identified on Figure 3-3 is a linear manmade ditch containing hydrophytic vegetation, including cattails. The ditch was likely constructed to collect stormwater runoff from the coal yard and is therefore not likely to be considered a jurisdictional wetland by the USACE. There is also an approximately 1.4-acre pond inside the rail loop; however, only a small portion of the pond (0.03 acre) falls within the project area.

Table 3-4. Wetlands and Open Water Features within the Project Area

Wetland ID	Wetland Type ¹	Size Within Project Area (acres)	Potential Jurisdictional Status ²	Latitude ³ (decimal degrees)	Longitude ³ (decimal degrees)
W001	PFO	0.02	J	36.010095	-84.154750
W002	PFO	0.03	J	36.009544	-84.153780
W003	PEM	0.15	J	36.005565	-84.151213
W004	PEM	0.13	J	36.005770	-84.151218
P001	PUB	0.03	J	36.008785	-84.152539
Wetland Ditch	DITCH	0.13	Non-J	36.024390	-84.151970

¹PEM = Palustrine, emergent

PFO = Palustrine, forested

PUB = Palustrine, unconsolidated bottom

²J = USACE Jurisdictional – USACE is responsible for final jurisdictional determination WOTUS decisions for wetlands

Non-J = USACE Non-Jurisdictional

³Latitude and longitude coordinates are representative of general center points of delineated wetland features

3.5.2 Environmental Consequences

3.5.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Implementation of Alternative A would have no long-term impacts to wetlands, as wetlands within the vicinity of project activities would be avoided. No wetland fill is proposed. Potential minor indirect impacts during the demolition process could include erosion and sedimentation from stormwater runoff into nearby wetlands. BMPs and site-specific erosion control plans would be implemented to minimize this potential. To the extent practicable, TVA would establish an average 30-foot buffer around the delineated wetlands and preclude any ground disturbing actions within the buffer to avoid placing fill material into the wetlands and minimize sedimentation. Therefore, indirect impacts to wetland areas due to construction activities would be short term and minor.

3.5.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Implementation of Alternative B would have similar potential impacts to wetlands as Alternative A. There are no wetlands delineated near the turbine bay of the powerhouse or the intake structure; therefore, there would be no change in the impacts as described for Alternative A.

3.5.2.3 Alternative C – No Action Alternative

The No Action Alternative would not result in impacts to wetlands, because the decontamination and deconstruction project area would remain in its current condition.

3.6 Aquatic Ecology

3.6.1 Affected Environment

BRF is located on the Melton Hill Reservoir, an area of the Clinch River that is impounded by the Melton Hill Dam (TVA 2016c). Other water resources in the vicinity of the plant include Bullrun Creek, a stream that flows into the Clinch River directly downstream of BRF at CRM 46.7. Surface water features delineated within the project area are described in Section 3.3. Operations of the plant utilize the Clinch River/Melton Hill Reservoir for water intake and discharge.

3.6.1.1 Habitat Quality

TVA assesses the ecological health of its reservoirs on a cyclical basis and has assessed Melton Hill Reservoir every two years since 1994. The ecological health of Melton Hill Reservoir is assessed based upon indicators of DO, chlorophyll, sediment quality, benthic macroinvertebrate community, and fish assemblage. Health ratings include good, fair, and poor (from high to low), and an overall reservoir rating and score are provided based on the combined health ratings from all measured reservoir locations. In 2018, the overall ecological health condition of Melton Hill Reservoir was in the 'fair' range (TVA 2022b).

A 2016 biological monitoring survey of the reservoir found that the shoreline habitat was 'poor' in the reach downstream of BRF (i.e., the downstream reach) and fair in the reach upstream of BRF (i.e., the upstream reach). No aquatic macrophytes were observed in the upstream reach (TVA 2017a). The presence of aquatic macrophytes, however, varies from year to year depending on flow conditions and other factors. The downstream reach also

had substrate of algae, aquatic macrophytes, and clay while the upstream reach also had substrates of gravel, bedrock, and sand (TVA 2017a).

During the 2016 survey, water temperatures in the Clinch River/Melton Hill Reservoir within the thermal plume were at least 3.6°F above the upstream ambient surface water temperature. Downstream increased ambient temperature could also be related to warm inflow from nearby tributary streams in addition to the thermal plume, as evidenced by increased temperatures observed when BRF was not in operation (TVA 2017a; TVA 2019d). Water quality monitoring during the 2016 biological survey found that conductivity, DO, and pH were found to be within acceptable ranges both upstream and downstream from BRF (TVA 2017a).

In 2018, DO ratings were in the 'good' range. DO has rated 'good' at the mid-reservoir location all years monitored and typically has rated 'good' at near the Melton Hill Dam unless there was an extended dry period, which reduced flows through the reservoir (TVA 2022b). Chlorophyll content rated 'fair' to 'good' in 2018 (TVA 2022b). Sediment quality rated 'good' in 2018, as no PCBs or pesticides were detected and concentrations of metals (i.e., arsenic and copper) were within acceptable ranges (TVA 2022b).

3.6.1.2 Benthic Macroinvertebrate Community

During the 2016 biological survey of Clinch River/Melton Hill Reservoir in the vicinity of BRF, the macroinvertebrate community was sampled within and upstream and downstream of the thermal plume created by plant thermal discharge. Downstream of the thermal plume, an average of 13.6 taxa were collected, while an average of 15.9 taxa were collected within the plume, and an average of 10.7 taxa were collected at the upstream of the thermal plume (TVA 2017a).

Diversity of certain taxa of aquatic macroinvertebrates, such as *Ephemeroptera*, *Plecoptera*, and *Trichoptera* (EPT) taxa is indicative of good habitat and water quality conditions. In the 2016 biological survey, the average number of EPT taxa collected below and within the plume were 1.2 and 1.0, respectively, and the average number of EPT taxa collected upstream was 0.6 (TVA 2017a). The average proportion of oligochaetes in each sample was high at all three sampling sites. The samples from the site below the thermal plume contained an average of 36.1 percent oligochaetes, samples within the plume contained an average of 30.4 percent oligochaetes, and upstream site samples contained an average of 51 percent oligochaetes (TVA 2017a). Average macroinvertebrate densities excluding chironomids and oligochaetes ranged from 1,116.7 square meters at the downstream sites to 4,343.3 square meters at the upstream site, which is indicative of good water quality conditions (TVA 2017a). Data collected from sites within and below the thermal plume downstream from BRF produced a good Reservoir Benthic Macroinvertebrate Index score of 29, and data from the upstream site produced a slightly lower good score of 27 (TVA 2017a).

A 2010 survey of the mussel community in the Clinch River/Melton Hill Reservoir adjacent to BRF found only four mussels, consisting of three common species, the mapleleaf, fragile papershell, and threeshorn wartyback (Third Rock Consultants 2010). No shellfish subject to entrainment or impingement occur in the vicinity of the BRF intake (TVA 2007; TVA 2016c).

3.6.1.3 Fish Community

In 2018, a total of 47 fish species were observed in the Melton Hill Reservoir (TVA 2022b). Abundant fish species collected in the reservoir include bluntnose minnow, spotfin shiner, green sunfish, largemouth bass, bluegill, common carp, channel catfish, and Mississippi silverside (TVA 2015).

In sampling of the fish community between 2001 and 2016, in all surveys except the 2016 biological assessment, more native species have been collected downstream of BRF than upstream. In 2016, 31 native species were collected in the downstream reach, 32 native species were collected in the upstream reach, and five non-native species were collected in both reaches (TVA 2017a). Species diversity in the transition zone of Melton Hill Reservoir is limited due to the cooler water released from Norris Reservoir (TVA 2015).

In the 2016 assessment of the biological community, the Reservoir Fish Assemblage Index score for the downstream reach was found to be 46, while the score for upstream sampling locations was found to be 42. This indicates that the fish community in the downstream reach exhibited an ecological structure and balance equal to or better than that of the control reach upstream (TVA 2017a). During this assessment, fish in the downstream reach from BRF had a higher occurrence of anomalies, indicating less favorable environmental conditions (TVA 2017a). The downstream reach was also found to have fewer occurrences of pollutant tolerant species than the upstream reach (TVA 2017a).

An entrainment study for BRF was conducted in 2013-2015. Entrainment occurs when organisms small enough to pass through intake screens (i.e., plankton, fish eggs and larvae, benthic organisms, and small fish) of the cooling water intake structures enter the condenser circulation water system (Chow et al. 1981). During the 2013-2015 entrainment characterization study, samples were taken from transects near the intake structures and within the reservoir. A total of 571 and 339 fish eggs were collected from the intake and reservoir transects combined during years one (2013) and two (2014), respectively. The total number of fish larvae collected were notably different between year one (1,024 total) and year two (76,185 total). Variation across years is likely attributed to differences in flow and water temperatures. Total taxa across years one and two were similar, with 15 species collected in year one and 18 species collected in year two. Approximately 20.3 million fish eggs and 535 million fish larvae were estimated to pass the BRF during the study years, while an estimated 10.4 million fish eggs and 488 million fish larvae were entrained over the two-year study period. Therefore, total annual entrainment was estimated at 51.5 percent for fish eggs and 91.1 percent for fish larvae. High densities of fish larvae collected in intake samples indicate that spawning and nursery areas are present just upstream of the intake structures (TVA 2019d).

An impingement study for BRF was conducted in 2005-2007. Impingement occurs when organisms too large to pass through the intake screens (i.e., large fish or shellfish) are physically impacted through direct contact with intake screens (Chow et al. 1981). During this impingement study, samples were collected weekly from the BRF cooling water intake screens. In total, 8,006 fish were collected in year one (2005) of the study and 22,390 fish were collected during year two (2006). Estimated total impingement of fish for each year were 56,042 for year one and 156,730 for year two. Total number of species collected across years (23 species in year one and 21 species in year two) were similar. The increase between years was due to the tripling of threadfin shad impingement from 41,769 in year one to 152,971 in year two. Survival of impinged fish to harvestable size or to

provide forage was estimated at 3,174 and 6,216 across years one and two, respectively (TVA 2007).

The retirement of BRF in 2023 will result in long-term minor positive impacts on the fish community, as entrainment and impingement will no longer occur, thereby eliminating a source of mortality of fish eggs, fish larvae, and fish (TVA 2019d).

3.6.1.4 Melton Hill Reservoir Fishery

Melton Hill Reservoir is a popular location for recreational fishing. Important recreational fish species in the reservoir include muskellunge, striped bass, largemouth bass, smallmouth bass, bluegill, redear sunfish, striped bass, yellow bass, white bass, crappie, catfish, rock bass, walleye, and sauger (Tennessee Wildlife Resources Agency [TWRA] 2022). Thermal effluent from BRF attracts fish during cooler months, which provides a unique fishing opportunity in Melton Hill Reservoir from early winter to late spring (TVA 2019d). In the 2014 biological surveys of the Clinch River/Melton Hill Reservoir performed by TVA, 17 commercially valuable and 20 recreationally valuable fish species were collected near CRM 45.0 and 10 commercially valuable and 16 recreationally valuable species were collected near CRM 52.0 (TVA 2015). TDEC has issued a fish consumption advisory for Melton Hill Reservoir due to PCB contamination (TDEC 2019a).

The retirement of BRF in 2023 will result in long-term minor negative impacts on the Melton Hill Reservoir fishery, as the loss of the warm-water thermal effluent has been shown to increase abundance of target game fishes, such as muskellunge, within the reservoir (TVA 2019d).

3.6.2 Environmental Consequences

3.6.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, all intake and discharge tunnels would be abandoned in place by installing bulkheads. Therefore, no in-water work is anticipated. Potential indirect impacts to aquatic resources could result from stormwater runoff during demolition activities. Increased sedimentation and erosion as a direct result of demolition activities may result in temporarily increased turbidity and decreased water quality within the Clinch River/Melton Hill Reservoir. This disturbance could extend into the convergence with nearby Bullrun Creek. Increases in turbidity can result in loss of benthic habitats, smothering of aquatic macroinvertebrates, and loss of fish habitat (Bilotta and Brazier 2008). Surface water runoff from demolition activities would be mitigated through the implementation of storm water erosion controls in accordance with a SWPPP, which would be prepared for this project. Monitoring of current industrial storm water outfalls would continue throughout the demolition process, with modifications as directed by the SWPPP. Therefore, only short-term, minor impacts to aquatic ecology of Clinch River/Melton Hill Reservoir would be expected due to surface water runoff during demolition.

Aquatic ecology resources are likely to remain as described in Subsection 3.6.1. The removal of potentially hazardous structures and materials from BRF decreases the likelihood of potential leakage of pollutants or heavy metals into the Clinch River/Melton Hill Reservoir. Therefore, there would be negligible long-term impacts to aquatic habitats, fish, macroinvertebrates, or the recreational fishery under this alternative.

3.6.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, decontamination and selective demolition of BRF would occur. Under this alternative, the existing intake structure would be left in-place in “as-is” condition; therefore, no in-water work is anticipated. Impacts to aquatic habitats under Alternative B would be similar to those expected to occur under Alternative A.

3.6.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, the facility would be left “as-is” and conditions would remain as described in Section 3.6.1. Under this alternative, there would be no work within the Clinch River/Melton Hill Reservoir. However, potential leakage of hazardous chemicals or heavy metals could result in localized, negative impacts to habitat quality and downstream aquatic communities. These impacts have the potential to result in long-term adverse impacts to the Clinch River aquatic communities, including the Melton Hill Reservoir recreational fishery. Pollutants such as heavy metals can adversely impact the survivability and physiological processes (i.e., growth, reproduction, immune and endocrine system function, development), and behavior of aquatic organisms (Baby et al. 2011). Therefore, under this alternative, there would be long-term, indirect, and adverse impacts on the aquatic ecology of the Clinch River/Melton Hill Reservoir in the vicinity of BRF.

3.7 Wildlife

3.7.1 Affected Environment

The decontamination and deconstruction project area has been heavily disturbed and altered for many years due to the construction and operation of BRF. However, there are several areas of herbaceous (approximately 53 acres) and forested (approximately 52 acres) habitat within the project area. More information on wildlife species that may use these habitat areas is included in Appendix C.

Some wildlife species are known to use man-made structures opportunistically. Common mammals, birds, and reptiles have been observed using parts of buildings abandoned or used infrequently by humans. Several species of bats commonly found in this region such as big brown bats and eastern red bats may roost in abandoned, dark, or quiet areas of buildings (Harvey 1992). A single bat was observed by BRF staff roosting near the edge of a culvert located south of the coal pile at BRF in the summer of 2016 (S. Stagnolia, Personal Communication). It is likely that this was a transitionally roosting bat. Field surveys in May 2020 did not detect bats nor signs (e.g., guano or staining) that bats were using or previously had used this culvert. Birds, both migratory and year-round residents, may also roost in buildings or areas of buildings that are used infrequently.

The forested areas within the project area include small forest stands in the northwestern portion of the reservation, the narrow forest fragment that bisects the powerhouse buildings and the coal yard, and other forested strips along the rail line and on either side of the coal yard. These areas are mature forest, but they are very dense with Chinese privet and Japanese honeysuckle in the understory. Several species of birds use forest edges and fragments in this region. Where there are snags and pockets of less dense understory, there may be moderate quality foraging and roosting habitat for several species of bat, as well as habitat for small mammals and reptiles.

Fields within the project area are almost entirely comprised of mowed grass or otherwise heavily disturbed mowed herbaceous habitat. These areas do not offer suitable habitat for rare wildlife species, but they can be used by common species. Emergent and palustrine wetlands and saturated WWCs within field settings provide habitat for common amphibians and reptiles.

Review of the TVA Regional Natural Heritage database in May 2022 indicated that three caves are known to occur within 3 miles of the project area, the closest of which is approximately 2.2 miles away. In addition, one colonial wading bird colony has been documented 1.3 miles from the project area. Field surveys in May 2022 also documented a colony of cliff swallows actively nesting on the sides of the water intake structure.

Review of the USFWS Information for Planning and Consultation (IPaC) database (USFWS 2022) indicated that several migratory bird species of concern have the potential to occur in the project area. These include bald eagle, Canada warbler, eastern whip-poorwill, Kentucky warbler, prairie warbler, prothonotary warbler, red-headed woodpecker, rusty blackbird, and wood thrush. There are sections of forested habitats throughout the project area that offer suitable habitat for one or more of these bird species.

3.7.2 Environmental Consequences

3.7.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Alternative A would result in disturbance and displacement of common and habituated wildlife in the project area due to the permanent removal of some structures and pavement demolition. Noise disturbance is expected to be short term and not above levels normally encountered by wildlife in and around BRF. Displaced wildlife may move into adjacent areas with similarly disturbed habitat common around the project area. It is likely that common, opportunistic foragers such as raccoons, possums, rats, and mice would enter the remaining structures in an attempt to find food or shelter. Direct effects from building demolition activities may occur to some individuals that may be immobile during the time of deconstruction (i.e., juvenile animals or eggs), especially if during breeding/nesting seasons. However, because the project area is fragmented and disturbed, and faunal communities residing there are considered common, adverse impacts during project activities would be minor.

In May 2022, all buildings with the potential to be demolished under this alternative were surveyed and assessed for potential future use by wildlife. At the time of the survey, most buildings were still being used for plant operations, and few wildlife were observed except for nesting osprey, discussed in Subsection 3.9, and an active colony of cliff swallows using the side of the intake structure. Only the equipment on the top of the intake structure (e.g., motors) is proposed for demolition, and the area on the concrete structure where the swallows are nesting would not be disturbed. Any actions associated with the project that may substantially disturb this colony, such as removal of pumps and screens, would be performed while nests are inactive. Therefore, impacts to the nesting colony would be minor.

Surveys did determine that several buildings may offer potentially suitable habitat for bats or other wildlife species once buildings are vacated. An extensive survey of these buildings, particularly the warehouses, utility buildings, and powerhouse, would be performed at least one month prior to deconstruction to determine if they are being used migratory birds or

other protected wildlife. If the timing of deconstruction/demolition activities cannot be modified to avoid nesting seasons of migratory birds observed during future surveys, coordination with USDA – Wildlife Services would be required for guidance to ensure compliance under EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). If colonies of bats or other protected wildlife species are observed in buildings proposed for demolition, TVA would coordinate with the appropriate state and federal agencies to minimize impacts.

All migratory birds of conservation concern identified by the USFWS IPaC database require forested habitat for some or all of their life history. No tree removal is proposed under this alternative; therefore, impacts to these species are not anticipated. Potential impacts to the bald eagle are discussed in Subsection 3.9 (Threatened and Endangered Species).

The closest known caves are greater than 2 miles away. No impacts to these cave habitats are expected because of the substantial distance from proposed actions. Implementation of Alternative A would have no long-term impacts to wetland habitats as wetlands within the project area would be avoided. Potential minor indirect impacts during demolition could include erosion and sedimentation from stormwater runoff into nearby wetland or stream habitat. BMPs and site-specific erosion control plans would be implemented to minimize this potential. Therefore, indirect impacts to wildlife species that use wetland habitats would be short term and minor.

Following completion of the deconstruction, potentially hazardous structures and materials would be removed from BRF, and disturbed areas would be reseeded with native or non-invasive vegetation. These actions would constitute a minor beneficial impact to some wildlife communities by removing potential pollutants and providing additional natural habitats.

3.7.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Because the turbine bay of the powerhouse and the entire intake structure would be retained under Alternative B, impacts to wildlife would be similar to or less than those described for Alternative A. The intake structure would be left in “as is” condition under this alternative; consequently, the barn swallow colony that nests on the intake structure would not be affected.

3.7.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any deconstruction or other disposition activities at BRF. If the facility is left in the “as-is” condition under this alternative, common mammals and resident and migratory birds would opportunistically use the buildings and structures at BRF for shelter or foraging. Some would occasionally enter buildings to find food, while swallows and other birds that nest on man-made structures would continue to use rafters, support beams, lighting fixtures, poles, and building corners as nesting sites. It is likely under Alternative C that use of buildings by nesting birds and mammals would increase due to reduced human disturbance in the project area. Terrestrial animals would either not be affected or may benefit from the removal of human disturbance.

3.8 Vegetation

3.8.1 Affected Environment

BRF is located within the Southern Limestone Dolomite Valleys and Low Rolling Hills subdivision of the Southwestern Appalachian Ecoregion of Tennessee. Dominated by cherty clay, lands within this ecotype historically supported mixed deciduous/evergreen forest but many lands on gentler slopes have been converted to agricultural uses such as cropland and pasture. Plant communities in the vicinity of BRF include areas of herbaceous vegetation and mixed evergreen-deciduous forests (Griffith et al. 2001).

Within a 5-mile radius of BRF, land cover is primarily deciduous forest (22,832 acres or 33 percent), hay/pasture (10,746 acres or 16 percent) and developed, low intensity lands (9,554 acres or 14 percent) (Figure 3-4 and Table 3-5) (Dewitz 2019). The predominant land cover types mapped within the BRF decontamination and deconstruction project area include developed, low intensity (139 acres or 55 percent), herbaceous (53 acres or 21 percent), deciduous forest (52 acres or 21 percent) and open water (8 acres or three percent) (Figure 3-1 [in Section 3.1] and Table 3-5). No unique plant communities are expected to be present within the proposed project area at BRF.

Wooded areas within BRF are mostly upland and are concentrated around the rail line. Planted Virginia pine trees dominate small forest stands in the northwestern portion of the BRF reservation and the narrow forest fragment that bisects the powerhouse buildings and the coal yard within the project area. Common canopy species in the other forested areas include tree of heaven, tulip poplar, eastern red cedar, red maple, sycamore, Persian silk tree, American elm, sassafras, catalpa, northern red oak, hackberry, chinkapin oak, black willow, and green ash. Dominant shrub species include multiflora rose, Bradford pear, blackberry, autumn olive, persimmon, elderberry, box elder, Chinese privet, and redbud. Common herbaceous species include ragweed, Queen Anne's lace, plantain, dandelion, pokeweed, thistle, Johnson grass, morning glory, common mullein, Japanese stiltgrass, and common milkweed. Woody vines like kudzu, Japanese honeysuckle, poison ivy, Virginia creeper, greenbriar, and trumpet vine are also common. Forested wetlands within BRF contain canopy trees like black willow and sweetgum over shrubs of green ash, red maple, sweetgum, box elder, sycamore and an herbaceous layer, which includes common rush, Japanese stiltgrass, and poison ivy (Wood 2022).

Herbaceous lands within BRF are mostly upland and are in maintained turf. While data on species found within areas of mowed turf in the project area are unavailable, old field areas presumably possess some of the same herbaceous species, especially graminoids. Common species observed in previous surveys of old field areas at BRF include Bermuda grass, Johnson grass, narrow-leaf plantain, perennial ryegrass, orchard grass, Queen Anne's lace, smooth brome, tall fescue, and sericea lespedeza (TVA 2016b). Herbaceous wetlands within BRF contain scattered shrubs of black willow and green ash over narrow-leaved cattail, shallow sedge, and common rush (Wood 2022).

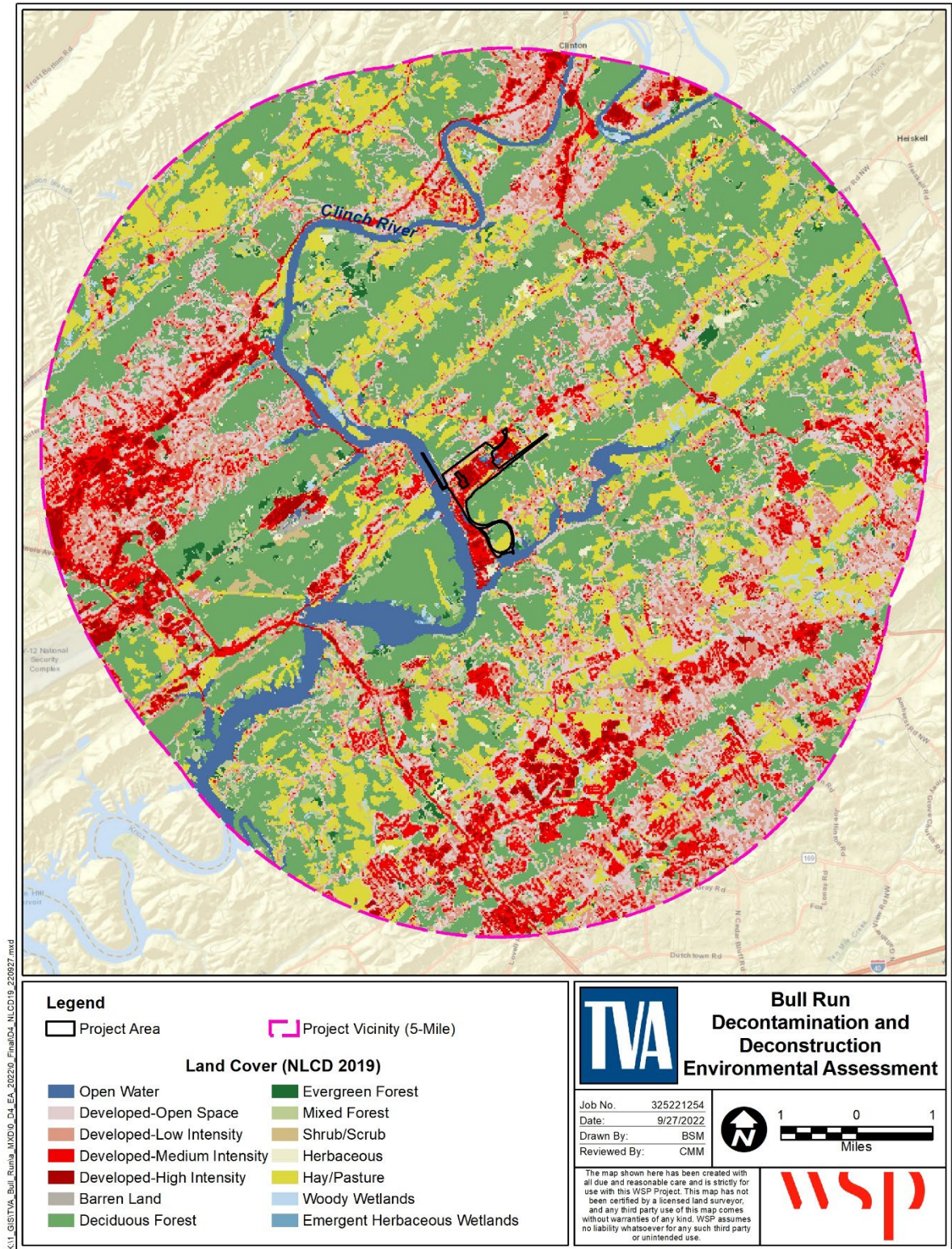


Figure 3-4. NLCD Land Cover within 5 Miles of the BRF Decontamination and Deconstruction Project Area

Table 3-5. Land Cover Within the Project Area and the Region (acres)

Land Use Type	Decontamination and Deconstruction Project Area	5-Mi Radius
Evergreen Forest		570.9
Mixed Forest		2,843.2
Herbaceous	52.7	653.8
Barren Land		152.8
Emergent Herbaceous Wetlands		70.7
Hay/Pasture		10,745.7
Shrub/Scrub		533.6
Developed, High Intensity		1,769.5
Developed, Medium Intensity		5,945.8
Developed, Low Intensity	139.0	9,554.0
Developed, Open Space		9,432.0
Deciduous Forest	52.2	22,832.4
Open Water	7.9	2,649.7
Woody Wetlands		456.7
Cultivated Crops		
Total	251.9	68,230.7

Source: Dewitz 2019

3.8.2 Environmental Consequences

3.8.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Implementation of Alternative A would result in direct and indirect impacts to vegetation during deconstruction activities. Direct impacts from demolition activities would include mechanical injury or removal and would be permanent. However, the vegetation found in these areas is composed of common, non-native weeds and early successional species that have little conservation value. Indirect, temporary impacts may include deposition of dust on terrestrial vegetation or sedimentation and erosion that could negatively affect aquatic vegetation in the intake channel or the Clinch River/Melton Hill Reservoir. Overall, potential impacts are negligible relative to the abundance of similar cover types within the vicinity.

If construction laydown occurs on unpaved areas, vegetation would be impacted mostly by storage of equipment and materials during construction. Direct impacts from storage and movement of materials would likely result in disturbance of soil and destruction of plants growing in traffic paths or directly under stored materials. Post-construction, these areas would revert to their original use; therefore, the impact to any vegetation present would be short term and minor.

Project-related demolition would result in localized disturbances of surface areas that have the potential to increase establishment of invasive plants. In addition, borrow soil potentially brought in from one or more previously developed or permitted offsite commercial borrow site(s) has the potential to introduce invasive plant seed and tissue that could spread onsite. However, these sites are all currently disturbed and are characterized by weedy,

early successional species. Impacts would be minimized as the site would be revegetated using native or non-invasive species as outlined in the *Tennessee Erosion and Sediment Control Handbook* (TDEC 2012).

Potential indirect impacts on vegetation adjacent to the haul roads or rail lines to transport borrow material to BRF or to transport materials to landfill(s) and recycling facilities would include deposition of fugitive dust during transportation. Additionally, invasive plant seeds contained within borrow soil have the potential to spread along the haul route during transport. BMPs such as covered loads and equipment maintenance would be implemented as appropriate to minimize impacts. Therefore, indirect adverse impacts to vegetation along haul routes would be minor.

Following completion of the deconstruction, disturbed areas would be reseeded with native or non-invasive vegetation or otherwise permanently stabilized, potentially replacing ruderal, non-native existing plant communities. This would constitute a minor beneficial impact to vegetation.

3.8.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, impacts to vegetation would be similar, but slightly less, than those described above under Alternative A. As the turbine bay of the powerhouse and the intake structure would remain, there would be less overall land disturbance, movement of materials, soil disturbance, and dust creation.

3.8.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any deconstruction or other disposition activities at BRF. As a result, no new work would be conducted that would result in the loss or disturbance of vegetation, and therefore no project-related environmental impacts to vegetation would occur under this alternative. The few vegetated areas in the project area would continue to be dominated by non-native and early successional species indicative of disturbed habitats. Any changes occurring in the vegetation onsite would be the result of other natural or anthropogenic factors and would not be the result of adoption of the No Action Alternative.

3.9 Threatened and Endangered Species

3.9.1 Affected Environment

The ESA (16 USC §§ 1531-1543) was passed to conserve the ecosystems upon which endangered and threatened species depend, and to conserve and recover those species. An endangered species is defined by the ESA as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant part of its range. Critical habitats, essential to the conservation of listed species, also can be designated under the ESA. The ESA establishes programs to conserve and recover endangered and threatened species and makes their conservation a priority for Federal agencies. Section 7 of the ESA requires federal agencies to consult with the USFWS when their proposed actions may affect endangered or threatened species or their critical habitats.

The State of Tennessee provides protection for species considered threatened, endangered, or deemed in need of management within the state other than those federally

listed under the ESA. The listings are handled by the TDEC; additionally, the Tennessee Natural Heritage Program and TVA both maintain databases of species that are considered threatened, endangered, special concern, or tracked in Tennessee. Table 3-6 lists the federally and state-listed species that have the potential to occur in the project area.

Appendix C includes full descriptions of these species and their preferred habitats.

Table 3-6. Federally Listed Terrestrial Species Reported from Anderson County, Tennessee and Other Species of Conservation Concern Documented Within 3 Miles of the Project Area

Common Name	Scientific Name	Status ¹		Suitable Habitat Present ³
		Federal	State (Rank ²)	
Birds				
Bald eagle	<i>Haliaeetus leucocephalus</i>	DL	D (S3)	P (foraging only)
Osprey	<i>Pandion haliaetus</i>	--	-- (S3)	Y
Mammals				
Gray bat ⁴	<i>Myotis grisescens</i>	E	E (S2)	P
Indiana bat ⁴	<i>Myotis sodalis</i>	E	E (S1)	P
Little brown bat	<i>Myotis lucifugus</i>	--	T (S3)	P
Northern long-eared bat ⁴	<i>Myotis septentrionalis</i>	E	T (S1S2)	P
Tricolored bat	<i>Perimyotis subflavus</i>	PE	T (S2S3)	P
Amphibians				
Hellbender ⁵	<i>Cryptobranchus alleganiensis</i>	PS	E (S3)	N
Insects				
Monarch butterfly	<i>Danaus plexippus</i>	C	-- (S4)	P

Source: TVA Regional Natural Heritage Database (TVA 2022c) and USFWS Information for Planning and Consultation (USFWS 2022) (<https://ecos.fws.gov/ipac/>), extracted May 5, 2022.

¹ Status Codes: DL = Delisted; D = Deemed in Need of Management; E = Endangered; T = Threatened; PE = Proposed Endangered; PS = Partial Status.

² State Ranks: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable; S4 = Apparently Secure.

³ Habitat Codes:

Y = Yes, species has been documented in existing habitats within proposed decontamination and deconstruction project area boundary, laydown areas, and/or the light use area, and suitable habitat is present

N = No, no records of species within proposed project areas and no suitable habitat is present

P = Potentially suitable habitat is present, but no records of species in proposed project areas

⁴ Federally listed species known from Anderson County, Tennessee, but not within three miles of the project footprint.

⁵ A subpopulation of hellbender found in the Ozarks of Missouri and Arkansas is federally listed. Species of hellbender found in Anderson County, Tennessee are not federally listed.

3.9.1.1 Terrestrial Animals

A review of the TVA Natural Heritage Project Database in May 2022 indicated that there are records of three Tennessee state-listed terrestrial animal species (hellbender, osprey, and little brown bat), one federally proposed endangered species (tricolored bat), and one federally protected species (bald eagle) within 3 miles of the project area (TVA 2022c).

Three federally listed terrestrial animal species (gray bat, Indiana bat, and northern long-eared bat) have been reported from Anderson County, Tennessee (Table 3-6). Review of the USFWS IPaC online database identified one additional candidate species (monarch butterfly) that has the potential to occur in the project area (USFWS 2022). Thus, impacts to this species have also been evaluated. No designated critical habitats have been documented within a 3-mile radius of BRF.

A field survey by TVA terrestrial zoologists in May 2022 determined that several buildings within the project area, particularly warehouses and utility buildings, may provide potential roosting habitat for bats or migratory birds after buildings are left vacant.

Bald eagles, which are protected under the Bald and Golden Eagle Protection Act (USFWS 2013), are routinely spotted foraging over the Clinch River/Melton Hill Reservoir adjacent to BRF. However, no bald eagle nests were observed during the field survey on the project area in May 2022, and the closest known nest is approximately 2.4 miles away. Four active osprey nests were documented within the project area during the field survey, and foraging habitat for osprey is present in the Clinch River/Melton Hill Reservoir.

Suitable summer roosting habitat for the gray bat may exist in buildings left open and abandoned during the decommissioning process, and foraging habitat for this species exists in the project area over wet low-lying areas south of the switchyard and over the Clinch River/Melton Hill Reservoir. Foraging and moderate summer roosting habitat for the Indiana bat, northern long-eared bat, tricolored bat, and little brown bat exists in the project area in and around trees, the Clinch River/Melton Hill Reservoir, and in wet low-lying areas south of the switchyard. Similar to the gray bat, suitable habitat for these species also may exist in buildings left open and abandoned during the decommissioning process.

Suitable nesting habitat for the hellbender is no longer thought to occur in the reach of the Clinch River/Melton Hill Reservoir that is adjacent to BRF or in any of the mainstems of rivers with TVA impoundments. No suitable habitat for hellbenders occurs in the project area.

Herbaceous areas in the project area are routinely mowed grassy areas that do not provide host plant or foraging habitat for monarch butterfly. Occasional flowering plants may still occur in low areas alongside roads or railroad tracks, or around wet areas southwest of the switchyard. However, these areas do not comprise a substantial amount of available habitat. This species was not observed on BRF during the May 2022 field survey.

3.9.1.2 Aquatic Animals

A review of the TVA Natural Heritage Database indicated records of 16 federally and/or state-listed aquatic species (six fish and 10 mollusks) within 10 miles of BRF (TVA 2022c). Review of the USFWS IPaC website identified seven additional federally listed aquatic species potentially in the vicinity of BRF (USFWS 2022). These species included six mollusk species and one aquatic snail. A list of the aquatic threatened and endangered species that are found or may potentially occur within a 10-mile radius of BRF can be found in Table 3-7.

Table 3-7. Federally and State Listed Aquatic Species Within 10 Miles of BRF and/or with Potential to Occur Near BRF

Common Name	Scientific Name	Status ¹		Documented in 10-mi radius
		Federal	State (Rank ²)	
Mollusks				
Alabama Lampmussel	<i>Lampsilis virescens</i>	E	E (S1)	No
Birdwing Pearlymussel	<i>Lemiox rimosus</i>	E	E (S1)	Extirpated
Cracking Pearlymussel	<i>Hemistena lata</i>	E	E (S1)	Extirpated
Dromedary Pearlymussel	<i>Dromus dromas</i>	E	E (S1)	Extirpated
Fanshell	<i>Cyprogenia stegaria</i>	E	E (S1)	No
Finerayed Pigtoe	<i>Fusconaia cuneolus</i>	E	E (S1)	Historical ³
Orange-foot Pimpleback	<i>Plethobasus cooperianus</i>	E	E (S1)	Historical
Pink Mucket	<i>Lampsilis abrupta</i>	E	E (S2)	Extirpated
Ring Pink	<i>Obovaria retusa</i>	E	E (S1)	No
Rough Pigtoe	<i>Pleurobema plenum</i> <i>Quadrula cylindrica</i>	E	E (S1)	No
Rough Rabbitsfoot	<i>strigillata</i>	E	E (S2)	No
Sheepnose Mussel	<i>Plethobasus cyphus</i>	E	-- (S2)	No
Shiny Pigtoe Pearlymussel	<i>Fusconaia cor</i>	E	E (S1)	Historical
Slabside Pearlymussel	<i>Pleuroaia dolabelloides</i>	E	E (S2) E	Historical
Spectaclecase	<i>Cumberlandia monodonta</i>	E	(S2S3)	Historical
White Wartyback	<i>Plethobasus cicatricosus</i>	E	E (S1)	Historical
Fish				
Yellowfin Madtom	<i>Noturus flavipinnis</i>	T	T (S1)	Extirpated
Slender Chub	<i>Erimystx chani</i>	T	T (S1)	No
Spotfin Chub	<i>Erimonax monachus</i>	T	T (S2) D	Yes
Highfin Carpsucker	<i>Carpionodes velifer</i>	--	(S2S3)	Historical
Tennessee Dace	<i>Chrosomus tennesseensis</i>	--	D (S3)	Yes
Flame Chub	<i>Hemitremia flammea</i>	--	D (S3)	Yes
Blue Sucker	<i>Cycleptus elongatus</i>	--	T (S2)	Historical
Aquatic Snail				
Anthony's Riversnail	<i>Athearnia anthonyi</i>	E	E (S1)	No

Sources: TVA 2022c, USFWS 2022, NatureServe 2022, TDEC 2016

¹ Status Codes: E = Listed endangered; T = Listed threatened; -- = Not listed; D = Deemed in need of management² Rank Codes: S1 = Extremely rare and critically endangered; S2 = Very rare and imperiled; S3 = Vulnerable³ Historical records are those observations that are greater than 25 years old.

A total of ten listed mollusk species have been recorded with a 10-mile vicinity of BRF. None of the listed mollusk species were observed during the 2016 biological characterization survey (TVA 2017a), and no individuals or populations of these species are

considered present in the Clinch River/Melton Hill Reservoir near BRF (TVA 2022b). A 2010 mussel survey of the riverfront adjacent to BRF did not find evidence of presence of any state-listed or federally listed threatened or endangered mussel species (Third Rock Consultants 2010).

Four federally and/or state-listed fish species have been recorded within a 5-mile radius of BRF (TVA 2019d). The spotfin chub has been verified within a 5-mile radius of BRF. The blue sucker, a state threatened species, has been classified as possibly historical in the vicinity of BRF, and the yellowfin madtom has been extirpated. Suitable habitat for the Tennessee dace, a state-listed species in need of management, does not exist in the Clinch River/Melton Hill Reservoir in the vicinity of BRF (TVA 2022b).

Flame chub, a state listed species in need of management, primarily occupies spring-fed tributaries (NatureServe 2022), and, therefore, is unlikely to be found in the Clinch River/Melton Hill Reservoir in the vicinity of BRF, but it does have the potential to occupy the nearby Bullrun Creek.

3.9.1.3 Plants

A review of the TVA Regional Natural Heritage database indicated that no federally listed vascular plant species, or associated designated critical habitat, are known to occur on or within a 5-mile radius of BRF (TVA 2022c). A total of 16 species of plants listed by the TDEC as threatened, endangered, or species in need of management in Tennessee are known to occur within Anderson County (TDEC 2022d). Of those, 11 species plus American ginseng (*Panax quinquefolius*) are known to occur within 5 miles of BRF (TVA 2022c).

Preferred habitat for each species and the possibility of habitat within the proposed decontamination and deconstruction project area is addressed in Table 3-8. Lands associated with the BRF project area have been extensively disturbed by current and/or previous land use. These areas are currently used for industrial purposes and do not contain intact, high-quality native plant communities (TVA 2016b; Wood 2022). No sensitive species or associated habitat are expected to be present within the BRF project area.

Table 3-8. Habitat Requirements for State-Listed Plant Species' Records within Anderson County

Common Name	Scientific Name	Habitat Requirements	Status*	Present in 5-mile Vicinity of Project Area ¹	Habitat within Project Area**
American ginseng	<i>Panax quinquefolius</i>	Slopes of shaded, rich woodlands ²	S-CE	Y	N
Branching whitlow-wort	<i>Draba ramosissima</i>	Bluffs, rocky woods ⁴	S	Possibly Historical	N
Butternut	<i>Juglans cinerea</i>	Rich mesic woods and streambanks ⁴	T	Y	N
Copper iris	<i>Iris fulva</i>	Swamps, marshes, wet woods ⁴	T	Y	N
Hairy willow-herb	<i>Epilobium ciliatum</i>	Moist to wet meadows, springs and bogs ⁴	T	Historical	N
Heartleaf meehania	<i>Meehania cordata</i>	Wooded mountain slopes ²	T	N	N
Large-leaved grass-of-parnassus	<i>Parnassia grandifolia</i>	Wet woods and fens ⁴	S	N	N
Mountain witch-alder	<i>Fothergilla major</i>	Dry woods, thickets, riverscours, cobble bars ⁴	T	Y	N
Naked-stem sunflower	<i>Helianthus occidentalis</i>	Barrens, prairies ⁴	S	Possibly Historical	N
Northern bush-honeysuckle	<i>Diervilla lonicera</i>	Dry woods and thickets, streambanks, rocky slopes ⁴	T	Y	N
Nuttall's Waterweed	<i>Elodea nuttallii</i>	Lakes, streams, small rivers ⁴	S	Y	N
Prairie goldenrod	<i>Solidago ptarmicoides</i>	Cedar glades and barrens ⁴	E	Possibly Historical	N
Spreading false-foxglove	<i>Aureolaria patula</i>	Calcareous ledges and bluffs ⁴	S	Y	N
Sullivantia	<i>Sullivantia sullivantii</i>	Moist shaded cliffs ³	E	N	N
Tall larkspur	<i>Delphinium exaltatum</i>	Open woodlands, rich woods, rocky slopes, glades, prairies ²	E	Y	N
Torrey's mountain mint	<i>Pycnanthemum torreyi</i>	Barrens ³	E	Y	N
Tubercled rein-orchid	<i>Platanthera flava</i> var. <i>herbiola</i>	Swamps and floodplains ³	T	N	N

Source:

¹ TVA 2022c² NatureServe 2022³ TDEC 2022d⁴ Chester 2015

*Status:

S = State Special Concern Species

S-CE = State Special Concern Species – Commercially exploited

E = State Endangered Species

T = State Threatened Species

**Habitat Codes:

Y = Yes, species has been documented in existing habitats in proposed project areas, and suitable habitat is present

N = No, no records of species within proposed project areas, and no suitable habitat is present

3.9.2 Environmental Consequences

3.9.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, osprey, gray bat, Indiana bat, little brown bat, northern long-eared bat, and tricolored bat have the potential to be impacted by the proposed actions. No suitable habitat for hellbender would be affected by the proposed actions. Therefore, this species would not be impacted. In addition, there is not a substantial amount of habitat available for monarch butterflies in the project area and there is an abundance of suitable herbaceous habitat in the vicinity of the site (see Table 3-5); therefore, impacts to this species are expected to be minor. Proposed actions would not jeopardize the continued existence of monarch butterflies.

One bald eagle nest exists approximately 2.4 miles from the project area. Due to distance from proposed actions, this nest would not be impacted. BMPs would be used near the Clinch River/Melton Hill Reservoir to minimize impacts to potential foraging habitat for bald eagles, and proposed actions are in compliance with the *National Bald Eagle Management Guidelines*. Therefore, bald eagles are not expected to be significantly impacted under Alternative A.

Four osprey nests are located within 660 feet of the project area. If the timing of deconstruction and demolition activities within 660 feet of these nests cannot be modified to avoid nesting seasons, coordination with USDA – Wildlife Services would be required for guidance to ensure compliance under the EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). Therefore, the proposed actions are not likely to adversely affect the osprey.

No caves for gray bat, Indiana bat, little brown bat, northern long-eared bat, or tricolored bat exist in the project area or would be impacted by the proposed actions. No tree removal is anticipated in association with this alternative. Therefore, no forested summer roosting or foraging habitat for Indiana bat, little brown bat, northern long-eared bat, or tricolored bat would be impacted. Aquatic foraging habitat exists for these species over the Clinch River/Melton Hill Reservoir and along wetlands and streams within and adjacent to the project area. BMPs would be used around all bodies of water; therefore, impacts to aquatic foraging habitat for bats are expected to be minor. Several buildings proposed for demolition offer potential roosting habitat for listed bats, depending on construction, light exposure, ingress/egress points, and temperature. No bats or evidence of bats was observed during preliminary building surveys; however, extensive interior surveys of buildings with potential for bat roosting were not performed because most were still being actively used for plant operations at the time of survey. TVA would conduct presence/absence surveys at least one month prior to demolition of buildings and structures to determine if listed bat species are utilizing them. The culvert where a bat was observed in 2016 would not be impacted by project activities.

A number of activities associated with the proposed decontamination and deconstruction project, including building demolition, were addressed in TVA's programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with ESA Section 7(a)(2) originally completed in April 2018 and updated in May 2023. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures. These activities and associated conservation measures are identified on pages

5-7 of the TVA Bat Strategy Project Screening Form (Appendix B) and need to be reviewed and/or implemented as part of the proposed project. Should colonies of state-listed bats be found roosting in buildings proposed for demolition, no deconstruction/demolition activities would occur until the bats have migrated out and appropriate Tennessee state agencies have been consulted. With adherence to identified conservation measures, survey requirements, and avoidance/consultation requirements, TVA has made the determination that proposed actions are not likely to adversely affect gray bat, Indiana bat, and northern long-eared bat. TVA has also determined that proposed actions would not jeopardize the continued existence of the tricolored bat, nor would actions be likely to impact populations of the little brown bat. As mentioned above, actions associated with this project have already been addressed in TVA's Bat Programmatic Consultation with the USFWS which satisfies Section 7 ESA compliance regarding potential impacts to federally listed threatened and endangered species. Due to TVA's non-jeopardy determination for tricolored bat, there is no requirement for Section 7 conference for this proposed endangered species.

As discussed in Subsection 3.6, impacts to aquatic habitats under Alternative A are expected to be negligible. Therefore, there would likely be negligible impacts to any aquatic threatened and endangered species. As there are no extant populations of mussels in the vicinity of BRF, demolition activities would have no impacts on threatened or endangered mussel species. Potential impacts to threatened or endangered fish species are limited to flame chub and spotfin chub, which are the only aquatic federal or state-listed threatened and endangered species that have the potential to occur in the vicinity of BRF. However, there would be no direct impacts to aquatic resources within the project area, and indirect impacts would be short term and minor because surface water runoff from demolition activities would be mitigated through the implementation of storm water erosion controls in accordance with a SWPPP.

Under Alternative A, existing ruderal vegetation of low conservation value would be impacted within BRF. However, because no sensitive plant species or associated suitable habitat is known from the project area, no impacts to threatened and endangered plants or other plant species of concern are anticipated as a result of project activities.

3.9.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Because the turbine bay of the powerhouse and the entire intake structure would be retained under Alternative B, impacts to threatened and endangered species would be similar to or less than those described for Alternative A.

3.9.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any deconstruction or other disposition activities at BRF. If the facility is left in "as-is" condition, buildings, soil, and vegetation would remain in their current state. Ospreys currently nesting on transmission towers would continue to be avoided or nearby actions minimized with guidance from USDA – Wildlife Services when necessary for compliance. Threatened and endangered terrestrial plants and animals and their habitats would not be affected under Alternative C. Degradation of aquatic habitats, as outlined in Subsection 3.6.2.3, have the potential to result in minor, indirect, long-term impacts on flame chub and spotfin chub populations should they occur in the vicinity of BRF.

3.10 Air Quality and Climate Change

3.10.1 Affected Environment

The study area for air quality is defined as Anderson County, Tennessee. However, given that air emissions cross county lines, the assessment here can be considered to apply to air quality effects over larger areas downwind of the facility. For purposes of climate assessment, the study area is Anderson County with respect to local climate conditions, and with respect to GHG emissions, the study area is the global environment.

3.10.1.1 Air Quality

The CAA requires the EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The CAA identifies two types of NAAQS, primary and secondary. Primary NAAQS provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings (EPA 2022e).

The EPA has specified NAAQS for six principal pollutants, which are called criteria pollutants, and air quality is measured primarily by the concentrations of the six criteria pollutants within a region. The criteria pollutants are ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), lead (Pb), sulfur dioxide (SO₂), and particulate matter (PM) which includes two subcategories: particles less than 10 microns in diameter (PM₁₀) and particles less than 2.5 microns in diameter (PM_{2.5}) (EPA 2022e).

EPA designates compliance status for the NAAQS through a formal rulemaking process involving publication of proposed and final rules in the Federal Register. For each pollutant for which there is a NAAQS, EPA designates an area as attainment, nonattainment, or maintenance. A maintenance area is a geographical area that has a history of nonattainment with a particular NAAQS but is currently meeting that NAAQS. Part of the redesignation process requires that the state or local agency with responsibility for managing air quality in the area must submit for EPA approval a plan to maintain compliance with the NAAQS for which the area was in nonattainment status.

Anderson County is an attainment or maintenance area for all criteria pollutants (EPA 2022f). However, all or part of the County has been in nonattainment status for two pollutants in the past 20 years. On September 27, 2017, Anderson County was redesignated by the EPA from a nonattainment to a maintenance area for the 2006 NAAQS for PM_{2.5}. On August 12, 2015, parts of Anderson County were redesignated from nonattainment to maintenance for the 8-hour 2008 ozone standard. The parts of Anderson County that achieved maintenance status for the 8-hour 2008 ozone standard include U.S. Census Bureau (USCB) Tract 213.02, in which BRF is located, and Tract 202 of the 2000 Census (EPA 2022a).

The primary mechanisms for causing potential effects to local air quality considered in this assessment are associated with the demolition of buildings and structures and transportation-related activities. Both activities generate fugitive dust, which is commonly measured by the size of PM. Air quality standards of measure for dust are PM₁₀ and PM_{2.5}. In addition, exhaust from internal combustion engines used to power trucks and demolition equipment result in emissions that can affect local air quality, particularly if the engines are not properly maintained.

3.10.1.2 Climate Change and Greenhouse Gases

Climate trends and data in the region of BRF are described in the Potential Bull Run Fossil Plant Retirement Final EA (TVA 2019d).

The EPA defines climate change as “*any significant change in the measures of climate lasting for an extended period of time.*” In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer. These changes are caused by a number of natural factors as well as anthropogenic (i.e., human-related) activities (EPA 2022b).

Climate change is primarily a function of excessive CO₂ in the atmosphere. CO₂ is the primary GHG emitted through human activities. Activities associated with the proposed action that produce CO₂ are primarily related to emissions from fossil-fuel-powered equipment (e.g., bulldozers, loaders, haulers, trucks, generators) used during the proposed activities. Forested areas that absorb and store CO₂ from the atmosphere via a process known as carbon sequestration help to reduce levels of CO₂ in the atmosphere. No forested areas would be directly or indirectly impacted under either of the proposed alternatives.

Additional GHGs that contribute to climate change include hydrofluorocarbons used in refrigeration equipment; sulfur hexafluoride used as a gaseous dielectric medium for high-voltage (1-kilovolt and above) circuit breakers, switchgears, and other electrical equipment; and methane. These gases can be released to the atmosphere through seal leaks, especially from older equipment, as well as during equipment manufacturing, installation, servicing, and disposal (EPA 2022d).

3.10.2 Environmental Consequences

3.10.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, short-term, direct air contaminants and GHG emissions would occur due to the generation of fugitive dust and use of vehicles and equipment in the demolition process and through the transport of demolition debris and borrow material. The proposed demolition activities would be subject to federal, state (Tennessee Division of Air Pollution Control), and county (Anderson County) regulations which impose permitting requirements and specific standards for expected air emissions, including TDEC Rule 1200-03-03 for fugitive dust.

Fugitive dust emissions from demolition activities are typically deposited on the property where the structures being demolished are located. Theoretical drift distance, as a function of particle diameter and mean wind speed, has been computed for fugitive dust emissions. Results indicate that, for a typical mean wind speed of 10 miles per hour, particles larger than about 100 microns are likely to settle out within 20 to 30 feet from the point of emission. Particles that are 30 to 100 microns in diameter are likely to settle within a few hundred feet from the point of emission. Smaller particles, particularly PM₁₀ and PM_{2.5}, have much slower gravitational settling velocities and are much more likely to have their settling rate retarded by atmospheric turbulence, and thus be transported offsite (EPA 1995).

Direct emissions of fugitive dusts would be generated by general demolition activities, but these emissions would be temporary, and the majority of PM would settle within the immediate vicinity of BRF. The closest structure to public receptors is the car wash, which is located in the northeast corner of the project area approximately 665 feet southeast of

the nearest residence and approximately 450 feet northeast of Claxton Community Center. Given the distance from the plant, these receptors would not be impacted by fugitive dust emissions. Under Alternative A, there would also be an intense, short-term release of fugitive dust associated with the removal of the stacks or structures by dropping with explosives. Fugitive dust would be released in an uncontrolled manner and would likely be released within a span of minutes, after which these emissions would cease. Dropping the stacks or structures via explosives would likely produce the most PM of any site activity, with the highest potential to travel off the demolition site.

To minimize potential fugitive dust mobilization associated with explosive demolition of stacks or structures, the demolition contractor would be required to remove ash from the facilities proposed for deconstruction and demolition prior to removal of that facility and implement dust control BMPs during demolition to prevent the spread of dust, dirt, and debris. These BMPs may include wetting equipment within demolition areas, covering waste or debris piles, using covered containers to haul waste and debris, and wetting unpaved vehicle access routes during hauling. TVA also requires onsite contractors to maintain engines and equipment in good working order.

Site preparation and vehicular traffic over paved and unpaved roads at the site would result in the emission of fugitive dust during active deconstruction, demolition debris removal, and restoration activities. The largest fraction of fugitive dust emissions would be deposited onsite within the demolition site boundaries. If necessary, emissions from open demolition areas and paved/unpaved roads could be mitigated by spraying water or other controlled materials on the roadways to reduce fugitive dust emissions.

Combustion of gasoline and diesel fuels by internal combustion engines (vehicles, generators, demolition equipment, etc.) would generate local emissions of PM, CO, NO₂, SO₂, volatile organic compounds, and CO₂, during the site preparation, demolition, and restoration periods. However, new emission control technologies and fuel mixtures have significantly reduced vehicle and equipment emissions. Additionally, measures to reduce diesel emissions would include, when possible, proper maintenance of vehicles, switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training or contracting policies.

Demolition debris would be transported to an offsite landfill by truck. Mode of removal of scrap metal and other recyclable materials would be determined by the demolition contractor and could include transport by truck and/or rail. The transport of demolition debris and scrap metal by truck during decontamination and deconstruction activities would require the use of approximately 25 truckloads (50 truck trips) per day to transport the material offsite. The materials would be transported along existing roadways in the vicinity of BRF for a period of up to 24 months. In addition, the need for borrow material for site restoration would require the transport of approximately 55 truckloads (up to 110 truck trips) per day of borrow from a previously developed or permitted borrow site within 100 miles of BRF. The borrow would be intermittently transported along existing roadways during the site restoration period of approximately 12 months subsequent to removal of demolition debris and scrap metal. The total amount of air emissions associated with this vehicular traffic would be temporary and minor in comparison to traffic in the region and would not adversely affect local air quality. Mitigation measures including implementing BMPs for controlling fugitive dust and proper maintenance of vehicles for controlling emissions would further reduce impacts.

Transportation of scrap metal and other recyclable materials by rail would be short term and relatively intermittent, would be expected to be integrated within the existing rail freight system, and would not result in increased rail congestion, delays, or idling time. As such, potential localized effects to air quality and climate change would not be notably greater than current rail operating impacts.

The use of vehicles and demolition equipment in the activities associated with Alternative A including offsite vehicle operations (such as debris disposal, the transport of borrow, and workforce transportation) would result in a minor temporary increase in CO₂ emissions. There would also be a small risk of a release of pollutants and/or GHGs associated with handling and removal of refrigeration and electrical equipment during deconstruction and demolition activities. Such emission levels are expected to be *de minimis* in comparison to the regional and world-wide volumes of GHGs. Therefore, local and regional GHG levels would not be adversely impacted by emissions from demolition activities.

Overall, implementation of Alternative A would have a minor and temporary impact on air quality and no direct or indirect impact on regional climate change.

3.10.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, air quality and climate change impacts from all demolition activities, excluding air emissions associated with removal of the turbine bay and intake structure, would be the same as under Alternative A.

Under Alternative B, emissions of fugitive dust would be less than Alternative A as these two structures would not be demolished and removed. Furthermore, the duration of these emissions would be slightly shorter than that associated with Alternative A. Overall, Alternative B is expected to have a minor and temporary impact on air quality and no direct or indirect impact on regional climate change.

3.10.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination, deconstruction or other disposition activities and the site would remain in its current condition. There would be no impacts to air quality or climate change associated with demolition activities or transport of demolition debris and borrow material.

Over the long term, indirect adverse impacts to air quality could occur due to the release of petroleum fuels, volatile organic compounds, hydrofluorocarbons, or other contaminants from leftover equipment within the BRF site. Sulfur hexafluoride could be released from electrical equipment. If such releases occur, they would be limited to the amount of gas in a specific container and would be expected to be negligible. The deterioration of hazardous materials not removed from the facility such as asbestos, lead paint, and dust could also result in the release of contaminants to the air. These would be limited to the amount of hazardous material remaining at the facility, would likely occur slowly over time due to degradation, and would be expected to be negligible. Overall, impacts to air quality would be minor and would have no impact on regional climate change.

3.11 Hazardous Materials and Solid and Hazardous Waste

3.11.1 Affected Environment

In general, hazardous materials include substances that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may present substantial danger to public health or the environment when released into the environment. Hazardous materials are regulated under a variety of federal laws including Occupational Safety and Health Administration (OSHA) standards, Emergency Planning and Community Right to Know Act, the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act of 1980, and the Toxic Substances Control Act.

RCRA regulations define what constitutes a hazardous waste and establishes a “cradle to grave” system for management and disposal of hazardous wastes. Universal wastes are a subset of hazardous wastes that are widely generated. Universal wastes include batteries, lamps and high intensity lights, and mercury thermostats. Universal wastes may be managed in accordance with the RCRA requirements for hazardous wastes or by special, less stringent provisions.

Solid waste consists of a broad range of materials that include refuse, sanitary wastes, contaminated environmental media, scrap metals, nonhazardous wastewater treatment plant sludge, nonhazardous air pollution control wastes, various nonhazardous industrial waste, and other materials (solid, liquid, or contained gaseous substances). Solid waste is regulated by the EPA and RCRA Subtitle D. Each state is required to ensure the federal regulations for solid waste are met and may implement more stringent requirements.

Special waste is a solid waste, other than a hazardous waste, that requires special handling and management to protect public health or the environment. In some states, special wastes may include sludges, bulky wastes, pesticide wastes, industrial wastes, combustion wastes, friable asbestos, and certain hazardous wastes exempted from RCRA Subtitle C requirements. Any of these wastes, if generated, would be disposed of as required by state and federal regulations.

BRF is considered a small quantity generator of hazardous waste by TDEC, generating less than 2,200 pounds of hazardous waste per calendar month. The primary hazardous wastes currently generated include small quantities of waste paint, waste paint solvents, paper insulated lead cable, mercury contaminated debris, debris from sandblasting and scraping, paint chips, solvent rags used to clean electric generating equipment, Coulomat (used for removing moisture from oil) and liquid-filled fuses (TVA 2016c, 2019b).

3.11.2 Environmental Consequences

3.11.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, all buildings and structures within the proposed project area would be decontaminated and demolished to 3 feet below final grade. Based on results of hazardous material surveys at similar TVA plants, solid and hazardous wastes that can reasonably be expected to be generated during deconstruction include:

- ACM
- Mercury in equipment switches and flow meters

- Lead-containing materials
- PCBs in transformers and other oil-filled equipment
- Remnant coal and Coal Combustion Residuals
- Materials such as glaze, caulk, building siding, roofing materials, electrical cable, cable trays, etc.
- Other construction waste (e.g., concrete, scrap metal, etc.)
- Universal waste (fluorescent light bulbs, batteries, etc.)
- Aboveground storage tanks and underground storage tanks
- Containerized petroleum products or chemicals
- Chlorinated fluorocarbons (Freon) from equipment
- Radioactive sources from equipment
- Out of date surplus materials
- Various oils and fuels
- Antifreeze
- Batteries in bulk and associated fixtures including deep cycle series uninterruptible
- Power supply batteries and lead batteries from emergency lighting
- Loose combustible debris (tenant debris)
- Street lighting
- Heavy metals
- Batteries
- Creosote (in railroad ties)
- Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM)

Implementation of this alternative would result in removal and disposal of potential contaminant sources, as defined above, in accordance with local, state, and federal regulations. A hazardous materials survey would be completed prior to demolition to estimate the specific types and quantities of wastes generated during demolition. Hazardous materials and special waste that would be addressed prior to demolition would likely include ACMs, used oil, lead-containing materials, aboveground storage tanks, TENORM, and other hazardous materials and special wastes identified during the hazardous materials survey. TENORM can be exposed to the accessible environment as a result of human activities, such as manufacturing, mineral extraction, or water processing. Radiation screening for TENORM would be conducted in areas of the plant that are most likely to have it, such as equipment surfaces, pipes, drains, refractory brick, and residual ash, among others. Levels of TENORM would be expected to be minimal and, if present, TVA would determine the best use and proper disposal of all special waste from the project area. TVA would use BMPs consistent with applicable laws and regulations, such as use of secondary containment where storage and handling of POL. Specific oil stains or areas that may contain materials of concern would be addressed prior to demolition as well.

Along with TVA BMPs, materials determined to be waste would be evaluated (e.g., waste determinations) and managed (e.g., inspections, container requirements, permitted transport) in accordance with applicable federal and state rules, including TDEC Solid and Hazardous Waste Rules and Regulations as described in TDEC Division of Solid Waste Management Rule 0400 Chapters 11 and 12, respectively. Any unknown wastes which may be unearthed during the project would be subject to a hazardous waste determination and must be managed appropriately. Prior to demolition activities, hazardous waste, PCBs, ACM, lead paint, and universal waste would require special removal, handling, labeling, and disposal by appropriately trained and licensed personnel and contractors. These materials would be disposed of at a facility designed and permitted to receive hazardous materials. Additionally, if new hazardous waste streams are generated during demolition, notification and registration of these must be made to the TDEC Division of Solid Waste Management. Brick, block, and concrete demolition debris not contaminated by ACM or other hazardous materials could be used as clean fill in the basements and lower levels of the facility. Removed materials would be transported to a landfill or other approved disposal facility. Thus, direct impacts would be minor due to the limited potential for hazardous waste to be discharged and/or released into the environment under this alternative.

Demolition activities would create demolition debris and scrap metal that would be hauled to a permitted landfill or recycling facility. Efforts would be made to divert any recyclable materials (e.g., concrete, steel, and asphalt) away from landfills and repurpose the material when possible. Although a specific landfill has not been identified, given that material would be disposed in a permitted landfill that has the capacity to receive waste materials, and the potential that scrap metal and other debris would be recycled, it is expected that disposal of demolition debris would have a negligible effect on the long-term ability to meet disposal needs of the region.

This alternative is likely to have short-term impacts to the local environment through the release of fugitive dust during demolition and removing material to the landfill. However, implementation of the mitigation measures of dust suppression and environmental controls outlined in the guidance would minimize potential impacts. Due to the temporary nature of the operations, use of permitted disposal facilities, and trained and experienced contractors and personnel, environmental impacts from waste handling and disposal are not anticipated.

3.11.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

This alternative would be similar to Alternative A in that contaminated demolition debris and hazardous wastes would be hauled by truck to a landfill designed to receive such waste and operated by a company under TVA contract. The retention of the turbine bay of the powerhouse and intake structure would result in a negligible decrease in the amount of material that would be hauled offsite. Possible short-term impacts to the local environment through the release of fugitive dust during demolition and while removing material to the landfill would be minimized through mitigation measures, including dust suppression and environmental controls. Due to the temporary nature of the operations and the use of permitted disposal facilities, along with trained and experienced contractors and personnel, environmental impacts from waste handling and disposal are not anticipated.

Degradation over time of the remaining structures and material that is incorporated into the remaining structures, such as lead-based paint on metal structures, wiring, and plumbing

(copper and lead), may not be removed. Over time, any environmental and safety issues resulting from the degradation of these remaining materials would be addressed when such issues are identified. These indirect impacts would be minor due to the limited potential for hazardous waste to be discharged and/or released into the environment under this alternative. Overall, the impacts to hazardous materials and solid waste under Alternative B would be minor.

3.11.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination or deconstruction activities. Peeling lead-based paint, failing concrete, buckling floor tiles, and deteriorating asbestos and ACM could pose a hazard risk, may result in potential releases to the environment (e.g., through leaching to soils, surface water, or groundwater), and would be likely to have long-term, moderate impacts.

Concerns regarding trespassing and vandalism under this alternative would also be higher than with Alternatives A and B. The presumed presence of materials that could be salvageable might attract trespassers who could be exposed to potential contaminants or physical injury.

3.12 Transportation

3.12.1 Affected Environment

BRF is served by highway and railway modes of transportation. The transportation network surrounding BRF contains roads and bridges, rail lines and navigable waterways. BRF is served by one CSX rail line to the south of the site.

Nearby, major interstates include I-75 and I-40. State highways provide ample access in the immediate vicinity of BRF. Principal access at BRF is via State Route (SR) 170 (Edgemoor Road), which is two lanes wide. U.S. 25W, a four-lane roadway, is approximately 2.5 miles east of BRF. West of U.S. 25W, SR 170 is known as Edgemoor Road. East of U.S. 25W, SR 170 becomes Raccoon Valley Road (see Figure 3-6 in Section 3.15), which is two lanes wide and continues to I-75 approximately 9 miles to the east of BRF.

The Annual Average Daily Traffic (AADT) on the roadways in the immediate vicinity of BRF for SR 170 (Edgemoor Road) and SR 170 (Raccoon Valley Road) are indicated in Table 3-9.

Table 3-9. Average Daily Traffic Volumes (2018-2021) on Roadways in Proximity to BRF

Roadway	AADT*			
	2018	2019	2020	2021
SR 170 (Edgemoor Road) between BRF and US 25W/SR 9	15,200	16,134	19,218	15,286
SR 170 (Edgemoor Road) between Oak Ridge Highway and BRF (just west of the Clinch River/Melton Hill Reservoir)	15,109	15,612	17,421	15,981
SR 170 (Raccoon Valley Road) just east of US 25W	4,475	4,925	4,995	4,347
SR 170 (Raccoon Valley Road) just west of Heiskell Road	3,868	3,833	3,989	3,767

Source: Knoxville Regional Transportation Planning Organization (TPO) 2022

* AADT = annual average daily traffic

The data in Table 3-9 includes traffic resulting from operation of the plant. AADT data for roads in the vicinity of the plant would be lower following the retirement of BRF (anticipated to occur in 2023).

3.12.2 Environmental Consequences

3.12.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Traffic generated during decontamination and deconstruction activities would consist of the shipment of goods and equipment, the construction workforce, transport of demolition debris from the facility to an offsite landfill or recycling operation, and potential transport of borrow material from an offsite location to the project area. TVA identified factors used to determine feasible modes of transport for hauling demolition debris and recyclable materials offsite and for transporting borrow to BRF. Those factors include volume of material; distance from BRF to a permitted landfill or borrow site; availability of the infrastructure to manage the transfer of material; cost effectiveness; and schedule. Rail transport could require the installation of loading and/or unloading infrastructure at BRF and/or at or near the landfill/disposal facility/borrow site, and it would require a rail transportation service in the form of a rail carrier. At landfills, material would need to be offloaded from the train to a stockpile area prior to being placed on trucks and conveyors or loaders to load the debris onto trucks and infrastructure to support trucking to the landfill site. The necessary environmental and construction permits to construct these facilities could easily take 18 to 24 months to acquire, if the said landfills and borrow sites are amenable to such additions. TVA determined that due to the closure schedule and the costs and environmental impacts associated with development and permitting of the required loading and unloading infrastructure, use of rail to transport demolition debris from and borrow material to BRF would not be feasible.

However, mode of transport for scrap metal and other recyclable materials would be determined by the demolition contractor and could include transport by truck and/or by rail. Scrap metal and other recyclable materials, unlike demolition debris, would not require the installation of loading/unloading infrastructure for rail transport; these materials can be loaded via excavator and unloaded via excavator and/or magnet. Potential transport of scrap metal and other recyclable materials by rail would be short term and relatively intermittent, and trains carrying these materials from BRF would be expected to be

integrated within the existing rail freight system and would not result in increased rail congestion, delays, or idling time. As such, potential localized effects to transportation along these existing rail lines would not experience notably greater impacts due to the transport of recyclable material by rail than those they already experienced under current rail operating conditions. Therefore, impacts to rail transportation would not be anticipated.

The construction workforce traveling to and from BRF would contribute to the traffic on the local transportation network. TVA estimates that the workforce needed for decontamination would range in size from 50 to 150 personnel over a 12-month period. The deconstruction workforce would range from 50 to 100 personnel over an approximately 18- to 24-month period, which could overlap the decontamination work phase. Therefore, assuming a peak workforce of 250 and one person per commuting vehicle, there would be a maximum daily morning inbound traffic volume of up to 250 vehicles and a maximum daily outbound traffic volume of up to 250 vehicles. Although workers would access BRF from SR 170, these motorists would eventually disperse throughout the transportation network and use interstate highways or major arterial roadways as much as possible. The traffic volume generated by the construction workforce would be relatively minor and would only occur for up to 24 months. Further, following plant retirement, the traffic volumes on SR 170 would decrease, which would partially offset the temporary increase in traffic due to the construction workforce. Therefore, the traffic volume generated by the construction workforce would be temporary and minor.

Construction-related vehicles (e.g., dozers, cranes, backhoes, graders, loaders, etc.) would be delivered to the decontamination and deconstruction area on flatbed trailers during both the mobilization and demobilization stages of the project, causing an increase in truck traffic in the vicinity. However, as this increase would primarily occur during the mobilization and demobilization phases, impacts to the surrounding transportation network are not anticipated.

Decontamination, deconstruction, and restoration activities would also result in increased truck traffic on surrounding roadways. Anticipated roadway traffic increases from transport of demolition debris, scrap metal, and borrow are shown in Table 3-10.

Demolition debris, ACM, and scrap metal would be hauled offsite to be recycled or disposed of at an appropriate facility in accordance with all federal, state, and local regulations. Scrap metal could also be sold to local or regional vendors. No specific disposal site has been identified at this time and ultimate disposition site selection would be determined by the demolition contractor. Masonry debris would be used for fill material for the basements at the site with any excess hauled to an offsite landfill or recycling facility by truck to one or more previously permitted commercial landfills. Material could also be hauled to an offsite hazardous waste landfill. If hauled by truck, TVA estimates that approximately 25 trucks per day would utilize local roads and arterial and interstate highways to transport demolition debris and scrap metal to a permitted landfill, vendor, or recycling facility within 20 miles of BRF during the decontamination and deconstruction phase, equating to a temporary (24 months) increased daily traffic count of approximately 50 truck trips in the vicinity of the BRF site. Because the extent of additional truck trips is minor, with maximum forecasted traffic increases of 1.3 percent on area roadways, the impact of transport of demolition debris to the surrounding roadway network would be minor. The retirement of BRF in 2023 would result in reduction of AADT on surrounding roadways in the vicinity of BRF prior to decontamination and deconstruction activities. As

such, the percentage increase in traffic associated with the transport of demolition debris would be less than anticipated.

Table 3-10. Traffic Impacts Associated with Alternative A

Roadway	2021 AADT*	Increased AADT with Demolition Debris	Traffic Increase (Percent)	Increased AADT with Borrow	Traffic Increase (Percent)
SR 170 (Edgemoor Road) between BRF and US 25W/SR 9	15,286	15,336	0.33%	15,396	0.71%
SR 170 (Edgemoor Road) between Oak Ridge Highway and BRF (just west of the Clinch River/Melton Hill Reservoir)	15,981	16,031	0.31%	16,091	0.68%
SR 170 (Raccoon Valley Road) just east of US 25W	4,347	4,397	1.14%	4,457	2.47%
SR 170 (Raccoon Valley Road) just west of Heiskell Road	3,767	3,817	1.31%	3,877	2.84%

* Source: Knoxville TPO 2022; AADT = Annual Average Daily Traffic

Note: AADT does not reflect predicted reduction in traffic after closure of BRF in 2023.

TVA estimates up to 300,000 cubic yards of borrow material would be needed to support site restoration. The estimated number of daily truckloads (of borrow material) using tandem dump trucks with a capacity of 15 cubic yards would be approximately 55 truckloads (110 truck trips) per day over a period of not more than 12 months. The borrow would be intermittently transported along existing roadways during the site restoration period subsequent to removal of demolition debris and scrap metal. Borrow would be hauled by truck from one or more previously permitted commercial sites within 100 miles of BRF. Although the exact location of borrow sites is not known, it is assumed that haul routes would use arterial or interstate roadways whenever possible. However, it would be necessary for haul routes to utilize SR 170 to access BRF. The transport of borrow to support site restoration would occur after decontamination and deconstruction is complete and as such the traffic associated with the hauling of borrow material would be offset by the reduction in traffic that would be experienced with the cessation of demolition and deconstruction activities and reduction in workforce due to the closure of BRF in 2023. Because the extent of additional truck trips is minor, with forecasted traffic increases of less than three percent on area roadways, the impact of transport of borrow material on the surrounding roadway network would be minor and temporary.

Under Alternative A, the stacks and certain structures would be demolished via explosives, the use of which would necessitate increased security measures that would affect transportation in the immediate vicinity of the project area. During blasting events, select public roadways could be closed for public safety and to facilitate site security. River traffic may be restricted as well due to the potential for demolition debris to fall into the river. Traffic closures would vary from approximately three hours before and up to three hours after the blast. The closures would not affect a large number of local residents due to the sparse population in the area. The demolition contractor would create a detailed plan for

road closures that would be coordinated with affected parties, including emergency personnel.

Therefore, given the minor, temporary and localized impact associated with increased traffic on SR 170, the impact of Alternative A on transportation would be minor.

3.12.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, transportation impacts from demolition activities would be similar to those described for Alternative A. The exclusion of the turbine bay and intake structure from demolition would result in a slightly smaller amount of debris material that would have to be hauled to an offsite landfill and borrow material brought onsite. Furthermore, the duration of traffic associated with project activities would be slightly shorter than that associated with Alternative A. Overall, Alternative B is expected to have a minor and temporary impact on transportation.

3.12.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination or deconstruction activities, and the site would remain in its current condition. Therefore, there would be no effect on traffic and transportation in proximity to the site.

3.13 Noise

3.13.1 Affected Environment

3.13.1.1 Noise

Noise is unwanted or unwelcome sound usually caused by human activity and added to the natural acoustic setting of a locale. It is further defined as sound that disrupts normal activities and diminishes the quality of the environment. Community response to noise is dependent on the intensity of the sound source, its duration, the proximity of noise-sensitive land uses, and the time of day the noise occurs (i.e., higher sensitivities would be expected during the quieter overnight periods). Affected receptors are specific (e.g., schools, churches, or hospitals) or broad (e.g., nature preserves or designated districts) areas in which occasional or persistent sensitivity to noise above ambient levels exists.

BRF is bordered by wooded ridges on the north and south, a partially wooded valley to the east, and the Clinch River/Melton Hill Reservoir on the west. Residential areas to the north and northwest are within the immediate vicinity of BRF facilities, including Claxton Community Park to the northeast. The nearest single-family residential areas are located along Edgemoor Road approximately 140 feet from the northwest boundary of the project area. Residential areas are located north, south, and east of the project area, and the Claxton Community Park is located adjacent to BRF to the north along Edgemoor Road. The partially wooded hills across the river are used for residential and recreational purposes. The residences closest to the plant and therefore most affected by plant noise are located along Edgemoor Road approximately 140 feet from the northwest boundary of the project area.

3.13.1.2 Noise Metrics

Sound is measured in logarithmic units called decibels (dB). The “pitch” (high or low) of the sound is a description of frequency, which is measured in Hertz (Hz). A normal human ear

can usually detect sounds that fall within the frequencies from 20 Hz to 20,000 Hz. However, humans are most sensitive to frequencies between 500 Hz to 4,000 Hz. Given that the human ear cannot perceive all pitches or frequencies of sound, noise measurements are typically weighted to correspond to the limits of human hearing. This adjusted unit of measure is known as the A-weighted decibel (dBA), which filters out sound in frequencies above and below human hearing. A noise level change of 3 dBA or less is barely perceptible to average human hearing; however, a 5-dBA change in noise level is clearly noticeable. The noise level associated with a 10-dBA change is perceived as being twice as loud; whereas the noise level associated with a 20-dBA change is considered to be four times as loud and would therefore represent a “dramatic change” in loudness.

Environmental noise refers to outdoor noise near a community. A continuous source of noise is rare for long periods of time and is typically not a characteristic of environmental noise. To account for sound fluctuations, environmental noise is commonly described in terms of the equivalent sound level, or L_{eq} . The equivalent sound level is the constant noise level that conveys the same noise energy as the actual varying instantaneous sounds over a given period. Fluctuating levels of continuous, background, or intermittent noise heard over a specific period are averaged as if they had been a steady sound. The day-night sound level (L_{dn}), expressed in dBA, is the 24-hour average noise level with a 10-dBA correction penalty for the hours between 10 p.m. and 7 a.m. to account for the increased sensitivity of people to noises that occur at night.

3.13.1.3 Ambient Sound Levels

Noise levels continuously vary with location and time. In general, noise levels are high around major transportation corridors, along highways, railways, airports, industrial facilities, and construction activities. Sounds from a source spread out as they travel from the source, and the sound pressure level diminishes with distance. In addition to distance attenuation, the air absorbs sound energy; atmospheric effects (wind, temperature, precipitation) and terrain/vegetation effects also influence sound propagation and attenuation over distance from the source. An individual's sound exposure is determined by measurement of the noise that the individual experiences over a specified time interval.

Common indoor and outdoor noise levels are listed in Table 3-11. Typical background day-night noise levels for rural areas are anticipated to range between an L_{dn} of 35 and 50 dB, whereas higher-density residential and urban areas background noise levels range from 43 dB to 72 dB (EPA 1974).

Table 3-11. Common Indoor and Outdoor Noise Levels

Common Outdoor Noises	Sound Pressure Levels (dB)	Common Indoor Noises
	110	Rock Band at 5 m (16.4 ft)
Jet Flyover at 300 m (984.3 ft)		
	100	
		Inside Subway Train (New York)
Gas Lawn Mower at 1 m (3.3 ft)		
	90	
		Food Blender at 1 m (3.3 ft)

Common Outdoor Noises	Sound Pressure Levels (dB)	Common Indoor Noises
Diesel Truck at 15 m (49.2 ft)	80	Garbage Disposal at 1 m (3.3 ft)
		Shouting at 1 m (3.3 ft)
Gas Lawn Mower at 30 m (98.4 ft)	70	Vacuum Cleaner at 3 m (9.8 ft)
Commercial Area	60	Normal Speech at 1 m (3.3 ft)
		Large Business Office
	50	Dishwasher Next Room
Quiet Urban Daytime		
	40	Small Theater, Large Conference Room
Quiet Urban Nighttime		Library
Quiet Suburban Nighttime	30	
		Bedroom at Night
Quiet Rural Nighttime		Concert Hall (Background)
	20	
		Broadcast and Recording Studio
	10	
		Threshold of Hearing
	0	

Source: Federal Highway Administration (FHWA) 2018

3.13.1.4 Regulations

Anderson County, Tennessee has established quantitative noise-level regulations specifying environmental noise level limits based on the land use of the property receiving the noise. Per the Anderson County Zoning Ordinance, Residential (R-1) districts have the most stringent regulations and noise cannot exceed 60 dBA during daytime hours (7a.m. to 10 p.m.) or 55 dBA during the night (10 p.m. to 7 a.m.), measured at the closest adjacent property line. As noted in Section 3.1, BRF is located in an area which has been zoned for heavy industrial use by Anderson County. Allowable noise levels from areas zoned for heavy industrial use cannot exceed 80 dBA. Construction activities are exempt from the noise regulations (Anderson County, TN 2015).

Agencies of the federal government have established noise guidelines for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise. According to the U.S. Department of Housing and Urban Development (HUD) criteria, residential units and other

noise-sensitive land uses are “clearly unacceptable” in areas where the L_{dn} exposure exceeds 75 dBA, “normally unacceptable” in regions exposed to noise between 65 and 75 dBA, and “normally acceptable” in areas exposed to noise of 65 dBA or less (HUD 1985). For outdoor activities, the EPA recommends an L_{dn} of 55 dBA as the sound level below which there is no reason to suspect that the general population would be at risk from any of the effects of noise. This level is not regulatory goals but are “intentionally conservative to protect the most sensitive portion of the American population” with “an additional margin of safety” (EPA 1974).

3.13.1.5 Sources of Noise

Industrial activities, transportation noise, and construction noise are common sources of environmental noise emanating from BRF (TVA 2019d). Off-site sources of noise are primarily derived from road traffic and rail traffic, although the majority of transportation noise surrounding BRF results from road traffic (TVA 2005). Road traffic noise is generated by the volume of traffic, the speed of traffic, and the number of trucks in the flow of the traffic. Doubling the number of noise sources (i.e., vehicles) increases the L_{eq} by approximately 3 dB, which is usually the smallest change that people can detect (FHWA 2018). Noise related to rail traffic may be influenced by speed of the engine, or type of engine, wagons, and rails (Berglund and Lindvall 1995). At BRF, rail operations are conducted at very low speeds and likely result in relatively low noise emissions.

3.13.1.6 Vibration

Construction and demolition activities, including the operation of heavy machinery, construction-related vehicles, and blasting, can create ground vibration. There are three primary types of receivers that can be adversely affected by ground vibration: people, structures, and equipment. Ground vibrations and ground noise can cause annoyance to people who live or work near sources of vibration. Additionally, if the vibration amplitudes are high enough, there is the possibility of physical and cosmetic damage to structures and the possibility of interference with the functioning of sensitive machinery. The length of time and strength of vibration varies with the equipment used. For example, the vibration from blasting has a high amplitude and short duration, whereas vibration from grading or highway traffic is lower in amplitude but longer in duration (Caltrans 2020). The Federal Transit Administration (FTA) developed a noise and vibration impact assessment manual for estimating vibrations generated by common transportation and construction sources, possible damage levels, and dampening distances. Figure 3-5 presents typical levels of ground-borne vibration at 50 feet for a variety of common transportation and construction equipment. At 50 feet from the source, community annoyance begins at a velocity level of 70 vibration decibels (VdB) for frequent events. Damage to structures occurs at 100 VdB for one-time activities such as blasting operations (FTA 2018).

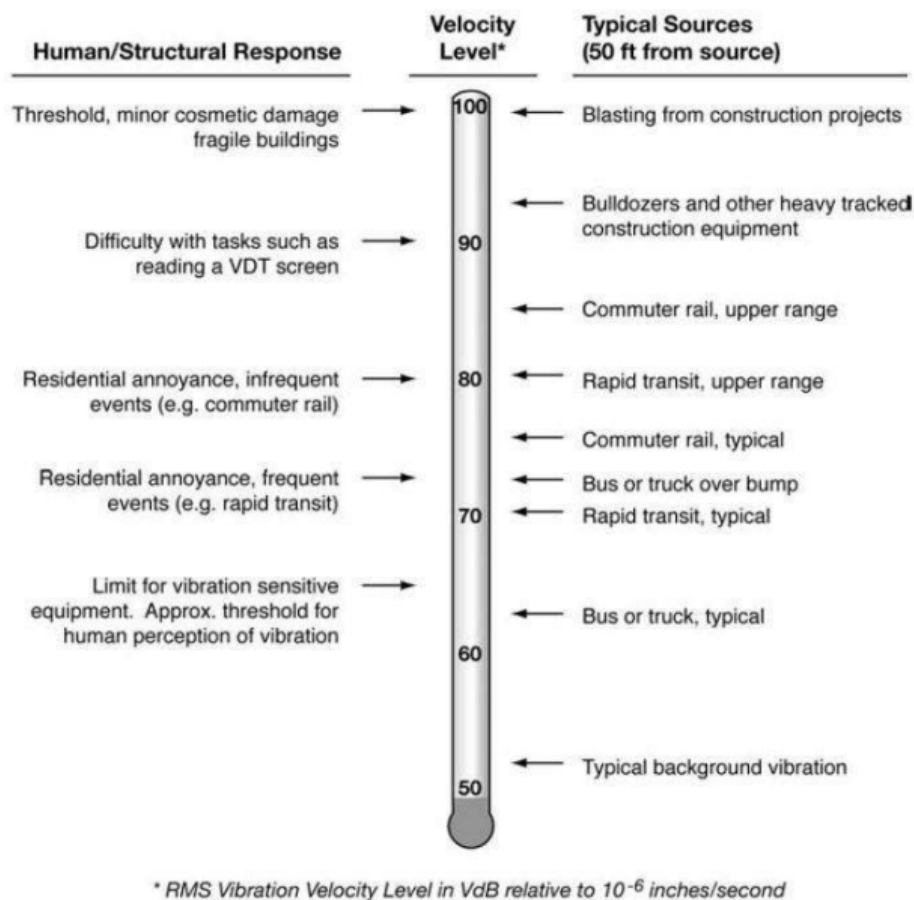


Figure 3-5. Typical Levels of Ground Borne Vibration

3.13.2 Environmental Consequences

3.13.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Decommissioning and decontamination of the plant would last approximately 12 months, whereas deconstruction would last approximately 18 to 24 months. This would be followed by a restoration period of approximately 12 months. Work would occur during daytime hours, between 6:00 a.m. and 6:00 p.m., up to seven days a week. Noise impacts under this alternative would be associated with the site decontamination and deconstruction activities, workforce vehicle traffic, transport of demolition debris and recyclable materials offsite, and transport of borrow material to BRF.

During the decontamination and demolition phases, noise would be generated by a variety of construction equipment and vehicles including front-end loaders, dozers, excavators, graders, and dump/haul trucks. Typical noise levels from this equipment are expected to be 85 dBA or less at a distance of 50 feet from the construction equipment (FHWA 2016).

The closest sensitive receptors to facilities being demolished within the main plant area are residences on the north side of Edgemoor Road near the northwest boundary of the project

area. The distances between sensitive receptors and facilities to be demolished are shown in Table 3-12.

Table 3-12. Distance Between Demolition Activities and Sensitive Receptors

Structure to be Demolished	Sensitive Receptor	Distance to Nearest Sensitive Receptor
Guard Shack	Residence	576 feet
Car Wash	Claxton Community Park	672 feet
Car Wash	Residence	673 feet
Reclaiming Hoppers	Residences	692 feet
Hydrated Lime Injection System Buildings	Residence	726 feet
Hydrogen Trailer Port	Residence	747 feet
Office Wing	Residence	791 feet
Transfer Stations and Support Structures	Residence	826 feet
Smokestack (800 feet tall)	Residence	840 feet
Control and Sampling Building (Coal Tower)	Residence	893 feet
Precipitators and Control Building	Residence	919 feet
Powerhouse	Residence	920 feet

Based on straight line noise attenuation, it is estimated that noise levels would attenuate to 62.4 dBA at Claxton Community Park, 672 feet from the nearest structure to be demolished (car wash), and 63.8 dBA at the nearest residence, 576 feet northwest of the nearest structure to be demolished (guard shack). Noise levels at sensitive receptors would most likely be lower in the field compared to calculated values, as objects and topography would cause further noise attenuation. The remaining sensitive receptors in Table 3-12 represent the ten closest sensitive receptors to structures to be demolished at BRF, all of which are increasingly further away than those receptors previously mentioned. Therefore, all subsequent receptors in Table 3-12 would be expected to experience fewer noise impacts than Claxton Community Park from the car wash. Claxton Community Park is located within the BRF property boundary and therefore falls within the I-2 Industrial zoning designation (Anderson County Assessor 2022). Despite construction noise being exempt from the Anderson County noise ordinance requirements, noise levels from demolition and deconstruction are expected to fall below the guidelines established by Anderson County for industrial properties.

Use of construction equipment during decontamination and demolition activities may occasionally and temporarily result in noise levels that exceed the Anderson County guideline of 60 dBA for daytime specific residential zoned noise levels, the EPA noise guideline of 55 dBA, and the HUD guideline of 65 dBA. However, as previously stated, the

Anderson County zoning ordinance exempts construction noise. In addition, construction noise would generally be intermittent and limited to daylight hours, avoiding adverse impacts to the adjacent residents and the Claxton Community Park, during evening or nighttime hours. To reduce noise impacts from construction, there are various mitigation options that may be considered for application by the contractor. Examples of this mitigation (New York City Department of Environmental Protection 2018) are listed below:

- Equipping construction equipment with the manufacturer's noise-control devices and maintaining these devices in effective operating condition.
- Utilizing quiet equipment or methods to minimize noise emissions during an activity, when possible.
- Operating equipment with internal combustion engines at the lowest operating speed to minimize noise emissions, when possible and practical.
- Closing engine housing doors during operation of the equipment to reduce noise emissions from the engine.
- Avoiding equipment engine idling.
- Utilizing quieter, less-tonal back-up alarms on construction equipment. These alarms should comply with all applicable safety restrictions, such as OSHA standards.

Given the temporary and intermittent nature of noise associated with deconstruction and demolition activities and implementation of mitigation measures to reduce noise levels at the site boundary, impacts to adjacent residences and the Claxton Community Park from the proposed action would be minor.

Should explosive demolition be used to remove the stacks and other structures, noise would be generated both from the explosion and from the collapse of the stack/structures onto the ground. The noise associated with the explosive drop removal of the stacks and certain structures would be temporary, short-term events. Due to the isolated nature of the explosive drop removal of the stacks and structures, the noise produced by explosive stack demolition cannot be included in the continuous, background, or intermittent noise categories that constitute equivalent sound level, L_{eq} , and are used in determining community sensitivity associated with L_{dn} . For example, a jet flyover at 1,000 feet has a high sound pressure level of approximately 105 dBA, but in most environments, is not a recurring event that would contribute to typical noise levels. Similarly, a single explosive blast event may be equivalent to a thunderclap (120 dBA) at the source, whereas ongoing noise generated by heavy equipment used during demolition activities would fall under the standard continuous, background, and intermittent noise category that determines L_{eq} and associated community sensitivity (AZTEC 2021).

Explosive demolition activities would be single occurrences that would be temporary and short term. The noise associated with the collapse of the structures would follow closely behind and be perceived as a single noise event. Notifications to the public, including area emergency services, would be issued prior to the use of explosives for demolition. With warning to the public prior to blasting activities, residents would be prepared for a single loud noise; therefore, direct impacts to noise levels in the area associated with blasting would be minor and temporary.

Removal of the stacks and structures would also result in vibrations at the surface in the immediate vicinity when they are felled. Additional vibrations would be generated throughout the course of demolition from the operation of land moving equipment. However, these vibrations would not cause structural or cosmetic damage or be perceptible to members of the public. Vibrations from explosive demolition events, however, could potentially affect nearby structures. If deemed necessary during development of the demolition plan, TVA would evaluate the potential for vibration impacts. TVA would use site-specific data provided by the blasting contractor to prepare a vibration model simulating the effects of discharge of the explosives or vibrations due to the stacks hitting the ground. The model results would be compared to thresholds developed by the U.S. Bureau of Mines for vibration damage (Siskind et al. 1980). The study would assess structures within a 0.5-mile radius of the stacks/structures to be explosively demolished. The installation of imported fill, dirt binder, and geofabric, or modifying the timing of detonation of charges could also serve as a form of noise/vibration control.

Seismologic analyses carried out at recent demolitions of other tall industrial chimneys in the U.S. strongly suggest that the vibrations would not result in measurable effects on nearby structures (Protec 2013). These seismological analyses were conducted to measure the effects from demolition-related vibrations on standing structures in the vicinity of chimney demolitions. In each case, vibrations were below the recommended limits set by the U.S. Bureau of Mines Report (Siskind et al. 1980). The report authors concluded the vibrations from the demolitions would not cause damage to structures as close as 526 feet from the blast area. Vibrations resulting from the demolition of BRF stacks are anticipated to be of similar or lesser magnitude than those discussed in the report, as the heights of the BRF stacks fall within the height range of those in the report. To add further protection, TVA would require the demolition contractor to develop and implement a demolition plan to minimize vibration effects at BRF and in the vicinity. Due to the temporary nature of the operation, implementation of the demolition plan, the site's industrial location, noise and vibration effects on the environment are expected to be short term and minor.

There is a potential for indirect noise impacts associated with a temporary increase in vehicle traffic related to the workforce traffic, transport of demolition debris and recyclable materials offsite, and transport of borrow material to BRF.

TVA estimates that the workforce needed for decontamination would range in size from 50 to 150 personnel over a 12-month period. The demolition workforce of approximately 50 to 100 personnel would be needed for approximately 18 to 24 months, which could overlap the decontamination work phase. Assuming one person per commuting vehicle, there would be a maximum daily morning inbound traffic volume of up to 250 vehicles and a daily outbound traffic volume of up to 250 vehicles during these periods. The workforce traffic noise would only occur twice per day as workers are entering and leaving the project site and would eventually be dispersed among the surrounding roadways.

Transport of demolition debris, scrap metal, and borrow material also would result in increased truck traffic on surrounding roadways. Because the extent of additional truck trips due to transport of these materials is minor, with maximum forecasted traffic increases of less than 3 percent on area roadways, noise impacts are also anticipated to be minor. In addition, traffic associated with the transport of borrow material would occur after decontamination and demolition is completed; thus, the traffic associated with hauling of borrow material would be offset by the reduction in traffic that would be experienced with the cessation of demolition and deconstruction activities.

In accordance with Table 3-10 in Section 3.12, traffic associated with the decontamination and demolition of BRF would comprise a small proportion of the overall area traffic volume and, consequently, traffic noise in the vicinity of the roadways. Therefore, traffic related to the decontamination and demolition of BRF would have minor and temporary impacts on transportation-related noise in the area.

Mode of removal of scrap metal and other recyclable materials would be determined by the demolition contractor and could include transport by truck or by rail. Transport of scrap metal and other recyclable materials by rail, if utilized, would be short term and relatively intermittent. Trains carrying scrap metal and other recyclable materials from BRF would be expected to be integrated within the existing rail freight system and would not result in increased rail congestion or idling time. As such, sensitive noise receptors located along these existing rail lines would not experience notably greater noise impacts due to the transport of recyclable materials by rail than those they already experience under current rail operating conditions. Therefore, noise and vibration impacts would not be anticipated.

In summary, given the minor, temporary and intermittent noise emissions associated with the implementation of Alternative A and the implementation of mitigation measures designed to minimize noise and vibration impacts, impacts from noise would be minor.

3.13.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Noise impacts under this alternative would be similar to those under Alternative A and would be minor.

3.13.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any deconstruction or other decontamination activities and the site would remain in its current condition. There would be no impacts from noise or vibration.

3.14 Visual Resources

3.14.1 Affected Environment

This assessment provides a review and classification of the visual attributes of existing scenery, along with the anticipated attributes resulting from the proposed action. The classification criteria used in this analysis are adapted from a scenic management system developed by the U.S. Forest Service (USFS) and integrated with planning methods used by TVA (USFS 1995). Potential visual impacts to cultural and historic resources are not included in this analysis as they are assessed separately in Section 3.16.

The visual landscape of an area is formed by physical, biological, and man-made features that combine to influence both landscape identifiability and uniqueness. Scenic resources within a landscape are evaluated based on a number of factors that include scenic attractiveness, integrity and visibility. Scenic attractiveness is a measure of scenic quality based on human perceptions of intrinsic beauty as expressed in the forms, colors, textures, and visual composition of each landscape. Scenic integrity is a measure of scenic importance based on the degree of visual unity and wholeness of the natural landscape character. The varied combinations of natural features and human alterations both shape landscape character and help define their scenic importance. The subjective perceptions of

a landscape's aesthetic quality and sense of place is dependent on where and how it is viewed.

Scenic visibility of a landscape may be described in terms of three distance contexts: foreground, middleground, and background. In the foreground, an area within 0.5 miles of the observer, individual details of specific objects are important and easily distinguished. In the middleground, from 0.5 to 4 miles from the observer, object characteristics are distinguishable, but their details are weak, and they tend to merge into larger patterns. In the distant part of the landscape, the background, details, and colors of objects are not normally discernible unless they are especially large, standing alone, or have a substantial color contrast. In this assessment the background is measured as 4 to 10 miles from the observer. Visual and aesthetic impacts associated with a particular action may occur as a result of the introduction of a feature that is not consistent with the existing viewshed. Consequently, the character of an existing site is an important factor in evaluating potential visual impacts.

For this analysis, the affected environment includes the proposed decontamination and deconstruction project area, which includes temporary laydown areas, as well as the physical and biological features of the landscape. The existing BRF facility is located just east of the City of Oak Ridge, along the bank of the Clinch River/Melton Hill Reservoir in Anderson County. The surrounding area is representative of ridge and valley topography, with BRF and other development located in the valleys. Forested areas within Haw Ridge Park are visible to the southwest. To the north, east, southeast, and west are residential areas, including the Claxton Community Park to the northeast, and pockets of forested landscape.

The BRF stacks and associated steam plumes, landfills, dry fly ash stack, ash ponds, and transmission lines are the dominant elements in the existing landscape that are visible to residents, motorists on nearby roadways, and visitors to nearby parks and recreation areas within the foreground and middleground. Within the immediate vicinity of the plant site, the landscape character is a mix of residential and open areas with minimal commercial development. The steam plume from the stacks is prominent from middleground and background distances when the plant is operating. Based on the above characteristics, the scenic attractiveness of the affected environment is considered to be common, whereas the scenic integrity is considered to be low to moderate. The rating for scenic attractiveness is due to the ordinary or common visual quality. The scenic integrity has been lowered by the industrial nature of the BRF facility and surrounding residential development. However, in the background these alterations are not substantive enough to dominate the view of the landscape. Based on the criteria used for this analysis, the overall scenic value class for the affected environment is considered to be fair to good.

3.14.2 Environmental Consequences

3.14.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, TVA would decontaminate and deconstruct the powerhouse and buildings and structures within the project area to 3 feet below final grade. Minor visual impacts may occur during the decontamination and deconstruction of the facilities. During the decontamination and deconstruction phase there would be additional visual discord due to an increase in personnel and equipment in the area. Impacts from additional vehicular traffic are expected to be minor as the roads are used for residential access and access to

the BRF facility. The increase in visual discord would be temporary and only last until all activities have been completed by TVA.

Although only the stacks are currently visible from most vantage points in the area, cranes and other tall and colorful equipment may be visible at BRF during deconstruction activities. Observers and recreationists using the Clinch River/Melton Hill Reservoir, Claxton Community Park, the Melton Lake Greenway, and Haw Ridge Park would likely be able to see the construction equipment operating at the stacks and the powerhouse facilities as these are the tallest structures. However, because of the screening effect of terrain associated with the forested bluff lines, visibility of the proposed project site by residents to the north, east, southeast, and west is expected to be limited. Additionally, due to the temporary nature of the activities, visual impacts during demolition of the facilities would be considered minor.

Removal of the BRF stacks and structures under Alternative A would enhance the visual environment of the foreground, middleground, and background distances due to the removal of an industrial object from a generally rural viewscape. The stacks and powerhouse are visible as a major visual intrusion to many residents in the surrounding area and recreationists in the Clinch River/Melton Hill Reservoir, Melton Lake Greenway, and Haw Ridge Park. The overall long-term impacts of this alternative would be beneficial, but minor, due to the number of observers in the area around BRF.

3.14.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, actions as described under Alternative A would occur, except that the turbine bay of the powerhouse and the full intake structure would remain in-place. Minor impacts could occur over time if the remaining few structures begin to deteriorate. These impacts would be mitigated by the general maintenance measures to address safety-related issues and would be minor. Visual impacts under this alternative during demolition activities would be less than those described in Alternative A, as there would be fewer total structures to be demolished; therefore, impacts to residents and recreationists would still be minor. The turbine bay and intake structure would still be visible to many residents in the surrounding area and to recreationists using the Clinch River/Melton Hill Reservoir and surrounding parks. However, as the stacks, the tallest structures at BRF, would be removed under this alternative, there would be the same beneficial, but minor, impact to the overall viewscape.

3.14.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, no decontamination or deconstruction activities would occur, and there would be no impact to visual resources. As TVA would only perform critical maintenance as needed, minor adverse impacts to visual resources would occur over time as the buildings at BRF begin to deteriorate.

3.15 Natural Areas, Parks, and Recreation

3.15.1 Affected Environment

3.15.1.1 Managed and Natural Areas

Natural areas include managed areas such as Wildlife Management Areas (WMAs), National Wildlife Refuges and Habitat Protection Areas, ecologically significant sites, and

Nationwide Rivers Inventory streams. Managed areas include lands held in public ownership that are managed by an entity (e.g., TVA, National Park Service [NPS], USFS, state or county) to protect and maintain certain ecological and/or recreational features. Ecologically significant sites are tracts of privately owned land that are recognized by resource biologists as having significant environmental resources or identified tracts on TVA lands that are ecologically significant, but not specifically managed by TVA's Natural Areas Program. The Nationwide Rivers Inventory is a listing of more than 3,200 free-flowing river segments in the U.S. that are believed to possess one or more outstandingly remarkable natural or cultural values judged to be of more than local or regional significance. Designated Nationwide Rivers Inventory segments are thus potential candidates for inclusion in the federally recognized National Wild and Scenic River System. This section addresses managed and natural areas that are on, immediately adjacent to (within a 0.5-mile radius), or within the region of the proposed decontamination and deconstruction project area (within a 3-mile radius).

A review of the TVA Natural Heritage Project database identified 23 managed and natural areas, a segment of Clinch River Nationwide Rivers Inventory, and a segment of Clinch River State Scenic River within 3 miles of the project area (Table 3-13; Figure 3-6).

Five managed or natural areas occur within 0.5 miles of the project area. The Bethel Valley Embayment TVA Habitat Protection Area (HPA) is located 0.4 miles southwest of the project area and is listed as having high significance as a scenic and biologically diverse site. Chestnut Ridge Bluff TVA HPA, a 7-acre bluff covered in deciduous forest, is located approximately 0.4 miles northwest of the project area. Wolf Creek Embayment TVA HPA is just over an acre and is located 0.5 miles northwest of the project area. TVA HPAs are managed to protect threatened and endangered species, state-listed species, or unusual/exemplary biological communities or geologic features.

Haw Ridge Park, located within the bend of the Clinch River/Melton Hill Reservoir across from and downstream of BRF, is owned and managed by the City of Oak Ridge and contains over 30 miles of trails used for mountain biking, hiking, and horseback riding. The 762-acre park is an undeveloped area covered by hardwoods, and a cedar barrens community is located along one of the trails. The forest supports more than forty varieties of wildflower, including one endangered plant (Friends of Haw Ridge Park 2022). Chestnut Ridge Park, located 0.4 miles northwest of the project area, is a forested, approximately 1.5-acre green space adjacent to several residences and the Clinch River/Melton Hill Reservoir.

The NPS lists the Clinch River in Anderson County below Norris Dam, including a portion in the vicinity of BRF, on the Nationwide Rivers Inventory (NPS 2022). Under a 1979 Presidential Directive, and related CEQ procedures, all federal agencies must seek to avoid or mitigate actions that would adversely affect one or more Nationwide Rivers Inventory segments. A section of the Clinch River, from Melton Hill Dam upstream to the Pellissippi Parkway, is designated a Class III Partially Developed River Area under the Tennessee Scenic Rivers Program (TDEC 2022a). A partially developed river is defined by TDEC as rivers or sections of rivers that are free flowing, unpolluted and with shorelines and vistas essentially more developed (TDEC 2022e). The Tennessee Scenic Rivers Program is a voluntary community-based partnership intended to preserve and protect the free flowing, unpolluted and outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic or cultural values of selected rivers or river segments in the state.

Table 3-13. Managed and Natural Areas Within 3 Miles of the Decontamination and Deconstruction Project Area

Natural Area	Size (acres)	Distance from Project Area (miles)
Haw Ridge Park	762.2	0.3
Chestnut Ridge Park	1.6	0.4
Bethel Valley Embayment TVA Habitat Protection Area	3.6	0.4
Chestnut Ridge Bluff TVA Habitat Protection Area	7.6	0.4
Wolf Creek Embayment TVA Habitat Protection Area	1.4	0.5
Bull Run Park	9.2	0.6
Pumping Station Embayment Slope TVA Habitat Protection Area	4.2	0.7
Brushy Valley Park	8.0	0.8
Lower Bull Run Bluffs TVA Habitat Protection Area	4.4	1.0
Railroad Slope TVA Habitat Protection Area	2.4	1.0
Pine Ridge Bluff TVA Habitat Protection Area	5.0	1.1
Upper Bull Run Bluffs TVA Habitat Protection Area	12.3	1.4
Oak Ridge Municipal Park	7.7	1.4
Emory Valley Greenway	8.6	1.5
Pilot Knob Bluff TVA Habitat Protection Area	2.8	2.0
Bull Run Wetland TVA Habitat Protection Area	2.8	2.1
Palisades Subdivision Embayment TVA Habitat Protection Area	16.3	2.4
University Of Tennessee Arboretum/State Wildlife Observation Area	374.7	2.4
Worthington Cemetery Cedar Barrens TVA Ecological Study Area	20.4	2.4
Oak Ridge Reservation Solway Bend Bluffs	13.9	2.6
Oak Ridge National Laboratory Reservation	32,848.6	2.6
Three Bend Scenic and Wildlife Refuge	3,209.2	2.7
Lost Bottom Park	16.8	2.7

Source: TVA 2022c

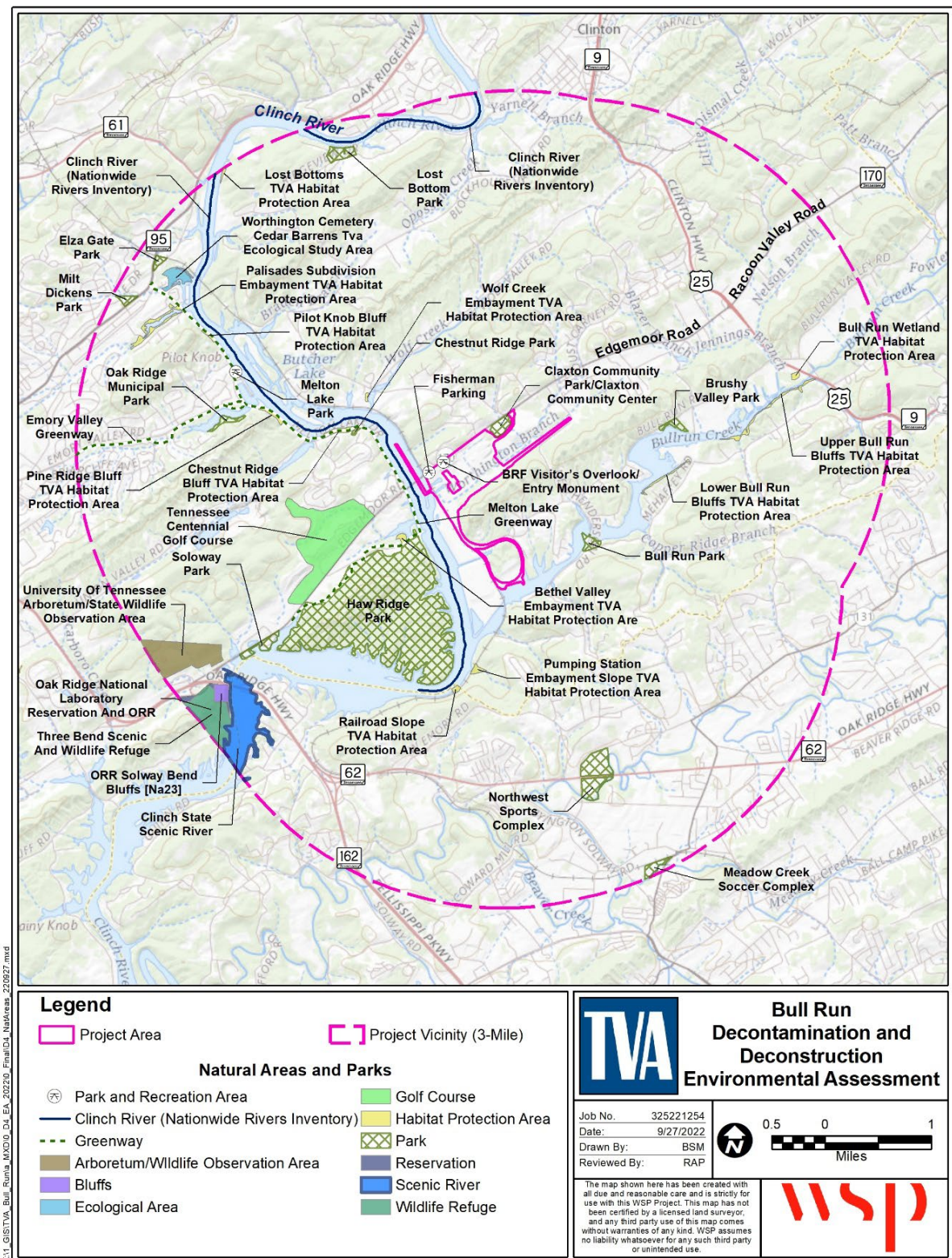


Figure 3-6. Natural Areas, Parks, and Recreation Facilities within 3 Miles of the Decontamination and Deconstruction Project Area

3.15.1.2 Parks and Recreation

Parks and developed recreation facilities include open areas, boat ramps, community centers, swimming pools, and other public places. Parks and recreation facilities that are on, immediately adjacent to (within a 0.5-mile radius), or within the region of the proposed decontamination and deconstruction project area (within a 3-mile radius) are shown on Figure 3-6.

Several parks and recreational areas that are near or adjacent (within 0.5 miles) to BRF are described below. Claxton Community Park, a public park that is leased by the community from TVA and includes a community center, playground, picnic shelter, and athletic fields, is on TVA property adjacent to the northern edge of the plant boundary. A paved parking area (labeled as “Fisherman Parking” on Figure 3-6) with a capacity of 11 vehicles is located at the northwest corner of the BRF reservation adjacent to Edgemoor Road and just east of the Edgemoor Road bridge. This parking area is used primarily by anglers for walk-in access to the Clinch River/Melton Hill Reservoir. There is also a scenic overlook of BRF and entry monument on TVA property along Edgemoor Road with a capacity for seven vehicles approximately 300 feet northeast of the BRF parking area entrance (TVA 2019d).

Four miles of the 6-mile Melton Lake Greenway run along the shoreline of the Clinch River/Melton Hill Reservoir from Oak Ridge Turnpike (SR 95) south to Haw Ridge Park. About 0.5 miles of this greenway is on the shoreline directly across from BRF. The Oak Ridge Rowing Association’s Melton Lake Rowing Venue is located at Melton Hill Park and hosts national rowing competitions (TVA 2019d). Rowing events such as camps, collegiate rowing races, regattas, and other events occur throughout the year, and many of these events begin at Melton Lake Park, with the course moving downriver adjacent to the project area.

The Tennessee Centennial Golf Course is a public 18-hole golf course, driving range, and clubhouse located on 220 acres along Edgemoor Road approximately 0.5 miles southwest and across the Clinch River/Melton Hill Reservoir from BRF. Centennial Golf Course has been designated a “Certified Audubon Cooperative Sanctuary” by Audubon International for its high standards protecting the environment and preserving the natural heritage of golf (The Golf Wire 2013).

3.15.2 Environmental Consequences

3.15.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, there would be no direct impacts to natural areas, parks, and recreational facilities from onsite decontamination and deconstruction activities, given the existing industrial setting of the project location and the distance between these areas and the project area. However, indirect impacts could occur on natural areas, parks, and recreational facilities that are within 0.5 miles of the project area. These indirect impacts would include construction noise, visual intrusions, and stormwater runoff, which would be minimized through the use of standard construction BMPs and coordination with land managers of nearby areas.

Under this alternative, demolition debris would be hauled by truck to an offsite landfill and borrow material may be hauled to BRF. Scrap metal and other recyclable materials could be transported by truck and/or rail, which would be determined by the demolition contractor.

The exact haul routes for demolition debris and borrow material are not known. While haul routes would use arterial or interstate roadways whenever possible, it may be necessary for some routes to utilize local roads within the vicinity of BRF, including Edgemoor Road. Therefore, there is potential for indirect impacts to natural areas, parks, and recreational facilities within the vicinity of BRF, especially to Claxton Community Park and other sites along Edgemoor Road, associated with increased traffic, noise, and potential fugitive dust from the transport vehicles during the deconstruction and site restoration phases. The Visitors Overlook/Entry Monument on BRF property (see Figure 3-6) would be temporarily closed to the public during demolition activities.

Impacts would be negligible to natural areas and recreational facilities along arterial and interstate roadways where the additional truck traffic would not have a substantial impact on existing traffic volume or, consequently, traffic noise or fugitive dust emissions. On the lower functioning roadways closest to BRF, increased traffic would be temporary and would likely resemble traffic patterns that were present when the plant was operational. Due to the short-term nature of the transport of demolition debris offsite and borrow material onsite, indirect impacts to natural areas, parks, and recreational facilities under Alternative A would be short term and minor.

Deconstruction activities could cause some temporary shifts in recreational boating and fishing in the waters immediately adjacent to the plant, but any impacts would be minor due to the short duration of demolition and coordination efforts by TVA with recreational organizations (i.e., Oak Ridge Rowing Association) that utilize sections of the Clinch River/Melton Hill Reservoir.

3.15.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, direct and indirect impacts to managed and natural areas, parks, and recreational facilities would be similar to those described under Alternative A.

3.15.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination or deconstruction activities at BRF, and the project area and vicinity would remain in its current condition. Therefore, there would be no impacts to natural areas, parks, or recreation.

3.16 Cultural and Historic Resources

3.16.1 Affected Environment

3.16.1.1 Regulatory Framework for Cultural Resources

Cultural resources or historic properties include archaeological sites, districts, buildings, structures, and objects, as well as locations of important historic events. Federal agencies, including TVA, are required by the NHPA (16 USC 470) and by NEPA to consider the possible effects of their undertakings on historic properties. Undertaking means any project, activity, or program, and any of its elements, which has the potential to have an effect on a historic property and is under the direct or indirect jurisdiction of a federal agency or is licensed or assisted by a federal agency. An agency may fulfill its statutory obligations under NEPA by following the process outlined in the regulations implementing Section 106 of NHPA at 36 CFR Part 800. Additional cultural resource laws that protect

historic resources include the Archaeological and Historic Preservation Act (16 USC 469-469c), Archaeological Resources Protection Act (16 USC 470aa-470mm), and the Native American Graves Protection and Repatriation Act (25 USC 3001-3013).

Section 106 of the NHPA requires that federal agencies consider the potential effects of their actions on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on the action. Section 106 requires identifying historic properties in the APE, assessing adverse effects, resolving adverse effects on historic properties. This process is carried out in consultation with the SHPO in the state where the project is located and other interested consulting parties, including federally recognized Indian tribes (Tribes) with an interest in the project area.

Cultural resources are considered historic properties if they are listed or eligible for listing in the NRHP. The NRHP eligibility of a resource is based on the Secretary of the Interior's criteria for evaluation (36 CFR 60.4), which state that significant cultural resources possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- a. Are associated with events that have made a significant contribution to the broad patterns of our history; or
- b. Are associated with the lives of persons significant in our past; or
- c. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value; or
- d. Have yielded, or may yield, information (data) important in prehistory or history.

If the agency determines (in consultation) that the undertaking's effect on a historic property would diminish any of the qualities that make it eligible for the NRHP (based on the criteria for evaluation at 36 CFR Part 60.4, above), the effect is said to be adverse. Examples of adverse effects would be ground disturbing activity in an archaeological site or erecting structures within the viewshed of a historic building in such a way as to diminish the structure's integrity of feeling or setting. Resolution of adverse effects may consist of avoidance (such as choosing a project alternative that does not result in adverse effects), minimization (such as redesign to lessen the effects), or mitigation. Adverse effects to archaeological sites are typically mitigated by means of excavation to recover the important scientific information contained within the site. Mitigation of adverse effects to historic structures sometimes involves thorough documentation of the structure by compiling historic records, studies, and photographs. Agencies are required to consult with SHPOs, Tribes, and others throughout the Section 106 process and to document adverse effects to historic properties resulting from agency undertakings.

3.16.1.2 Area of Potential Effect

The APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist.

For Alternative A and Alternative B, the APE consists of the BRF decontamination and deconstruction project area, which totals approximately 252 acres and is shown in Figure 1-2. For Alternative C (No Action Alternative), NHPA Section 106 would not be triggered and there would be no APE, as TVA would not be proposing any activities with potential to affect historic properties at BRF.

3.16.1.3 Previous Cultural Resources Investigations in the APE

TVA has conducted eight archaeological surveys at BRF over the past four decades, and these have included areas within the APE. Table 3-14 summarizes these previous investigations. Four were completed prior to 1990, and four were conducted between 2004 and 2019. For the earlier surveys, either no report or very brief reports were generated, making it difficult to assess the adequacy of the effort. None of those surveys identified cultural resources. The four surveys carried out since 2004 are summarized in reports that meet current survey and reporting guidelines and were submitted to the SHPO and Tribes for review. These modern archaeological surveys overlap one another to some extent. Approximately 380-400 acres within BRF have been affected by deep and extensive ground disturbance; these areas were not surveyed as they lack potential for archaeological sites.

Table 3-14. Previously Completed Archaeological Surveys at BRF

Survey Year	Report Title or Area Surveyed	Surveyor	Acres
1975	Two proposed borrow areas (no report on file)	Motlow State Community College	Unknown
1980	Archaeological Survey of Proposed Dry Ash Disposal Area – Bullrun Steam Plant	J.H. Polhemus	Approx. 22
1984	An Archaeological Reconnaissance Near Bull Run Steam Plant (1,000-foot extension of Rail Road, crossing New Henderson Road)	C.M. Hubbard	Approx. 1
1989	Archaeological Reconnaissance, Proposed Asbestos Land Fill, Bull Run Steam Plant, Anderson County, Tennessee	Julia Elmendorf	9
2005	Phase I Archaeological Survey of a 4-Acre Borrow Area at the Bull Run Fossil Plant in Anderson County, Tennessee (bound with a report titled Phase I Archaeological Survey of An Approximately 105-Acre Tract and 2.6 Miles of Shoreline for Proposed Scrubber Site and Barge Loading Facility for Kingston Steam Plant in Roane County, Tennessee)	TRC	4
2011	Phase I Archaeological Survey of the Bull Run Fossil Plant Site J Proposed Boring Locations and Access Routes, Anderson County, Tennessee	TRC	115, plus five bore hole locations
2012	Phase I Cultural Resources Survey of Thirty Tracts Associated with the Bull Run fossil Plant Coal Combustion Products (CCP) Property Acquisition Project, Anderson County, Tennessee	TRC	114.5
2019	A Phase I Archaeological Survey of Selected Tracts within the Tennessee Valley Authority's Bull Run Fossil Plant in Anderson County, Tennessee	Tennessee Valley Archaeological Research (TVAR)	497

The surveys performed prior to 2012 identified no archaeological sites or cemeteries within the APE. Although four archaeological sites have been identified at BRF, these are all located outside the APE, and all four sites were likely destroyed by the construction of coal ash landfills in the 1960s.

TVA's most recent survey at BRF, in 2019, was completed pursuant to the Archaeological Resources Protection Act and Section 110 of the NHPA and included 497 acres, which encompasses the APE and additional areas of BRF. With this survey, all undeveloped/undisturbed land within the APE has been examined with an archaeological survey that meets current SHPO and TVA guidelines. This survey identified two previously unrecorded archaeological sites (40AN269 and 40AN270), and 49 non-site localities. The non-site localities consist of modern artifacts that lack archaeological significance and were not given archaeological site numbers by the Tennessee Division of Archaeology. Sites 40AN269 and 40AN270 are both mid-20th century historic house sites that lack associated structural remains. Site 40AN269 is adjacent to the southern border of the APE but is not within the APE. Site 40AN270 is in the APE, in a narrow strip of land between a rail line and a coal ash landfill. TVA determined that both sites are ineligible for listing in the NRHP, and the Tennessee SHPO agreed, in consultation. Therefore, as documented by these archaeological surveys and TVA's Section 106 consultation, the APE contains no NRHP-eligible archaeological sites or cemeteries.

In 2011, TVA conducted a survey of the APE for a proposed CCR landfill expansion. The survey identified 12 previously unrecorded architectural resources over 50 years old. Evaluations of these resources determined that they are ineligible for the NRHP because of their lack of architectural distinction; loss of integrity caused by modern alterations and/or damage; and the inability to associate the houses and/or their original owners with an important historical event or series of events. TVA consulted with the Tennessee SHPO, who agreed with the findings.

In 2019 TVA completed an inventory and NRHP assessment of BRF. During background research conducted prior to the site visit, TVA learned that the Tennessee Department of Transportation (TDOT) recommended BRF eligible for listing in the NRHP during a road construction project, and SHPO agreed. However, TDOT's study included no on-site examination of the facilities. TVA's own NRHP inventory did include interior and exterior examination of all structures and buildings at BRF. Based on this study, TVA determined that BRF is eligible for listing in the NRHP under Criterion A, with significance at the local level in the areas of Engineering and Industry. TVA consulted with the Tennessee SHPO regarding the study findings and TVA's eligibility determination. The Tennessee SHPO concurred with TVA's eligibility finding.

3.16.2 Environmental Consequences

3.16.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Alternative A would not impact NRHP-listed or -eligible archaeological sites as TVA has identified none in the APE. Alternative A would result in an adverse effect on NRHP-eligible BRF through the demolition of buildings and structures that contribute to the property's eligibility. Upon reaching agreement with the Tennessee SHPO regarding BRF eligibility and TVA's finding of adverse effect, TVA consulted further with SHPO to identify mitigation measures. TVA and the SHPO have agreed on appropriate mitigation measures that are listed in an MOA executed in April 2023 (Appendix E). Per the MOA, TVA will complete

Historic American Engineering Record-equivalent documentation on BRF and will install interpretive signage at a public location near BRF, as mitigation for the adverse effect. TVA has notified the ACHP of the adverse effect finding and will provide them with a copy of the executed MOA.

3.16.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, impacts to cultural and historic resources would be similar to those described above under Alternative A.

3.16.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, the proposed project would not be implemented and no impacts on cultural or historic resources would be anticipated. Therefore, there would be no direct, indirect, or cumulative impacts to archaeological sites or historic architectural properties listed in, or eligible for listing in, the NRHP. While natural ecological processes and anthropogenic disturbances would continue, changes would not result from the proposed project.

3.17 Utilities and Service Systems

3.17.1 Affected Environment

Current utilities and service systems at BRF include drinking water, process wastewater and cooling water, sanitary wastewater, electrical, fiber optics, and compressed air. The switchyard, non-CCR process water basin, BRF Visitor's Overlook/Entry Monument, and the Claxton Community Center and Park would remain and stay active at BRF under all alternatives.

3.17.2 Environmental Consequences

3.17.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Implementation of Alternative A would require that all aboveground utilities and service systems be removed. All buried utilities would be cut and properly abandoned in place. Only safety-necessitated utilities, including lighting, security, and fire protection, would be active and would be re-routed prior to demolition. Utilities constructed of hollow pipe, including the existing intake structure, would be decommissioned by placing a mechanical cap or plug and/or concrete in an open end. Sanitary sewer lines and lift stations would be cleaned as deemed necessary and closed in place. Utilities would be abandoned in place. Manholes and catch basins would be demolished to 3 feet below final grade. The firewater loop, including hydrants around the switchyard would be maintained during deconstruction and may require cutting/capping to maintain system integrity while isolating from the domestic loop where connected. Overall, the impacts of Alternative A on utilities and service systems are expected to be minor. No impacts would be anticipated beyond the decontamination and deconstruction project area.

3.17.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, impacts to utilities and service systems would be similar to those described for Alternative A and would be minor and localized. Utilities required to power the turbine bay of the powerhouse would be retained under this alternative, and the existing

intake structure would be left in-place in “as-is” condition. Services to remain would be re-routed prior to demolition. Personnel from other TVA sources would be used, as necessary, to assist with performing monitoring and maintenance of the intake structure and power for turbine bay electrical needs.

3.17.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, the facility would remain in place to degrade from its current condition. With the exception of active utilities, only utilities necessitated by safety, such as lighting, security, and fire protection, would be active on the BRF site.

If the facility remains in “as-is” condition, it would likely present a higher risk than Alternatives A and B, as utilities would not be maintained and would degrade over time, resulting in the potential to contaminate soil and groundwater. Impacts related to the No Action Alternative would occur over the long term and are expected to be minor.

3.18 Public Health and Safety

3.18.1 Affected Environment

Public health and safety encompass the occupational and environmental health and safety of employees at BRF as well as members of the public living and working in locations surrounding BRF. The plant is in an area that supports industrial land use. Residential properties and commercial businesses are located on all but the west side of the BRF property, as the western edge of the property is located along the Clinch River/Melton Hill Reservoir. The closest residence is located north of Edgemoor Road. Claxton Community Park is located within TVA property, adjacent to the BRF facility on the north side. BRF is surrounded by chain link security fence. Public and vehicle access to BRF is controlled with secure gates at three entrances along Edgemoor Road. The office wing is accessed through a secured door.

3.18.1.1 Occupational Health and Safety

Occupational health and safety regulations are designed to eliminate personal injuries and illnesses from occurring in the workplace. These laws may be comprised of both federal and state statutes. OSHA is the main statute protecting the health and safety of workers in the workplace. OSHA regulations are presented in Title 29 CFR Part 1910 (29 CFR 1919). A related statute, 29 CFR 1926, contains health and safety regulations specific to the construction industry. The Tennessee Department of Labor and Workforce Development has adopted federal OSHA standards contained in 29 CFR Parts 1910 and 1926 pursuant to Tennessee Code Annotated (TCA) Section 50-3-201.

Operation and maintenance activities at the existing BRF facility reflect a safety-conscious culture and are performed consistent with OSHA and TVA standards and requirements. TVA also maintains guidance which workers must follow when performing operational or maintenance activities. Personnel at BRF create a culture of safety by implementing safety practices, training, and control measures that reduce or eliminate occupational hazards. The safety record of BRF shows only two OSHA recordable cases reported over the past ten years (USDOL 2022).

Safety programs and BMPs established at BRF to minimize the potential of safety incidences include but are not limited to the following:

- Hazard Analysis
- Management of Change
- Spill and Emergency Response Plan
- Standard Operating Procedures
- Safety Reviews
- Compliance Audits
- Training
- Incident Investigations

TVA implements a contractor safety program that ensures a safety management system is in place for contract employees to actively participate in hazard recognition and control. Contractors must submit a Site-Specific Safety Plan (SSSP) in accordance with TVA guidelines and are audited by TVA based on their execution of the SSSP and adherence to TVA safety expectations (TVA 2020a). TVA also expects employees to follow safety guidelines outlined in the TVA Safe Work Requirements Manual which includes safety rules for tasks often performed during operation or maintenance activities (TVA 2020b).

3.18.1.2 Environmental Health and Safety

Environmental health and safety requirements aim to mitigate health hazards or contamination in the form of emissions or discharges that have the potential to affect the public and the environment. Environmental health and safety requirements also dictate how to respond if a hazardous situation or emergency did occur. Potential off-site hazards and emergency response plans are discussed with local emergency management agencies. These programs are audited by TVA no less than once every three years and by EPA periodically (TVA 2016c). Applicable regulations and administrative codes prescribe monitoring requirements for emergency management, environmental health, drinking water, water and sewage, pollution discharge, air pollution, hazardous waste management and remedial action.

Wastes generated by the decontamination and deconstruction of the plant can pose a health hazard. Wastes including solid wastes, hazardous waste, liquid wastes, discharges, and air emissions are managed in accordance with applicable federal, state, and local laws and regulations and all applicable permit requirements. Furthermore, waste reduction practices are employed including recycling and waste minimization. TVA is committed to complying with all applicable regulations, permitting, and monitoring requirements.

3.18.2 Environmental Consequences

3.18.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

Under Alternative A, decontamination and deconstruction would result in the lowest risk to soil and groundwater, as contaminants and potential sources of contamination would be removed from the site. Decontamination activities would last approximately 12 to 18 months and deconstruction would last approximately 18 to 24 months and may overlap with the

decontamination phase. This would be followed by a restoration period of approximately 12 months. All decontamination and deconstruction activities would be performed in accordance with OSHA and TVA requirements. Hazardous materials associated with the existing buildings and structures would be removed and discarded in accordance with applicable federal, state, and local requirements.

As part of the structure removal, the stacks and certain structures would be demolished via explosives. Minor increases in risk to worker safety would occur under this alternative due to the use of explosives. However, risks would be minimized through implementation of safety measures. TVA would develop a detailed blasting plan to protect workers and neighboring properties prior to any blasting activities. The plan would identify the specifications or rules that clearly define the performance and safety requirements of the work. Explosives would be managed under the direction of a licensed blaster. Prior to demolition of the stacks and structures, the area would be prepared, and a targeted fall zone and circular fall exclusion zone would be established. During the blast event, no personnel would be allowed in the fall exclusion zone. A fall exclusion zone area would provide a sufficient safety buffer for debris and dust control around the area as well as a control zone for any unlikely change in the intended fall direction. The plan would also delineate proper hearing protection for workers in the vicinity of the blast and would ensure that the use, transportation, and storage of explosives is being conducted in accordance with all applicable or relevant regulations, including 29 CFR 1926.900, Blasting and the Use of Explosives; 49 CFR Parts 171-179, Highways and Railways and 49 CFR Parts 390-397 Motor Carriers (transportation); and 27 CFR Part 55, Commerce in Explosives (storage). Site security on the day of the event would be strictly enforced, and trespassing would not be tolerated. Notifications to the public would be issued prior to the use of explosives for demolition.

Public health and safety concerns related to hazardous materials would be low under this alternative. The potential for contaminants from the facility to reach soil and groundwater would be almost nonexistent. Emergency response plans are in place in the case of spills or discharges during decontamination and demolition and removal of potential sources of contamination will reduce environmental safety concerns associated with long term storage or use of hazardous and regulated materials.

Potential contaminants removed prior to structure deconstruction would be hauled to an offsite landfill. Brick, block, and concrete demolition debris not contaminated by asbestos or other hazardous materials would be used as clean fill onsite. Other demolition debris would be hauled by truck to an offsite landfill within 20 miles of BRF or to an offsite recycling facility. The materials would be transported along existing roadways in the vicinity of BRF for a period of approximately 18 months. In addition, site restoration would require the transport of borrow material from a previously developed or permitted borrow site within 100 miles of BRF for a period of approximately 12 months. These hauling activities would cause an increase in truck traffic to and from the facility intermittently during the construction and restoration periods. Increased traffic could lead to a slightly higher risk of traffic accidents in the BRF vicinity during decontamination, demolition, and restoration phases of the project due to the increase in the number of vehicle miles traveled on surrounding roadways. This increase in vehicle miles is a factor in injury and fatal traffic crash rates. Therefore, there would be a temporary minor impact related to increased traffic and driver safety.

Scrap metal and other recyclable materials could be transported offsite by truck and/or rail, which would be determined by the demolition contractor. Increased rail traffic can be a

factor in injury and fatal traffic crash and derailment rates. However, potential transport by rail would be short term and relatively intermittent, and trains carrying scrap metal and other recyclable materials from BRF would be expected to be integrated within the existing rail freight system and would not result in increased rail congestion, delays, or idling time. As such, potential health and safety impacts along these existing rail lines would not be notably greater due to the transport of recyclable material by rail than those they already experienced under current rail operating conditions. Therefore, impacts to public health and safety from potential rail transport would not be anticipated.

Trespassing and vandalism would not be a notable issue under this alternative due to the implementation of an adequate security presence, either manned or passive (cameras and sensors) as well as fencing. The BRF overlook along Edgemoor Road would be closed during deconstruction to prevent onlookers from stopping to watch the deconstruction activities.

During deconstruction, customary industrial safety standards as well as the establishment of appropriate BMPs and job site safety plans would describe how job safety would be maintained during the project. These BMPs and site safety plans address the implementation of procedures to ensure that equipment guards, housekeeping, and personal protective equipment are in place; the establishment of programs and procedures for lockout, right-to-know, confined space, hearing conservation, forklift operations, excavations, grading and other activities; the performance of employee safety orientations and regular safety inspections; and the development of a plan of action for the correction of any identified hazards. It is TVA policy that all contractors have in place a site-specific health and safety plan prior to conducting construction activities on TVA property. Trained, experienced, and certified/accredited safety professionals would be onsite throughout the decontamination and demolition of BRF. One safety professional would be onsite full time and dedicated to safety program implementation, monitoring, enforcement, reporting, and compliance.

Use of BMPs, safety procedures, and security measures along with ongoing environmental maintenance activities would minimize possible public health and safety impacts. Therefore, impacts to public health and safety under Alternative A are expected to be minor and short term.

3.18.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, impacts to public health and safety would be similar to or less than those described above under Alternative A because fewer structures would be deconstructed and, thus, less potential for risks to health and safety. Some hazardous and regulated materials may be retained onsite in association with the turbine bay and intake structure under this alternative; however, these materials would continue to be stored and handled in accordance with all federal, state, and local requirements, which greatly reduce associated health and safety risks.

3.18.2.3 Alternative C – No Action Alternative

Under the Alternative C, TVA would not perform any decontamination or deconstruction activities at BRF. If the facility remains in “as-is” condition, it likely would present a higher potential safety risk than Alternative A or B to contaminate soil and groundwater as systems and structures degrade. In addition, the risk of trespassing and injury to trespassers would

likely increase due to a perception that salvageable materials are present on the site as well as the increased level of environmental contaminants. TVA would maintain security at the facility due to remaining structures. TVA would also periodically assess the condition of remaining site facilities as they deteriorate. Due to the site location and distance to the nearest residences, effects on safety to the public would be minor.

3.19 Socioeconomics and Environmental Justice

3.19.1 Affected Environment

The BRF facility is located in southern Anderson County, Tennessee, along the east bank of the Clinch River/Melton Hill Reservoir. For the socioeconomic and environmental justice analysis, the study area is a 10-mile radius from the BRF facility. The study area is primarily composed of Anderson and Knox counties. The 10-mile radius also includes small portions of Loudon, Morgan, and Roane counties; therefore, these counties and the state of Tennessee are included as appropriate secondary geographic areas of reference. Comparisons at multiple spatial scales provide a more detailed characterization of populations that may be affected by the proposed actions, including any environmental justice populations (e.g., minority and low-income). Anderson County is a mix of rural land interspersed with municipal development, including the cities of Oak Ridge, Clinton, and Oliver Springs. Knox County is predominantly urban including the cities of Knoxville, Powell, Karns, and Farragut, interspersed with rural lands. Demographic and economic characteristics of populations within the study area were assessed using the most recent USCB data available, including 2020 Decennial Census counts (USCB 2022a) for total population and racial characteristics, and 2016-2020 American Community Survey 5-year estimates (USCB 2022b) for the remaining datasets.

3.19.1.1 Demographics and Housing

The population within the study area is primarily composed of residents of Anderson and Knox counties along with small portions of Loudon, Morgan, and Roane counties. Morgan County has the smallest population at 21,035 while Knox County has the largest population at 478,971. The urbanization of Knoxville and Oak Ridge in Knox and Anderson counties contribute to the higher populations urbanizing those counties. Collectively, Anderson and Knox counties have a total population of 556,094, which is approximately 8.0 percent of the total population of the State of Tennessee (Table 3-15).

Table 3-15. Demographic Characteristics

	Anderson County	Knox County	Loudon County	Morgan County	Roane County	Tennessee
Population^{1,2}						
Population, 2020 estimate	76,513	466,184	53,169	21,538	53,331	6,772,268
Population, 2020	77,123	478,971	54,886	21,035	53,404	6,910,840
Persons under 18 years, 2020	21.1%	21.0%	19.4%	19.2%	18.7%	22.3%
Persons 65 years and over, 2022	19.9%	15.8%	26.3%	18.0%	22.7%	16.4%
Housing and Income¹						
Housing units, 2020	35,057	207,611	23,393	9,055	25,690	2,996,127
Median household income, 2020	\$52,338	\$59,250	\$61,664	\$41,701	\$55,578	\$54,833

Sources: ¹USCB 2022b; ²USCB 2022a

Populations throughout the study area are predominantly of working age as most of the populations for each county fall within 18 and 65 years of age. The study area population is older in comparison to the State of Tennessee, as the percentage of individuals under 18 for each of the counties is less than the state percentage of 22.3. Anderson County has the highest percentage of individuals under 18 at 21.1 percent. All counties except for Knox County have more people 65 years and older than the state (16.4 percent) with Loudon County having the highest percentage (26.3 percent). Knox County has the lowest percentage (15.8 percent) of individuals 65 years and older.

Anderson and Knox counties are primarily developed for residential and rural residential land uses. Land immediately adjacent to the BRF facility is composed of agricultural, residential, and commercial land uses (Anderson County Assessor 2022). Housing units within the study area range from 9,055 in Morgan County to 207,611 in Knox County, accurately reflecting the population differences between each county. Collectively, Anderson and Knox counties have 242,668 housing units, which is approximately eight percent of the housing units in the state. The state-wide median household income in Tennessee is \$54,833 (Table 3-15). Median household incomes in each county in the study area range from \$41,701 in Morgan County to \$61,664 in Loudon County. The median household income of Anderson County is \$52,338, which is \$2,495 lower than that of the state, whereas the median household income of Knox County is \$59,250, or \$4,417 higher than the state.

3.19.1.2 Economic Conditions

Employment characteristics for the project area are summarized in Table 3-16. The total employed civilian population in each county ranges between 7,197 in Morgan County to 233,540 in Knox County. Unemployment in Anderson County (3.0 percent), Knox County (2.7 percent), and Loudon County (2.0 percent) is less than the state unemployment rate of 3.3 percent. Morgan and Roane counties each have an unemployment rate of 3.3 percent, which is the same as the state. Based on data from the U.S. Bureau of Labor Statistics, between January and April of 2022, unemployment in the Knox and Anderson counties averaged 2.8 percent, which is 0.5 percent lower than the statewide average of 3.3 percent over the same period (USBLS 2022).

Combined, Anderson and Knox counties have a total population of 265,960 employed individuals in the civilian labor force. Approximately 4.4 percent of the combined civilian labor force within Knox and Anderson counties is unemployed, which is lower than the unemployment rate of the civilian labor force for the State of Tennessee (5.3 percent).

Table 3-16. Employment Characteristics of the Resident Labor Force

	Anderson County	Knox County	Loudon County	Morgan County	Roane County	Tennessee
Population Over 16 years	62,065	379,072	44,045	17,949	44,825	5,437,242
Civilian Labor Force						
Employed	32,420	233,540	23,059	7,197	22,969	3,147,330
Unemployed	1,892	10,321	861	601	1,471	177,361
Subtotal	34,312	243,861	23,920	7,798	24,440	3,324,691

	Anderson County	Knox County	Loudon County	Morgan County	Roane County	Tennessee
Unemployment						
Percent of Total Population	3.0%	2.7%	2.0%	3.3%	3.3%	3.3%
Percent of Civilian Labor Force	5.5%	4.2%	3.6%	7.7%	6.0%	5.3%

Source: USCB 2022b

The top five most prevalent sectors of civilian employment in Anderson County, Knox County, Roane County, and in the State of Tennessee include: Education, Health Care, and Social Assistance; Professional, Scientific, and Management, and Administrative and Waste Management Services; Retail Trade; Manufacturing; and Arts, Entertainment, Recreation, Accommodation, and Food Services (Table 3-17). Most of the workforce within Loudon County (18.8 percent) is employed within the Manufacturing sector, whereas the most prevalent occupations in Anderson, Knox, Morgan, and Roane counties occur in the Education, Health Care, and Social Assistance sector with percentages of 22.4, 25.0, 22.1, and 22.9, for each county respectively. The Education, Health Care, and Social Assistance sector is also the largest employer within the State of Tennessee at 22.6 percent of the workforce (USCB 2022b).

Table 3-17. Largest Employers by Sector

Sector	Anderson County	Knox County	Loudon County	Morgan County	Roane County	Tennessee
Education, Health Care, and Social Assistance	22.4%	25.0%	16.2%	22.1%	22.9%	22.6%
Professional, Scientific, Management, and Administrative Services, and Waste Management Services	15.9%	12.7%	10.9%	10.6%	14.6%	9.9%
Retail Trade	10.7%	13.3%	11.7%	10.7%	14.0%	11.6%
Manufacturing	10.5%	7.9%	18.8%	11.1%	9.7%	12.9%
Arts, Entertainment, Recreation, Accommodation and Food Services	8.6%	9.9%	8.4%	8.6%	7.7%	9.6%
Construction	8.0%	6.6%	8.6%	11.0%	6.3%	6.6%
Transportation and warehousing, and Utilities	6.1%	4.9%	7.7%	6.5%	6.8%	6.8%
Other Services, except Public Administration	5.2%	4.1%	4.3%	5.2%	4.2%	4.8%
Finance, Insurance, Real Estate, Rental and Leasing	4.7%	6.8%	4.1%	1.3%	3.6%	5.9%
Public Administration	4.3%	3.2%	3.5%	10.2%	5.5%	4.2%
Wholesale Trade	2.1%	2.9%	2.0%	0.5%	1.8%	2.5%

Sector	Anderson County	Knox County	Loudon County	Morgan County	Roane County	Tennessee
Information	1.1%	2.2%	1.3%	0.7%	1.8%	1.6%
Agriculture, forestry, fishing, hunting, and mining	0.4%	0.5%	2.4%	1.5%	1.3%	1.0%

Source: USCB 2022b

3.19.1.3 Environmental Justice

On February 11, 1994, President Clinton signed EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations). EO 12898 mandates some federal-executive agencies to consider environmental justice as part of their NEPA analyses. Environmental justice has been defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income (EPA 2018) and ensures that minority and low-income populations do not bear disproportionately high and adverse human health or environmental effects from federal programs, policies, and activities. In addition, on January 27, 2021, President Biden issued EO 14008 (Tackling the Climate Crisis at Home and Abroad). Amongst other objectives, the EO calls for the federal government to make environmental justice a defining feature of the response to climate crisis by developing programs, policies, and activities to address current and historic injustices, and by investing and building a clean energy economy that spurs economic opportunity for disadvantaged communities. For these reasons, TVA routinely considers environmental justice impacts as part of the project decision-making process.

Guidance for addressing environmental justice is provided by the CEQ Environmental Justice Guidance under NEPA (CEQ 1997). The CEQ defines minority as any race and ethnicity, as classified by the USCB, that is: Black or African American; American Indian or Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; some other race (not mentioned above); two or more races; or an individual whose ethnicity is Hispanic or Latino (CEQ 1997).

Identification of minority populations requires analysis of individual race and ethnicity classifications as well as comparisons of all minority populations in the region. Minority populations exist if either of the following conditions is met:

- The minority population of the impacted area exceeds 50 percent of the total population.
- The ratio of minority population is meaningfully greater (i.e., greater than or equal to 20 percent) than the minority population percentage in the general population or other appropriate unit of geographic analysis (CEQ 1997).

The nationwide poverty level is determined annually by the USCB and varies by the size of family and number of related children under 18 years of age. The 2021 USCB Poverty Threshold for an individual under the age of 65 is an annual income of \$14,097, and for a family of four it is an annual household income of \$27,949 (USCB 2022c). For the purposes of this assessment, low-income individuals are those whose annual household income is less than two times the poverty level. More encompassing than the base poverty level, this low-income threshold, also used by the EPA in their delineation of low-income populations, is an appropriate measure for environmental justice consideration because current poverty

thresholds are often too low to adequately capture the populations adversely affected by low-income levels, especially in high-cost areas (EPA 2017). According to EPA, the effects of income on baseline health and other aspects of susceptibility are not limited to those below the poverty thresholds. For example, populations having an income level from one to two times the poverty level also have worse health overall than those with higher incomes (Centers for Disease Control and Prevention 2011). A low-income environmental justice population exists if either of the following two conditions is met:

- The low-income population exceeds 50 percent of the total population.
- The ratio of low-income population significantly exceeds (i.e., by greater than or equal to 20 percent) that of the general population or other appropriate geographic areas of analysis.

According to CEQ guidance, U.S. Census data are typically used to determine minority and low-income population percentages in the affected area of a project to conduct a quantitative assessment of potential environmental justice impacts. The geographic unit used in the analysis to identify any environmental justice communities of concern is the census block group (CBG). Figure 3-7 identifies the CBGs within the study area that meet the specified criteria as environmental justice minority or low-income populations.

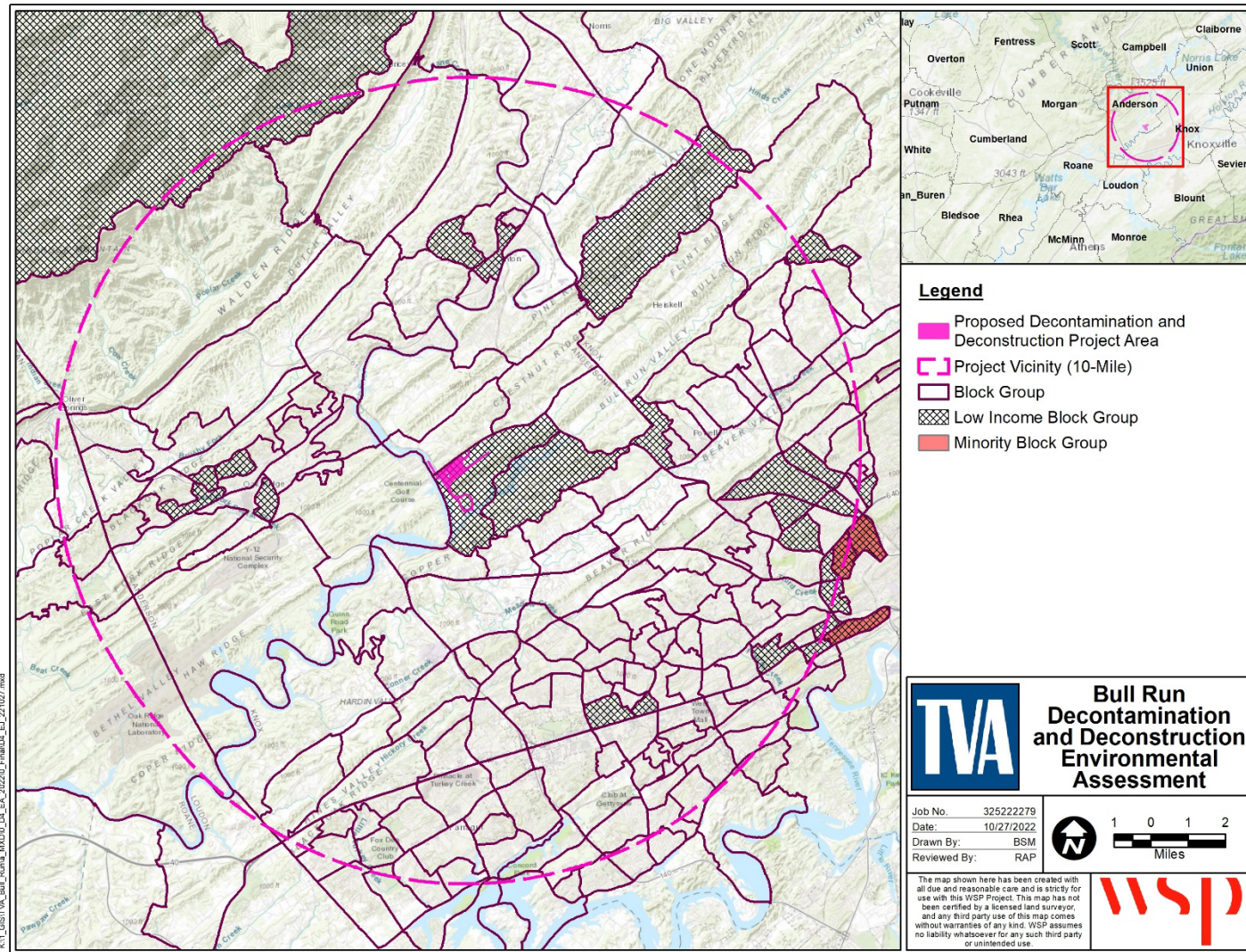


Figure 3-7. Environmental Justice Populations within a 10-mile Radius of the Project Area

3.19.1.3.1 Minority Populations

Table 3-18 presents the results of the minority population analysis for the study area. The minority population as a percentage of total population ranges from 9.5 percent in Morgan County to 22.0 percent in Knox County, with the State of Tennessee having a minority population of 29.1 percent of the total population. Three CBGs in the study area were identified as meeting the CEQ criteria for minority populations (Figure 3-7 and Table 3-18); these CBG minority populations are located in Knox County and represent an environmental justice population as it relates to minority populations.

Table 3-18. 2020 Minority Population Data

	Total Population	Minority Population	Percent Minority Population
Anderson County	77,123	11,079	14.4%
Knox County	478,971	105,181	22.0%
Block Group 2, Census Tract 26	1,679	893	53.2%
Block Group 3, Census Tract 28	2,078	1,558	75.0%
Block Group 4, Census Tract 28	1,237	671	54.2%
Loudon County	54,886	8,467	15.4%
Morgan County	21,035	2,006	9.5%
Roane County	53,404	5,310	9.9%
Tennessee	6,910,840	2,010,594	29.1%

Source: USCB 2022a

3.19.1.3.2 Low Income

Table 3-19 shows the percentage of individuals in the study area living below the poverty level. In 2020, the estimated proportion of the population with income below the poverty level ranged from 11.3 percent in Loudon County to 22.8 percent in Morgan County. The State of Tennessee had a 14.6 percent population with income below the poverty level. The portion of the population identified as low-income (those whose household income is less than two times the poverty level) ranged from 30.7 percent in Knox County to 47.8 percent in Morgan County. The State of Tennessee had 33.8 percent of the population below the low-income level. Within the 10-mile study area, there are 28 CBGs that meet the criteria for a low-income population (Figure 3-7 and Table 3-19). These CBGs are located within Anderson and Knox counties and represent an environmental justice population in terms of poverty level.

Table 3-19. 2020 Poverty Level and Low-Income Data

	Total Population¹	Persons Below Poverty Level	Percent of Persons Below Poverty Level	Persons Below Low Income Level²	Percent of Persons Below Low Income Level²
Anderson County	74,792	11,349	15.2%	26,150	35.0%
Block Group 3, Census Tract 202.02	1,761	821	46.6%	1,121	63.7%
Block Group 2, Census Tract 204	2,521	1,164	46.2%	1,286	51.0%
Block Group 1, Census Tract 205	1,300	290	22.3%	688	52.9%
Block Group 2, Census Tract 205	579	60	10.4%	352	60.8%
Block Group 1, Census Tract 207	829	235	28.5%	449	54.4%
Block Group 4, Census Tract 209.02	1,336	196	14.3%	726	53.1%
Block Group 2, Census Tract 212.01	1,006	357	35.5%	579	57.6%
Block Group 3, Census Tract 212.12	1,945	780	40.1%	1,101	56.6%
Block Group 1, Census Tract 213.04	2,099	484	23.1%	1,257	59.9%
Block Group 2, Census Tract 213.04	1,545	340	22.0%	854	55.3%
Knox County	455,044	60,065	13.2%	139,572	30.7%
Block Group 2, Census Tract 26	1,815	732	40.3%	1,183	65.2%
Block Group 2, Census Tract 27	1,657	761	45.9%	1,201	72.5%
Block Group 1, Census Tract 28	735	28	3.8%	422	57.4%
Block Group 3, Census Tract 28	1,533	624	40.7%	1,325	86.4%
Block Group 4, Census Tract 28	1,375	328	23.9%	1,072	78.0%
Block Group 1, Census Tract 37	1,564	325	20.8%	915	58.5%
Block Group 2, Census Tract 38.01	1,745	574	32.9%	1,048	60.1%
Block Group 4, Census Tract 38.01	770	92	11.9%	439	57.0%
Block Group 2, Census Tract 39.01	1,553	333	21.4%	814	52.4%

	Total Population ¹	Persons Below Poverty Level	Percent of Persons Below Poverty Level	Persons Below Low Income Level ²	Percent of Persons Below Low Income Level ²
Block Group 1, Census Tract 39.02	971	205	21.1%	851	87.6%
Block Group 4, Census Tract 40	1,650	254	15.4%	892	54.1%
Block Group 1, Census Tract 46.10	2,983	712	23.9%	1,542	51.7%
Block Group 3, Census Tract 46.10	702	255	36.3%	387	55.1%
Block Group 1, Census Tract 48	2,730	1,062	38.9%	2,059	75.4%
Block Group 2, Census Tract 48	881	56	6.4%	502	57.0%
Block Group 2, Census Tract 49	1,802	738	41.0%	1,128	62.6%
Block Group 3, Census Tract 61.03	1,121	175	15.6%	605	54.0%
Block Group 2, Census Tract 62.05	413	120	29.1%	234	56.7%
Loudon County	51,857	5,845	11.3%	16,486	31.8%
Morgan County	18,539	4,232	22.8%	8,869	47.8%
Roane County	52,262	7,237	13.8%	17,411	33.3%
Tennessee	6,603,468	965,213	14.6%	2,231,052	33.8%

Source: USCB 2022b

¹ Population for whom poverty status is determined² Low Income is defined as two times the poverty level

3.19.2 Environmental Consequences

3.19.2.1 Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade

3.19.2.1.1 Socioeconomics

An anticipated influx of a temporary construction workforce would create a short-term change in the demographic characteristics of the study area. The workforce necessary for the demolition of BRF is expected to be a combination of TVA workforce and specialized demolition workforce, supplemented with local laborers. Specialized workforce laborers may be required to relocate temporarily to the affected or nearby areas while general laborers are anticipated to come from the local workforce. Primary responsibility for the workforce composition would be determined by the demolition contractor. TVA estimates that the workforce needed for decontamination would range from 50 to 150 personnel over a 12-month period. The workforce needed for deconstruction would range from 50 to 100 personnel over an 18- to 24-month period, which could overlap the decontamination phase.

Demolition and deconstruction activities and the associated influx in the workforce is also expected to result in short-term increased economic opportunity. Economic benefits may occur because of increased spending particularly at service industries such as local convenience stores, restaurants, and hotels. Payroll taxes would also increase with increased employment, and sales tax would increase as more materials and supplies are purchased during demolition activities. Future use of the BRF facility site is undetermined; restoration to grade is the extent of the plans for the site at present. Consequently, associated impacts, including beneficial and/or negative impacts related to such redevelopment are unknown as well. The deconstructed area may be redeveloped in the future for industrial or commercial use and may ultimately contribute to the region's economic health. Overall, the demographic and economic impacts of the demolition of the BRF facility are anticipated to be beneficial albeit short term in duration and incrementally minor.

Upon completion of deconstruction and demolition activities, three workers would be required to perform the necessary minor, part-time maintenance activities at BRF. Personnel from other TVA facilities may be used, as necessary, to assist with performing operations and maintenance activities.

3.19.2.1.2 Environmental Justice

As described above, portions of the study area meet the criteria to be considered an environmental justice population under EO 12898 as it relates to minority and low-income populations. As shown in Figure 3-7, the project area is located within a low-income environmental justice population (Block Group 2, Census Tract 213.04). The closest residential area is located across Edgemoor Road to the north, approximately 140 feet from the northwest project boundary at its closest point, in a CBG that was not identified as an environmental justice population. However, some residents to the northeast of BRF and to the south, adjacent to the rail loop, are located in identified low-income communities. Demolition and deconstruction activities, including the release of air and noise emissions, would have the greatest impact on these residential areas located in close proximity to BRF, which are comprised of both environmental justice and non-environmental justice communities. In addition, increased traffic related to workforce vehicles, transport of borrow material, and hauling of debris to landfills and/or recycling facilities could result in increased

traffic on local roads and possibly railroads, noise, and fugitive dust in the communities throughout the study area. While both environmental justice communities and non-environmental justice communities in proximity to the project site may experience minor impacts from air and noise emissions due to deconstruction and decommissioning, environmental justice populations may bear a disproportionate impact due to the location of the project area within and adjacent to block groups with low-income populations. However, these impacts would be short term and minor.

To engage the local communities and environmental justice populations, TVA has established a Bull Run Community Outreach Team, which will identify key regions and communities and key community leaders, organizations, and community infrastructure to engage in environmental justice outreach. TVA will also identify local farmers markets, festivals, grocery stores, community centers, school, and libraries in or near environmental justice communities. The Bull Run Community Outreach Team will meet with local leaders, develop a project website, and transmit postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.

Transportation activities associated with this alternative include hauling demolition debris to an existing permitted landfill, hauling materials offsite to be recycled, and obtaining borrow material from a previously permitted site for use in site restoration. TVA anticipates borrowing approximately 30,000 cubic yards of borrow material; however, no specific site has been identified at this time and site selection would be left up to the contractor. Likewise, the demolition contractor has responsibility to select which permitted landfill and/or recycling facility would be utilized. It is anticipated that the selected landfill has environmental control plans and project designs to ensure compliance in regard to offsite sensitive receptors.

The transport of demolition debris offsite would lead to increased traffic, transportation related noise, exposure to fugitive dust, and exhaust emissions for those communities located along the transportation routes. Although the exact locations of the landfill and borrow site are not known, it is assumed that transport of these materials would use existing arterial or interstate roadways whenever possible. These activities would likely result in traffic patterns that were present when the plant was in operation and would be short term and intermittent. While haul routes for both borrow and demolition debris would use arterial routes and major interstates, when possible, it may be necessary to use local roads. The transport of borrow and demolition debris is intermittent in nature and not expected to result in heavy volumes of traffic through residential areas for extended periods of time. Mitigation measures including implementing BMPs for controlling fugitive dust and proper maintenance of vehicles for controlling emissions would reduce potential impacts to communities along haul routes.

If utilized, trains carrying scrap metal and other recyclable materials from BRF would be expected to be intermittent, integrated within the existing rail freight system, and would not result in increased rail congestion, delays, or idling time. As such, impacts to air quality and climate change, transportation, and noise and vibrations would not be expected.

Overall, the proposed demolition and deconstruction activities would have minor, localized, temporary impacts on the surrounding community. Environmental justice populations in proximity to the project site may bear greater impacts from air and noise emissions due to the location of the project area within a low-income block group. However, these impacts would be temporary and limited to the deconstruction and decommissioning phase of the

project. Overall, impacts associated with the proposed action would be minor for both environmental justice communities and non-environmental justice communities.

3.19.2.2 Alternative B – Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure

Under Alternative B, the proposed action is the same as described above in Alternative A, except that the powerhouse and intake structures would remain in place. Impacts therefore would be very similar to those described for Alternative A but would be slightly less because the demolition and deconstruction phase would be shorter, and less material would be hauled offsite to a landfill.

3.19.2.3 Alternative C – No Action Alternative

Under the No Action Alternative, TVA would not perform any decontamination or deconstruction activities and the site would remain in its current condition. The No Action Alternative would not alter demographic or economic conditions in the study area, nor pose considerations for impacts to be disproportionately borne by environmental justice populations.

3.20 Cumulative Impacts

The CEQ regulations (40 CFR §§ 1500-1508) implementing the procedural provisions of the NEPA of 1969, as amended (42 USC § 321 et seq.) define cumulative impact as: "...the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions (RFFAs) regardless of what agency (federal or nonfederal) or person undertakes such other actions." (40 CFR § 1508.7).

A cumulative impact analysis must consider the potential impact on the environment that may result from the incremental impact of a project when added to other past, present and RFFAs (40 CFR § 1508.7). Baseline conditions reflect the impacts of past and present actions. The impact analyses summarized in preceding sections are based on baseline conditions and, therefore, incorporate the cumulative impacts of past and present actions.

3.20.1 Scoping for Cumulative Impacts Analysis

TVA evaluated a full range of environmental resource issues associated with Alternatives A and B for inclusion in the cumulative impacts analysis. The proposed actions and their connected actions identified under these alternatives would occur mostly on land that was previously disturbed and is used for industrial purposes. The landscape surrounding the existing BRF facility is already subject to environmental stressors associated with industrial operations and previous disturbance of the site. Consequently, as has been described in prior subsections of this EA, the existing quality of environmental resources potentially directly or indirectly affected by project activities is generally low.

This analysis is limited to those resource issues potentially adversely affected by project activities. Accordingly, land use and prime farmland; geology; aquatic ecology; wildlife; vegetation; wetlands; floodplains; threatened and endangered species; visual resources; natural areas, parks, and recreation; utilities and service systems; safety; and socioeconomics are not included in this analysis as these resources are either not adversely affected, or the effects are considered to be negligible or beneficial. Primary resource categories specifically considered in this cumulative impacts assessment include

groundwater, surface water, cultural resources, air quality and climate change, hazardous materials and solid and hazardous waste, transportation, noise, and environmental justice.

3.20.2 Geographic Area of Analysis

The appropriate geographic area over which past, present and future actions could reasonably contribute to cumulative effects is variable and dependent on the resource evaluated. The cumulative impact analysis is based on the resources of potential concern and the geographic area in which potential adverse impacts from site-specific activities have the potential to alter (degrade) the quality of the regional environmental resources. For air quality, the geographic area is the county.

Based upon the defined list of resources potentially affected by cumulative effects, the following general geographic areas were considered appropriate for consideration in this analysis:

- Lands in the vicinity of BRF. This geographic area provides an appropriate framework for the consideration of potential cumulative impacts to noise, transportation, and socioeconomics. This geographic area includes near off site areas and those within a 10-mile radius of BRF.
- Lands, waters, and wetlands within the vicinity of BRF. This geographic area contains water resources (surface water and groundwater) and aquatic resources potentially impacted by runoff from decontamination and deconstruction activities at BRF.
- Regional landfills. This geographic area encompasses regional landfills that may accept solid and/or hazardous waste associated with potential future actions. This geographic area extends for a distance of 20 miles (reasonable trucking distance) and includes established permitted landfills.
- Surrounding environmental justice communities. This geographic area encompasses identified low-income and minority populations within a 10-mile radius of BRF that may be subject to effects from multiple actions. Such actions may include transportation of demolition debris through environmental justice communities.

3.20.3 Identification of “Other Actions”

3.20.3.1 Summary of Other Actions

Past, present, and reasonably foreseeable future actions that were identified for consideration in this cumulative analysis are listed in Table 3-20. These actions were identified within the geographic area of analysis as having, in the aggregate, the potential to result in larger and potentially significant adverse impacts to the resources of concern.

Actions that have a timing that is “past” or “present” inherently have environmental impacts that are integrated into the base condition for each of the resources analyzed in this chapter. However, these actions are included in this discussion to provide for a more complete description of their characteristics. Actions that are not reasonably foreseeable are those that are based on mere speculation or conjecture, or those that have only been discussed on a conceptual basis.

Table 3-20. Summary of Other Reasonably Foreseeable Future Actions in the Vicinity of the Proposed Project

Action	Approximate Distance from BRF Project Area	Description	Timing and Reasonable Foreseeability
Bull Run Fossil Plant Retirement	At BRF (in project area)	In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023. At that time, TVA would cease most plant operations and reduce plant staff. Based on the impacts analysis performed in the associated EA (TVA 2019d), adverse impacts to all resources would be negligible to minor and long-term beneficial impacts are anticipated for air quality, surface water, groundwater, aquatic ecology, solid and hazardous waste, visual resources, transportation, and noise.	Reasonably Foreseeable Future
Bull Run Fossil Plant Switchyard Refurbishment	At BRF (adjacent to project area)	Due to the scheduled retirement of BRF in 2023, TVA needs to upgrade the transmission system to ensure power supply to the area remains reliable. Modifications to the 161-kilovolt and 500-kilovolt switchyards include repairs and replacements of some existing equipment and installation of new equipment including breakers, switches, and insulators. Additionally, line relays and communications equipment in the existing control room would be upgraded and relocated to the existing switch house along with associated upgrades at the remote terminals. Equipment upgrades at the Bull Run Substation Switchyard are anticipated to be completed by 2027.	Reasonably Foreseeable Future
Bull Run Fossil Plant CCR Unit Work	At BRF (adjacent to project area)	As part of TVA's goal to eliminate wet ash storage at its coal plants, TVA is considering closure of the ash impoundments at BRF. TVA could consider several options of closure of these facilities including Closure-by-Removal with CCR transported to an offsite landfill and Closure-in-Place. The viable closure options would be evaluated in accordance with the TDEC order and through consultation with TDEC. Although a decision regarding specific actions associated with these activities has not been finalized, the closure of existing surface impoundments and long-term management and storage of CCR generated at BRF are reasonably foreseeable activities. TVA would conduct a NEPA evaluation to address the potential environmental effects associated with long-term management of CCR stored at BRF. The NEPA document will identify the environmental impacts of activities associated with the proposed projects and would include a detailed cumulative effects assessment as part of the evaluation of alternatives. Proposed schedule for this action is unknown at this time.	Reasonably Foreseeable Future

Action	Approximate Distance from BRF Project Area	Description	Timing and Reasonable Foreseeability
City of Oak Ridge Water Treatment System Upgrades	4 miles southwest	The City of Oak Ridge will design and construct a new ultrafiltration membrane drinking water treatment plant to replace the existing 80-year-old conventional treatment plant at Y-12, which is currently at capacity and beyond its useful life. The new plant will be located at the existing raw water intake off Pump House Road. Construction is anticipated to begin in fall 2022, and the plant is expected to begin operation in spring 2025 (Pounds 2022).	Reasonably Foreseeable Future
Clinch River Nuclear (CRN) Site Advanced Nuclear Reactor Technology Park	15 miles southwest	TVA would construct and operate various facilities at an advanced nuclear reactor technology park containing one or more 300-megawatt small modular reactors at TVA's CRN Site in Oak Ridge, Roane County, Tennessee (TVA 2022a). This project is subject to ongoing due diligence evaluations and proposed schedule is unknown.	Reasonably Foreseeable Future
Horizon Center Industrial Park	12 miles southwest	Operational industrial park with sites containing approximately 320 acres remaining for development and approximately 500 acres set aside for environmental preservation.	Past, Present, and Reasonably Foreseeable Future
Kairos Nuclear Reactor Demonstration	14 miles southwest	Demonstration of Kairos' Hermes low-power test reactor at the East Tennessee Technology Park. Kairos Power, LLC is a U.S. based company developing a fluoride salt cooled high temperature reactor (KP-FHR) using Tri-structural Isotropic fuel in pebble form (NRC 2022). This project is subject to ongoing due diligence evaluations and proposed schedule is unknown.	Reasonably Foreseeable Future
Oak Ridge General Aviation Airport	13.5 miles southwest	Development of a general aviation airport with a 5,000-foot runway, would support general aviation in the Oak Ridge Corridor region, as current capacity is limited in this market and is not expected to support projected growth and future demand. The city plans to open the airport in 2025 (City of Oak Ridge 2022).	Reasonably Foreseeable Future

Action	Approximate Distance from BRF Project Area	Description	Timing and Reasonable Foreseeability
Synchronous Condensers	At BRF (in project area)	<p>After BRF is decommissioned and deconstructed, there is an option for the site to utilize synchronous condensers, which would provide additional means for transmission system stability. Synchronous condensers help provide stability to the transmission systems' inertia and voltage support that are lost as the coal units are retired and replaced with much smaller generating sources with less mass.</p> <p>If TVA decides to install and utilize synchronous condensers at BRF, the turbine bay of the powerhouse and the intake structure would be retained onsite, as described under Alternative B in Section 2.1.2 of this EA. The existing generator would be connected to the transmission system directly via a breaker. Some new equipment would need to be installed to modify or size-match the generator auxiliaries. More studies would need to be conducted to determine the viability of using these units.</p> <p>Timing of potential installation depends on additional studies; however, the synchronous condensers could be installed in 2024 and operating as soon as Spring of 2024. If this project is determined to be viable, a separate NEPA review would be conducted.</p>	Reasonably Foreseeable Future
Tennessee Department of Transportation (TDOT) Edgemoor Road and Edgemoor Road Bridge Expansion	Adjacent to project area	Approximately 3.6 miles of Edgemoor Road from SR-62 to near Melton Lake Drive and another 3.6 miles from near Melton Lake Drive to SR-9, which includes the stretch of road on which BRF is located, would be widened from two lanes to four lanes with a median and/or center turn lane. This project would also include bicycle and pedestrian facilities and a new bridge. At this time, these projects are candidate projects for Fiscal years 2021 to 2023 with estimated completion to be in 2026 (TDOT 2019).	Reasonably Foreseeable Future
TRISO-X Fuel Fabrication Facility	12 miles southwest	Construction and operation of a fuel fabrication facility to produce nuclear fuel to support next generation reactors in the energy, aerospace, chemical, and defense sectors. A construction permit application has been submitted to the U.S. Nuclear Regulatory Commission for review. Preconstruction activities have begun, and initial operations are planned for 2025.	Present, Reasonably Foreseeable Future

3.20.4 Analysis of Cumulative Effects

To address cumulative impacts, the existing affected environment surrounding the project area was considered in conjunction with the environmental impacts presented in Chapter 3. These combined impacts are defined by the CEQ as “cumulative” in 40 CFR Section 1508.7 and may include individually minor, but collectively significant actions taking place over a period of time. The potential for cumulative effects to the identified environmental resources of concern are analyzed below for Alternative A and B.

3.20.4.1 Groundwater

As described in Section 3.2, groundwater quality within the vicinity of BRF is generally of good quality with selected areas of localized exceedances of one or more constituents. Activities associated with all of the RFFAs listed in Table 3-20 also have the potential to affect groundwater during their construction phases. However, for many of these potential actions, implementation of the proper BMPs would minimize the impacts to groundwater.

Construction activities associated with decontamination and deconstruction of BRF under either Alternatives A or B have the potential to release constituents that may impact groundwater. However, demolition and environmental abatement would be conducted in accordance with any applicable environmental and safety regulations, minimizing the potential for a release of contaminants. In the long term, all potential environmental contamination sources would be removed from the decontamination and deconstruction area, which would limit the potential for contamination of groundwater from these sources and would have a positive impact on groundwater quality relative to existing conditions. Therefore, there would be no cumulative impact on groundwater under either Alternatives A or B.

3.20.4.2 Surface Water

Surface water runoff associated with demolition and construction activities could occur under the proposed action. Similar impacts could be anticipated from construction activities associated with all of the RFFAs listed in Table 3-20. If proper BMPs are implemented and stormwater discharges comply with TDEC permit limits, cumulative impacts of the proposed action on surface water via runoff under either Alternatives A or B would be negligible.

3.20.4.3 Air Quality and Climate Change

The geographic reference area for air quality is Anderson County, Tennessee. It is expected that emissions would continue from local vehicles and other permitted industrial and commercial facilities in the county. The retirement of BRF in 2023 would result in significant reductions in air emissions that represents a benefit to regional air quality conditions. In addition to ongoing emissions from vehicles, local emissions and fugitive dust are expected to occur in conjunction with activities associated with the RFFAs listed in Table 3-20.

Air emissions associated with demolition activities under Alternatives A and B would also result in an increase in local emissions and fugitive dust. As described in Section 3.10, emissions from equipment and vehicle use are expected to be minor and short term. In addition, fugitive dust emissions associated with demolition activities would be mitigated through the use of BMPs, such as water suppression for dust control and regular inspections and maintenance of construction vehicles. The cumulative impact of the demolition activity emissions, when combined with the ongoing emissions from local

vehicles and other facilities, would incrementally increase emissions local to BRF under the proposed action, but such increases would not be notable on a regional scale. Furthermore, the retirement of BRF would result in significant reduction in emissions prior to the beginning of demolition activities. If the RFFAs occur at the same time as the proposed project, there would be potential for minor and short-term impacts to air quality. However, exceedances of applicable ambient air quality standards are not expected. Therefore, the cumulative effects of the proposed action on air quality under either Alternatives A or B would not adversely affect regional air quality.

3.20.4.4 Hazardous Materials and Solid and Hazardous Waste

Under both Alternatives A and B, demolition debris and hazardous wastes would be hauled by truck to a landfill designed to receive such wastes. Due to the temporary nature of the operations and the use of permitted disposal facilities, along with trained and experienced contractors and personnel, environmental impacts from waste handling and disposal are not anticipated. Reasonably foreseeable future construction activities in the immediate vicinity identified in Table 3-20 would also have the potential to contribute waste to permitted disposal facilities in the region. Because there are permitted landfills in the vicinity of BRF that have sufficient capacity for large volumes of solid waste, and because large volumes of materials are expected to be recycled, the cumulative impact from the proposed project on local or regional landfill capacity is anticipated to be negligible.

3.20.4.5 Transportation

As described in the Final Ash Impoundment Closure Programmatic Environmental Impact Statement Part I and Part II – Site-Specific NEPA Review: Bull Run Fossil Plant (TVA 2016a, b), TVA identified factors to determine whether transport of CCR at BRF by rail would be reasonable. Those factors include volume of material; distance from the impoundment to a permitted landfill; availability of the infrastructure to manage the transfer of material; cost effectiveness; and schedule. Rail transport of demolition debris, borrow materials, or CCR would require the installation of loading/unloading infrastructure at BRF, and a rail transportation service in the form of a rail carrier. It also may require the construction of additional rail infrastructure at or very near a Subtitle D landfill (both for demolition debris as well as CCR) and at a borrow site. Near the landfill, material would need to be offloaded from the train to a stockpile area prior to being placed on trucks and conveyors or loaders to load the debris (or CCR) onto trucks and infrastructure to support trucking to the landfill site. The necessary environmental and construction permits to construct loading/unloading facilities could take 18 to 24 months or more to acquire, if the landfills and borrow sites are amenable to such additions. Therefore, due to the costs and environmental impacts associated with development and permitting of the required loading and unloading infrastructure, use of rail to transport material from BRF to landfills and borrow material to BRF would not be feasible.

However, mode of transport for scrap metal and other recyclable materials would be determined by the demolition contractor and could include transport by truck and/or by rail. Scrap metal and other recyclable materials, unlike demolition debris or CCR, would not require the installation of loading/unloading infrastructure for rail transport; these materials can be loaded via excavator and unloaded via excavator and/or magnet. Potential transport of scrap metal and other recyclable materials by rail would be short term and relatively intermittent, and trains carrying these materials from BRF would be expected to be integrated within the existing rail freight system and would not result in increased rail congestion, delays, or idling time. As such, potential localized effects to transportation along

these existing rail lines would not experience notably greater impacts due to the transport of recyclable material by rail than those they already experienced under current rail operating conditions. Therefore, cumulative impacts to rail transportation would not be anticipated.

Although impacts of the removal of the TVA owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives in this EA, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.

If truck transport of CCR and/or construction materials is used, the RFFAs such as the proposed CCR unit closures would contribute to additional traffic volumes on the local transportation network. Volumes of traffic would be variable depending on the closure method selected. If CCR unit closures occur at the same time as the proposed project, the number of trucks associated with the transport of debris from BRF deconstruction, added to the number of trucks required to support CCR unit closure and restoration activities, could result in a very large number of trucks entering and exiting the facility on a daily basis. This could lead to cumulative impacts associated with congestion along adjacent arterial roadways. TVA would mitigate congestion in the vicinity of BRF with a traffic plan, as needed. Possibilities include staging of trucks, spacing logistics, or timing truck traffic to occur during lighter traffic hours (such as not in the morning or afternoon commute hours). With implementation of these mitigation measures, cumulative impacts of the proposed action to transportation would be minor to moderate depending on the closure method selected and extent of temporal overlap with CCR unit closure activities.

The proposed upgrades to Edgemoor Road may also contribute to cumulative transportation impacts during the construction phase of that project. Significant congestion could result if trucks transporting demolition debris to disposal areas need to travel west on Edgemoor Road. The congestion would be further worsened if both of these projects occur at the same time as the CCR unit closure. Should construction on Edgemoor Road lead to cumulative effects associated with congestion near BRF and adjacent roadways, TVA would mitigate congestion with a traffic mitigation plan, as needed.

3.20.4.6 Noise

Noise impacts from the proposed action under either Alternative A or B would be temporary and intermittent, and with the implementation of mitigation measures designed to minimize noise and vibration impacts, impacts would be minor. Implementation of the RFFAs has the potential to contribute to additional noise impacts associated with construction activities. Due to the temporary nature of construction activities, noise from construction associated with these activities are expected to be localized and would not result in a cumulative impact to noise. Therefore, the cumulative effects of the proposed action under Alternatives A or B on noise emissions would not adversely affect sensitive noise receptors.

3.20.4.7 Cultural Resources

Either Alternative A or B would result in an adverse effect on NRHP-eligible BRF through the demolition of buildings and structures that contribute to the property's eligibility. Mitigation measures were identified through consultation with the SHPO and listed in the MOA for this project that was executed in April 2023 (Appendix E). Any potential impacts to the NRHP-eligible BRF due to the Edgemoor Road expansion project would be mitigated through consultation with SHPO. Therefore, no cumulative effects to cultural resources are anticipated.

3.20.4.8 Environmental Justice

Several communities within the vicinity of BRF meet the criteria for environmental justice consideration. Due to location of environmental justice populations within the BRF project area and adjacent CBGs, there is potential that these communities would be indirectly impacted due to an increase in traffic, noise, exposure to fugitive dust, and exhaust emissions from the trucks used to transport the borrow material and demolition debris. It is also likely that some of these communities would be along the routes taken by trucks for the potential CCR unit closures at BRF, or other planned construction projects within the vicinity of BRF. Because these short-term actions are potentially coincident, potential cumulative effects may be expected to occur on a local basis. Therefore, the cumulative effects of the proposed action on noise and dust emissions within low-income and minority communities have the potential to represent a moderate increase in impact to environmental justice populations if these activities occur concurrently with other construction activities in the geographic area. Such physical impacts associated with the transport of borrow material or demolition debris (i.e., noise, dust) would be mitigated through BMPs identified in Section 2.3.2 or by the selection of borrow sites and haul routes that are not within identified environmental justice communities. These impacts would also be temporary, as they would occur only during the construction periods of these projects.

3.21 Unavoidable Adverse Impacts

Unavoidable adverse impacts are the effects of the proposed action on natural and human resources that would remain after mitigation measures or BMPs have been applied. Mitigation measures and BMPs are typically implemented to reduce a potential impact to a level that would be below the threshold of significance as defined by the CEQ and the courts. Impacts associated with the proposed activities have the potential to cause unavoidable adverse effects to natural and human environmental resources.

Unavoidable localized increases in air and noise emissions would occur during deconstruction activities. Activities associated with the use of construction equipment may result in varying amounts of dust, air emissions, and noise that may potentially impact onsite workers. Workers would use appropriate protection and adhere to safety standards designed to minimize worker-related injuries. Additional impacts include traffic noise, air emissions, and fugitive dust associated with the construction workforce traveling to and from the site, as well as the transport of demolition debris offsite and borrow material onsite. Emissions and fugitive dust from construction equipment and vehicles are minimized through implementation of mitigation measures, including proper maintenance of construction equipment and vehicles and dust suppression measures.

In addition, temporary impacts to water quality from runoff at the site could impact nearby receiving water bodies during construction activities. BMPs to minimize runoff would be implemented, and water discharged in the course of decontamination and deconstruction activities would meet established TDEC permit limits.

With the application of appropriate BMPs and adherence to permit requirements, these unavoidable adverse effects would be minor.

3.22 Relationship of Short-Term Uses to Long-Term Productivity

NEPA requires a discussion of the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. This EA focuses on the analyses of environmental impacts associated with the decontamination and deconstruction

of the buildings and structures at BRF that are no longer used for their original purpose to support power generation. For the purposes of this section, these activities are considered short-term uses of the environment and the long-term is considered to be initiated upon the completion of deconstruction and site restoration.

Most environmental impacts during deconstruction activities would be relatively short term and would be addressed by BMPs and mitigation measures. Deconstruction activities would have a limited, yet favorable, short-term impact to the local economy through the creation of construction jobs and associated revenue.

In the long term, the site could become productive if commercial or industrial facilities were to be established, thereby producing employment opportunities and tax revenue, and enhancing long-term productivity of the site.

3.23 Irreversible and Irretrievable Commitments of Resources

A resource commitment is considered irreversible when impacts from its use would limit future use options and the change cannot be reversed, reclaimed, or repaired. Irreversible commitments generally occur to nonrenewable resources such as minerals or cultural resources and to those resources that are renewable only over long timespans, such as soil productivity. A resource commitment is considered irretrievable when the use or consumption of the resource is neither renewable nor recoverable for use by future generations until reclamation is successfully applied. Irretrievable commitments generally apply to the loss of production, harvest, or other natural resources and are not necessarily irreversible.

Resources required by decontamination and deconstruction activities, including labor and fossil fuels, would be irretrievably lost. Nonrenewable fossil fuels would be irretrievably lost through the use of gasoline and diesel-powered equipment during demolition and deconstruction. However, it is unlikely that their limited use in these projects would adversely affect the overall future availability of these resources.

CHAPTER 4 – LIST OF PREPARERS

4.1 NEPA Project Management

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Project Role:	TVA Project Manager, TVA NEPA Coordinator, NEPA Compliance
Experience:	4 years of professional experience in NEPA and environmental compliance
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Education:	M.S., Geological Sciences and B.S., Geology
Project Role:	TVA NEPA Specialist
Experience:	13 years managing and performing NEPA compliance
Name:	Rebecca Porath
Education:	M.S. and B.S., Wildlife and Fisheries Sciences
Project Role:	WSP Project Manager. Chapters 1 and 2; Hazardous Materials and Solid/Hazardous Waste; Utilities; Managed and Natural Areas, Threatened and Endangered Species; Vegetation; and Wildlife reviews; technical editing and document management
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Name:	Stephanie Miller
Education:	M.S., Biology and B.S., Marine Biology
Project Role:	WSP Project Manager. Chapters 1 and 2; Overall technical reviews and coordination
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4.2 Other Contributors

TENNESSEE VALLEY AUTHORITY

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CHAPTER 5 – LITERATURE CITED

- Anderson County, TN. 2015. Zoning Resolution of Anderson County, Tennessee. Adopted December 17, 2015. Retrieved from <https://andersoncountyplanning.com/wp-content/uploads/2020/03/Zoning-Resolution-of-Anderson-County.pdf>.
- Anderson County Assessor. 2022. Anderson County TN Property Searched. Retrieved from <https://acassessor.maps.arcgis.com/apps/webappviewer/index.html?id=ceca75ab630048669e3b90abb301b09a>.
- AZTEC Engineering. 2021. Final Noise Report SR 101L, 75th Ave to I-17 Adding General Purpose Lanes & 75th Ave TI Improvements. Arizona Department of Transportation. Retrieved from <https://azdot.gov/sites/default/files/media/2022/02/SR-101-Final-Noise-Report.pdf>.
- Baby, J., J.S. Raj, E.T. Biby, P. Sankarganesh, M.V. Jeevitha, S.U. Ajisha, and S.S. Rajan. 2011. Toxic effect of heavy metals on aquatic environment. *International Journal of Biological and Chemical Sciences*, 4(4): 939-952.
- Berglund, B., and T. Lindvall. 1995. Community Noise Archives of the Center for Sensory Research, 2. Stockholm: Stockholm University. Retrieved from <https://www.nonoise.org/library/whonoise/whonoise.htm>.
- Bilotta, G.S., and R.E. Brazier. 2008. Understanding the influence of suspended solids on water quality and aquatic biota. *Water Research*. Vol. 42, No. 12. pp. 2849-2861.
- Brahana, J.V., D. Mulderink, J. A. Macy and M. W. Bradley. 1986. Preliminary Delineation and Description of the Regional Aquifers of Tennessee – the East Tennessee Aquifer System: U.S. Geological Survey Water-Resources Investigations Report 82-4091. Retrieved from https://pubs.usgs.gov/wri/wri824091/pdf/wrir_82-4091_a.pdf.
- Caltrans. 2020. Transportation and Construction Vibration Guidance Manual. California Department of Transportation. Retrieved from <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>.
- Centers for Disease Control and Prevention. 2011. CDC Health Disparities and Inequalities Report — United States, 2011. *MMWR*, January 14, 2011; Vol. 60 (Suppl). Retrieved from: <http://www.cdc.gov/mmwr/pdf/other/su6001.pdf> (accessed September 2022).
- Chester, E.W. 2015. Guide to the Vascular Plants of Tennessee. Knoxville, TN: The University of Tennessee Press, p. 260.
- Chow, W., I.P. Murarka, and R.W. Brocksenm. 1981. Entrainment and impingement in power plant cooling systems. *Water Pollution Control Federation*, Vol. 53, No. 6, pp. 965-973.
- City of Oak Ridge, Tennessee. 2022. Oak Ridge Airport Frequently Asked Questions (FAQs). Updated August 2022. Retrieved from <http://www.oakridgetn.gov/content.aspx?article=5203> (accessed October 31, 2022).

- Council on Environmental Quality (CEQ). 1997. Environmental Justice Guidance under the National Environmental Policy Act, Executive Office of the President, Washington, DC. Retrieved from https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf (accessed July 2022).
- Dewitz, J. 2019. National Land Cover Database (NLCD) 2016 Products (ver. 2.0, July 2020): U.S. Geological Survey data release, <https://doi.org/10.5066/P96HHBIE>.
- Federal Highway Administration (FHWA). 2016. Construction Noise Handbook. Retrieved from http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook_09.cfm (accessed August 31, 2022).
- FHWA. 2018. Techniques for Reviewing Noise Analyses and Associated Noise Reports. Retrieved from https://www.fhwa.dot.gov/Environment/noise/resources/reviewing_noise_analysis/fhwahep18067.pdf (accessed August 31, 2022).
- Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Retrieved from https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.
- Friends of Haw Ridge Park. 2022. Haw Ridge. Retrieved from <https://www.tnlandforms.us/fohr/> (accessed September 16, 2022).
- The Golf Wire. 2013. Centennial Golf Course (Oak Ridge, TN) to Host Grand Re-Opening Showcasing Renovations. October 4, 2013. Retrieved from <https://thegolfwire.com/300700-2/j> (accessed September 16, 2022).
- Griffith, G.E., J.M. Omernik, J.A. Comstock, S. Lawrence, G. Martin, A. Goddard, V.J. Hulcher, and T. Foster. 2001. Ecoregions of Tennessee, (color poster with map, descriptive text, summary tables, and photographs). Reston, Virginia. U.S. Geological Survey (map scale 1:1,700,000).
- Harvey, M. J. 1992. Bats of the Eastern United States. Arkansas Game and Fish Commission, Little Rock, Arkansas. 46 pp.
- Knoxville Regional Transportation Planning Organization (TPO). 2022. Knoxville Traffic Counts. Retrieved from: <https://knoxtpo.org/maps/traffic/> (accessed August 18, 2022).
- Lloyd, O.B., and W.L. Lyke. 1995. Hydrologic Atlas 730-K. USGS. Retrieved from [HA 730-K Valley and Ridge aquifers text \(usgs.gov\)](https://pubs.usgs.gov/of/1995/730-K/).
- Miller, R.A., P.D. Sitterly. 1977. Geologic Hazards Map of Tennessee. Tennessee Department of Environment and Conservation. Division of Geology. Retrieved from ["Geologic Hazards Map of Tennessee \(1977\)" by Tennessee Department of Conservation \(etsu.edu\)](https://www.tn.gov/education/geology/geologic-hazards-map-of-tennessee-1977).

- NatureServe. 2022. "NatureServe Explorer: An Online Encyclopedia of Life [Web Application]." Arlington, VA: NatureServe. Retrieved from <http://explorer.natureserve.org/> (accessed September 7, 2022).
- National Park Service (NPS). 2022. Nationwide Rivers Inventory. Retrieved from <https://www.nps.gov/subjects/rivers/nationwide-rivers-inventory.htm> (accessed September 16, 2022).
- New York City Department of Environmental Protection. 2018. The Rule of the City – Chapter 28: Citywide Construction noise Mitigation. Retrieved from <https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCrules/0-0-0-29014> (accessed August 31, 2022).
- Pounds, B. 2020. Water Quality Near Bull Run Discussed. The OakRidger. Retrieved from <https://www.oakridger.com/story/news/environment/2020/03/16/water-quality-near-bull-run-discussed/41738675/>.
- _____. 2022. City to Use \$30M State Loan to Replace Water Treatment Plant; Rate Impact Unclear. The OakRidger. Retrieved from <https://www.oakridger.com/story/news/2022/06/28/city-using-state-loan-replace-water-treatment-plant-may-raise-rate/7695462001/> (accessed October 31, 2022).
- Protec Documentation Services (Protec). 2013. Vibration Monitoring Plan and Impact Calculation Study, 612 feet and 828 feet ASARCO Concrete Stack Demolition El Paso, Texas.
- Siskind, D., M. Stagg, J. Kopp, and C. Dowding. 1980. Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting. Report of Investigations – United States Bureau of Mines.
- Stantec. 2009. Report of Phase 1 Facility Assessment Coal Combustion Product Impoundments and Disposal Facilities. Appendix C Bull Run Fossil Plant. Retrieved from http://152.87.4.98/power/stantec/tn/rpt_005_appndx_c_brf_171468118.pdf.
- Tennessee Department of Environment and Conservation (TDEC). 2012. Erosion and Sediment Control Handbook, A Stormwater Planning and Design Manual for Construction Activities, Fourth Edition. Retrieved from https://tnepsc.org/TDEC_EandS_Handbook_2012_Edition4/TDEC%20EandS%20Handbook%204th%20Edition.pdf.
- _____. 2016. A Guide to the Rare Animals of Tennessee. Tennessee Natural Heritage Program. Nashville, Tennessee. September 2016. Retrieved from <https://www.nrc.gov/docs/ML1802/ML18026A609.pdf> (accessed August 4, 2022).
- _____. 2019a. Posted Streams, Rivers, and Reservoirs in Tennessee. Tennessee Division of Water Resources. Retrieved from https://www.tn.gov/content/dam/tn/environment/water/documents/water_fish-advisories.pdf (accessed July 1, 2022).
- _____. 2019b. Rules of the Tennessee Department of Environment and Conservation, Chapter 0400-40-04, Use Classifications for Surface Waters. Original rule filed

- September 17, 2013; effective December 16, 2013. Rule originally numbered 1200-04-04. Amendments filed June 13, 2019; effective September 11, 2019.
- _____. 2020. Tennessee Groundwater Monitoring and Management Groundwater 305(b) Report, 2020. Division of Water Resources Drinking Water Unit. Retrieved from https://www.tn.gov/content/dam/tn/environment/water/drinking-water-unit/wr_wq_report-groundwater-305b-2020.pdf.
- _____. 2021. *General NPDES Permit for Discharges of Storm water Associated with Construction Activities*. 2021. Retrieved from https://dataviewers.tdec.tn.gov/dataviewers/f?p=9034:34051:0::NO:34051:P34051_PERMIT_NUMBER:TNR100000.
- _____. 2022a. The Known Exceptional Tennessee Waters and Outstanding National Resource Waters [Online Database]. Retrieved from <https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34304:7794604943377:.....> (accessed September 16, 2022).
- _____. 2022b. TDEC Division of Water Resource Data Viewer: TN0005410. Retrieved from https://dataviewers.tdec.tn.gov/dataviewers/f?p=2005:34051:5364354732946:::34051:P34051_PERMIT_NUMBER:TN0005410. (accessed September 9, 2022).
- _____. 2022c. Draft 2022 List of Impaired and Threatened Waters in Tennessee. Available at: <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/water-quality-reports---publications.html>. (accessed September 7, 2022).
- _____. 2022d. "Rare Species by County." Tennessee Department of Environment and Conservation, Natural Heritage Program. <https://dataviewers.tdec.tn.gov/dataviewers/f?p=9014:3:3031824848602:> (accessed September 8, 2022).
- _____. 2022e. Scenic River Classifications. Retrieved from <https://www.tn.gov/environment/program-areas/na-natural-areas/na-sr-scenic-rivers-list/na-sr-river-classifications.html> (accessed September 16, 2022).
- _____. 2022f. Tennessee Water Well Desktop Application. Division of Water. Retrieved from [TDEC Water Well Desktop Application \[V 4.0 - PUBLIC\] | TDEC Division of Water Resources \(arcgis.com\)](https://www.tdec.tn.gov/water/well/desktop-application) (accessed September 7, 2022).
- Tennessee Department of Transportation (TDOT). 2019. TDOT Candidate Projects for FY 2021-2023 3-Year Program. Retrieved from: <https://knoxtpo.org/home/meetings/exec/agendas/2019/december/2a.pdf> (accessed September 25, 2022).
- Tennessee Valley Authority (TVA). 2005. Installation of Flue Gas Desulfurization System at Bull Run Fossil Plant Final Environmental Assessment, Anderson County, Tennessee.
- _____. 2007. Fish Impingement at Bull Run Fossil Plant During 2005 Through 2007.

- _____. 2015. Biological Monitoring of the Clinch River Near Bull Run Fossil Plant Discharge: Autumn 2014. June 2015.
- _____. 2016a. Final Ash Impoundment Closure Environmental Impact Statement Part I – Programmatic NEPA Review, June 2016. Retrieved from [Final Ash Impoundment Closure EIS Part I -- Programmatic NEPA Review \(azureedge.net\)](#).
- _____. 2016b. Final Ash Impoundment Closure Programmatic EIS Part II – Site Specific NEPA Review: Bull Run Fossil Plant, June 2016.
- _____. 2016c. Bull Run Fossil Plant Landfill Final Environmental Impact Statement, November 2016.
- _____. 2017a. Biological Monitoring of the Clinch River Near Bull Run Fossil Plant Discharge. Autumn 2016.
- _____. 2017b. Bull Run Fossil Plant Ash Impoundment Closure Project Supplemental Environmental Assessment, issued October 23, 2017.
- _____. 2018. Environmental Investigation Plan Bull Run Fossil Plant. Revision 4, December 17, 2018. Retrieved from [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/energy/our-power-system/coal/bull-run-fossil-plant/bull-run-environmental-investigation-plan-\(eip\).pdf?sfvrsn=c340d10_2](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/energy/our-power-system/coal/bull-run-fossil-plant/bull-run-environmental-investigation-plan-(eip).pdf?sfvrsn=c340d10_2) (accessed November 29, 2022).
- _____. 2019a. 2019 Integrated Resource Plan, Volume 1 - Final Resource Plan. Retrieved from <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/Integrated-Resource-Plan> (accessed September 22, 2022).
- _____. 2019b. 2019 Integrated Resource Plan, Volume 2 - Final Environmental Impact Statement. Retrieved from <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/Integrated-Resource-Plan> (accessed August 2022).
- _____. 2019c. Bull Run Fossil Plant Ash Impoundment Closure Project Supplemental Environmental Assessment, Anderson County, Tennessee. Retrieved from <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/Bull-Run-Ash-Impoundment-Closure>.
- _____. 2019d. Potential Bull Run Fossil Plant Retirement Final Environmental Assessment, Anderson County, Tennessee. Retrieved from <https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews/Potential-Retirement-of-Bull-Run-Fossil-Plant>.
- _____. 2020a. TVA 21018 - Contractor Safety Expectations. Retrieved from https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/information/supplier-connections/21018_contractor_safety_expectations.pdf?sfvrsn=9fbda207_2.

- _____. 2020b. TVA Safe Work Requirements Manual, Revision 4. Retrieved from <https://usermanual.wiki/m/7330467c3f1b9c45f7f2e8111ab8429f6d74889e310f43be8bf4b8ffce0acf64.pdf>.
- _____. 2022a. Clinch River Nuclear Site Advanced Nuclear Reactor Technology Park Final Programmatic Environmental Impact Statement. Retrieved from <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/clinch-river-nuclear-site-advanced-nuclear-reactor-technology-park> (accessed October 31, 2022).
- _____. 2022b. Melton Hill Reservoir. Retrieved from <https://www.tva.com/environment/environmental-stewardship/water-quality/reservoir-health-ratings/melton-hill-reservoir> (accessed July 1, 2022).
- _____. 2022c. Natural Heritage Database for BRF. Provided 18 July 2022.
- _____. 2022d. TVA Melton Hill. <https://www.tva.com/energy/our-power-system/hydroelectric/melton-hill-reservoir> (accessed September 7, 2022).
- _____. 2022e. TVA Reservoir Health Ratings. <https://www.tva.com/environment/environmental-stewardship/water-quality/reservoir-health-ratings> (accessed September 7, 2022).
- Tennessee Wildlife Resources Agency (TWRA). 2022. 2022-2023 Tennessee Fishing Guide. Retrieved from <https://www.eregulations.com/assets/docs/guides/22TNFW.pdf> (accessed July 1, 2022).
- Third Rock Consultants, LLC. 2010. Mussel and Habitat Survey, Bull Run Fossil Plant, Anderson County, Tennessee. September 2010.
- TRC. 2011. Phase I Archaeological Survey of the Bull Run Fossil Plant Site J Proposed Boring Locations and Access Routes, Anderson County, Tennessee. Final Report. TRC Environmental Corporation, Nashville, Tennessee.
- _____. 2012. Phase I Cultural Resources Survey of Thirty Tracts Associated with the Bull Run Fossil Plant Coal Combustion Products (CCP) Property Acquisition Project, Anderson County, Tennessee. Final Report. TRC Environmental Corporation, Nashville, Tennessee.
- U.S. Army Corps of Engineers (USACE). 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0*, ed. J. F. Berkowitz, J. S. Wakeley, R. W. Lichvar, C. V. Noble. ERDC/EL TR-12-9. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- U.S. Bureau of Labor Statistics (USBLS). 2022. Local Area Unemployment Statistics. Retrieved from <https://data.bls.gov/PDQWeb/la> (accessed July 27, 2022).
- U.S. Census Bureau (USCB). 2022a. 2020 Decennial Census Redistricting Data (PL 94-171). Retrieved from: <https://data.census.gov/cedsci/> (accessed July 2022).

- _____. 2022b. American Community Survey 2016-2020. Detailed Tables. Retrieved from: <https://data.census.gov/cedsci/> (accessed July 2022).
- _____. 2022c. Poverty Thresholds for 2021. Retrieved from <http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html> (accessed September 2022).
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey. Retrieved from <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>.
- U.S. Department of Housing and Urban Development (HUD). 1985. The Noise Guidebook, HUD-953-CPD Washington D.C., Superintendent of Documents, U.S. Government Printing Office.
- U.S. Department of Labor (USDOL). 2022. Establishment Search Tool. Retrieved from <https://www.osha.gov/pls/imis/establishment.html>.
- URS Energy & Construction (URS). 2014. Part II Permit Application Hydrogeologic Site Investigation, CCP Proposed Landfill. Coal Combustion Product Disposal Program.
- U.S. Environmental Protection Agency (EPA). 1974. EPA Identifies Noise Levels Affecting Health and Welfare. Retrieved from <https://www.epa.gov/archive/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html>.
- _____. 1995. AP-42 Compilation of Air Pollutant Emission Factors, Volume I – Stationary Point and Area Sources – 5th Edition. Office of Transportation and Air Quality, January 1995.
- _____. 2019. EJSCREEN Technical Documentation. Office of Policy, Washington, DC. August 2019. Retrieved from: https://www.epa.gov/sites/default/files/2017-09/documents/2017_ejscreen_technical_document.pdf (accessed August 30, 2022).
- _____. 2022a. 8-Hour Ozone (2008) Designated Area Partial County Descriptions as of June 30, 2022. Detailed Descriptions of Certain Area Boundaries for Partial Counties. Website: https://www3.epa.gov/airquality/greenbook/hbp.html#Ozone_8-hr.2008.Knoxville (accessed July 14, 2022).
- _____. 2022b. Climate Change: Basic Information. Available at: <https://19january2017snapshot.epa.gov/climatechange/climate-change-basic-information.html> (accessed August 19, 2022).
- _____. 2022c. EPA Sole Source Aquifers Interactive Map. Retrieved From <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b> (accessed September 23, 2022).
- _____. 2022d. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. U.S. Environmental Protection Agency, EPA 430-R-22-003. <https://www.epa.gov/ghgemissions/draft-inventory-us-greenhouse-gas-emissions>

- _____. 2022e. NAAQS Table and Criteria Air Pollutants. U.S. Environmental Protection Agency. Updated April 5, 2022. Retrieved from <https://www.epa.gov/criteria-air-pollutants/naaqs-table> (accessed July 14, 2022).
- _____. 2022f. Tennessee Nonattainment/Maintenance Status for each County by Year for all Criteria Pollutants as of June 30, 2022. Retrieved from https://www3.epa.gov/airquality/greenbook/anayo_tn.html (accessed July 14, 2022).
- _____. 2013. Bald and Golden Eagle Protection Act. Retrieved from <https://www.fws.gov/law/bald-and-golden-eagle-protection-act> (accessed June 27, 2022).
- _____. 2022. IPaC Resource List for Anderson County, Tennessee. Retrieved from <https://ecos.fws.gov/ipac/> (accessed May 2022).
- U.S. Forest Service (USFS). 1995. Landscape Aesthetics, A Handbook for Scenery Management. Retrieved from https://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf.%20Accessed%20July%202022 (accessed July 2022).
- U.S. Geologic Survey (USGS). 2022a. Quaternary fault and fold database for the United States. Retrieved from <https://www.usgs.gov/natural-hazards/earthquake-hazards/faults> (accessed July 7, 2022).
- _____. USGS. 2022b. USGS StreamStats, Tennessee. Retrieved from <https://water.usgs.gov/osw/streamstats/tennessee.html> (accessed February 2022).
- U.S. Nuclear Regulatory Commission (NRC). 2022. Hermes – Kairos Application. Retrieved from <https://www.nrc.gov/reactors/non-power/hermes-kairos.html> (accessed October 31, 2022).
- U.S. Water Resources Council. 1978. Floodplain Management Guidelines for Implementing EO 11988. 43 FR 6030. February 10, 1978.
- Wood. 2022. Waters of the U.S. Delineation Report. Tennessee Valley Authority. Bull Run Fossil Plant. Wood Environment and Infrastructure Solutions, Inc.

**Appendix A – Public and Agency Comments and TVA’s Responses to
Comments on the Draft EA**

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Appendix A
Public and Agency Comments and TVA's Responses to Comments on the
TVA Bull Run Fossil Plant Decontamination and Deconstruction
Draft Environmental Assessment

The Draft EA was released for a 60-day public comment period on December 5, 2022, and was posted on TVA's website (<http://tva.com/nepa>). The availability of the Draft EA was announced in a news release and in newspapers that serve the Anderson County, Tennessee area. These newspapers include *The Clinton Courier* and *The Oak Ridger*.

TVA's interagency involvement included circulation of the Draft EA to local, state, and federal agencies for comments. Comments on the Draft EA were accepted through February 2, 2023, via mail and e-mail. TVA received comment submissions from the following:

- Agencies – Anderson County, City of Oak Ridge, U.S. Environmental Protection Agency (EPA), Tennessee Department of Environment and Conservation (TDEC), Tennessee Department of Transportation (TDOT), and Tennessee Department of Agriculture
- Organizations – Tennessee Chapter Sierra Club, Southern Environmental Law Center (SELC), Statewide Organizing for Community Empowerment, Appalachian Voices, and Sierra Club; RSI EnTech, LLC, United Cleanup Oak Ridge (UCOR)
- Individual members of the public (130 submissions)

TVA carefully reviewed all the substantive comments that were received for consideration in the Final EA. Summarized comments and TVA's responses are included in Table A-1. Original comment submissions follow Table A-1 and will be retained as part of the project's Administrative Record.

**Table A-1. TVA Bull Run Fossil Plant Decontamination and Deconstruction Draft EA
Comments and TVA Responses**

Comment Number	Name	Organization / Affiliation	Comment	Response
1	Terry Frank, Anderson County Mayor	Anderson County	<p>After reading the Draft Environmental Assessment and the description and analysis of the alternatives provided, including the affected environment and environmental consequences, I write to express preference for "Alternative A-Full Demolition of All Structures to Three Feet Below Final Grade." While my personal assessment of the Draft Environmental Assessment concludes that Alternative A creates the least long-term risk to the community, it is noteworthy that it also provides the best opportunity for repurposing and redevelopment of the site for the economic benefit of the community, and region.</p> <p>In addition, the Draft Environmental Assessment notes that the structures and facilities of Claxton Community Park, Claxton Community Center, CCR Impoundments, BRF Visitor's Overlook/Entry Monument, and Switchyard are not part of this Alternative. However, I wish to take this opportunity to note decommissioning and demolition of the Bull Run Fossil Plant is also an opportunity to move the Claxton Community Center and Claxton Community Park. This opportunity would provide the greatest opportunity for a clean site. Given TVA's legacy of recreation and community involvement, decommissioning and demolition of Bull Run Fossil Plant provides an opportunity for TVA to further partner with Anderson</p>	<p>TVA agrees that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project and would enhance the future economic development of the area.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. Similarly, moving the Claxton Community Center and Community Park is out of scope for this project.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			County to relocate these beloved community amenities, in a way that provides the benefit of a fully clean footprint for redevelopment.	
2	Rick Meredith	Anderson County Chamber of Commerce	The Anderson County Chamber of Commerce, Clinton, TN, requests that the Bull Run Fossil Plant be totally demolished and repurposed for mixed use: Recreational, Retail, Industry and Community Facilities. The Chamber also encourages TVA to complete the demolition safely and expeditiously so the site can be adapted for both public and private sector opportunities as soon as possible.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. TVA acknowledges that environmental risks, safety, and security at the plant site, and making the land available for future economic development are important considerations, as indicated by their inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) would meet the purpose and need of the project and would enhance the future economic development of the area. Decontamination and deconstruction activities would occur over an approximately 24-month period that would likely begin shortly after closure of the plant. This would be followed by a 12-month site restoration period. The demolition consultants would be required to conduct all activities in accordance with all applicable health and safety regulations.
3	Mark Watson, Ph.D., City Manager	City of Oak Ridge	I am writing on behalf of the City of Oak Ridge, Tennessee, in response to the Tennessee Valley Authority's (TVA) December 5, 2022, release of the subject document for public comment. The City of Oak Ridge is a long-time partner with TVA and continues to be a major stakeholder in the closure, decontamination, and deconstruction of the Bull Run Fossil Plant. Given the proximity of the site, planning for disposition and beneficial reuse of the property is of utmost importance to our community. In 2018, TVA issued a draft environmental assessment (EA) regarding the possible	The December 18, 2018 letter from the City of Oak Ridge has been included as Comment #10 through Comment #14 below.

Comment Number	Name	Organization / Affiliation	Comment	Response
			closure of the facility. The City of Oak Ridge reviewed that document and City Council transmitted the attached comment letter to communicate significant concerns related to the proposed closure. I am attaching the letter dated December 18, 2018, and request that it be included in the City's response for public comment on the current draft EA. TVA made the decision in January 2019 to retire the Bull Run Fossil Plant by 2023 and is now assessing decommissioning and demolition of existing plant structures that the agency deems will not be necessary in the future.	
4	Mark Watson, Ph.D., City Manager	City of Oak Ridge	According to Page 19 of the draft EA, TVA has not at this time identified a preferred alternative. However, Alternative A - Full Demolition of All Structures to Three Feet Below Final Grade - most closely aligns with the City's desire for timely demolition and economic redevelopment of the site. As stated in the City's 2018 letter, the removal of equipment but leaving the buildings and structure in place is not a viable option. The City strongly urges TVA to make the financial commitment to completing the D&D as quickly as possible so that the site does not languish. Socioeconomic benefits such as re-employment of the local, skilled workforce during D&D can be realized sooner to help offset the loss of jobs due to the plant closure	As discussed in Section 3.19.2.1.1 of the EA, TVA acknowledges that decontamination and demolition activities and the associated influx in the workforce is expected to result in a minor, short-term increased economic opportunity. TVA also acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. A final decision regarding the future disposition of the structures at Bull Run Fossil Plant will be made after the completion of this EA.
5	Mark Watson,	City of Oak Ridge	The City urges TVA to coordinate with the Tennessee Department of Transportation (TDOT) to prioritize the Edgemoor Road	Comment noted. TVA would coordinate with the Tennessee Department of Transportation and other state, federal and local agencies, as appropriate, to

Comment Number	Name	Organization / Affiliation	Comment	Response
	Ph.D., City Manager		(SR 170) construction project, urging the restoration of the western portion as Phase 1. The proposed widening of Edgemoor Road from 2-lanes to 4-lanes has been in TDOT's planning stages for two decades. The timely expansion is vital to the beneficial repurposing of the TVA's Bull Run Fossil Plant property and should be initiated in coordination with the D&D of Bull Run. Synching the projects is needed to make the most efficient and effective use of both TVA and TDOT resources. Additionally, the large number of commuters to the Department of Energy facilities in Oak Ridge creates an important coordination effort with our community and the associated bridge crossing at the Bull Run Fossil Plant.	minimize potential for transportation impacts associated with decontamination and deconstruction activities.
6	Mark Watson, Ph.D., City Manager	City of Oak Ridge	The City of Oak Ridge/Anderson County has borne a significant environmental burden associated with legacy waste management practices by the federal government. Given the TVA's status as a Natural Resource Trustee of the Department of Energy's Oak Ridge Reservation, the City believes that TVA has a special responsibility to ensure that the agency and its contractors strictly adhere to the mitigation measures and best management practices as described in Section 2.3 of the draft EA. Given recent growth in population and economic activity, the City further requests that metal/waste recycling and waste disposition occur only at licensed and bonded facilities outside of the Oak Ridge city limits.	<p>Comment noted. Section 1.7 of the EA lists all necessary environmental permits that would be adhered to for the proposed action, and Section 2.3 describes the best management practices and mitigation measures that would be employed by TVA and its contractors to avoid or reduce adverse environmental effects.</p> <p>Section 3.11.2.1 of the EA describes how waste would be handled. All waste would be handled in accordance with all applicable federal, state, and local regulations and disposed in an existing, facility permitted for each specific waste. Waste disposition sites would be selected by the contractor as planning moves forward.</p>

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
7	Mark Watson, Ph.D., City Manager	City of Oak Ridge	As noted in the EA, the Bull Run site is in close proximity to major natural areas, parks and recreation such as Haw Ridge and Melton Lake. These amenities are also economic drivers for the city, region, and state. The City urges TVA to conduct its D&D activities in full consideration of the nearby world-class rowing venue and protection thereof by continuing to comply with permit requirements. Assuming the shutdown will occur by December 2023 and current permitted standards are met, the City of Oak Ridge does not have significant concerns about the recent permit reissuance to TVA for the Bull Run Fossil Plant.	As discussed in Subsection 3.15 of the EA, impacts to natural areas, parks, and recreation under the proposed action are expected to be short term and minor. These indirect impacts would include construction noise, visual intrusions, and stormwater runoff, which would be minimized through the use of standard construction BMPs and coordination with recreational organizations and land managers of nearby areas.
8	Mark Watson, Ph.D., City Manager	City of Oak Ridge	The scope of this environmental assessment does not include long-term Bull Run coal ash storage or specific future development options for the site. The document states that separate evaluations will be conducted for those projects. Beneficial reuse/economic development by TVA or the community cannot be accomplished until these evaluations occur. Thus, the City strongly urges TVA to initiate the necessary studies needed to complete these assessments, as all are inter-related to support successful repurposing of the site.	TVA is evaluating its coal combustion residuals (CCR) units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth in the TDEC Commissioner's Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. TDEC must approve the CARA Plan, including the methods of closure for the CCR units at BRF; the CARA Plan is subject to public notice and comment. TVA would perform any additional environmental reviews if needed. Additionally, the Bull Run CCR unit closure was previously analyzed in the NEPA reviews described in Section 1.4 of the Final EA.
9	Mark Watson, Ph.D., City Manager	City of Oak Ridge	Finally, the Environmental Assessment #2022-8 does not cover a defined timetable to begin and complete the demolition. This action by TVA has created an expectation in the community and particularly adjacent	The TVA Board of Directors has approved the retirement of BRF by December 2023, and decontamination and deconstruction activities would occur over an approximately 24-month period that would likely begin shortly after closure of the plant. This

Comment Number	Name	Organization / Affiliation	Comment	Response
			areas. Future development in Oak Ridge is observant in anticipating this project. However, the lack of definitive timetables for studies, assessments, external and off-site improvements and TDOT improvements create uncertainty for this sector of Anderson County, the City of Oak Ridge and impact Knox County. This should NOT be a project that is continually delayed or have flexible priority to the ultimate demolition and redevelopment.	would be followed by a 12-month site restoration period. A detailed project schedule would be developed once a final decision regarding the future disposition of the structures at BRF is made. The Bull Run Community Outreach Team would engage with local leaders and provide regular schedule updates as the project progresses.
10	Warren L. Gooch, Mayor	City of Oak Ridge	<p><i>[This comment was provided in December 2018 during public review of the Potential Bull Run Fossil Plant Retirement Draft EA. Mark Watson (Oak Ridge City Manager) re-submitted the comment on behalf of the City of Oak Ridge during public review of the BRF Decontamination and Deconstruction Draft EA.]</i></p> <p>The Bull Run Fossil Plant has provided reliable power to the citizens of the Tennessee Valley for over fifty years. It is a fixture to the citizens of Oak Ridge, both as a symbol of the commitment of Tennessee Valley Authority to provide low cost, reliable power to our community and maintaining strict compliance with safety and environmental policies that protect our region and its citizens. We consider the possible loss of this resource to be of grave concern. At the most immediate level, the loss of 100 high paying jobs and the associated impacts on the transportation industry, tourism (through impact on the fisheries), and the multiplied effects of these economic input</p>	<p>This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of BRF. Impacts related to the decision to retire BRF are not in the scope of this review. The 2019 Potential Bull Run Fossil Plant Retirement Final EA evaluated the environmental and socioeconomic impacts of the retirement of BRF.</p> <p>Other energy sources to be used throughout TVA's service area have been considered in TVA's Final 2019 Integrated Resource Plan (IRP) and the associated IRP Final Environmental Impact Statement (EIS). The IRP identified the various generating resources that TVA intends to pursue to meet the energy needs of the Tennessee River Valley, and TVA is evaluating a variety of other generation projects at other locations which are or will be addressed in separate NEPA evaluations. Decisions made about TVA power generation assets are made in the best interests of TVA customers, employees and the citizens across the Tennessee Valley as the resulting savings drive lower power rates overall and enable economic development.</p>

BRF Decontamination and Deconstruction

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			<p>both to our City and to Anderson County, would appear much more consequential than indicated in the report.</p> <p>The City Council understands that the operation or closure of a generation asset is a financial decision made in an effort to provide economical electric power.</p> <p>However, while we understand that the plant has moved from an 80% capacity factor to a 33% capacity factor, we are concerned that by considering elimination of the plant, TVA is moving away from its commitment to a diverse fuel mix and toward over dependence on natural gas.</p> <p>One can hardly recall TVA's own dire warnings of high load and appeals for conservation during both high and low temperature extremes over the last several years without questioning if elimination of a generation resource is, in fact, desirable from the perspective of a robust, reliable power system.</p>	<p>On May 19, 2023, TVA published a Notice of Intent to begin work on the next IRP that is slated to be completed in 2024.</p>
11	Warren L. Gooch, Mayor	City of Oak Ridge	<p><i>[This comment was provided in December 2018 during public review of the Potential Bull Run Fossil Plant Retirement Draft EA. Mark Watson (Oak Ridge City Manager) re-submitted the comment on behalf of the City of Oak Ridge during public review of the BRF Decontamination and Deconstruction Draft EA.]</i></p> <p>All of that said, perhaps the most troubling aspect of the proposal is the Alternative B, where the plant is closed and the equipment removed, but its buildings and structures remain in place. This scenario both unacceptably removes an important</p>	<p>As described in Section 3.20 (Cumulative Impacts) of the Final EA, after BRF is decommissioned and deconstructed, there is an option for the site to utilize synchronous condensers, which would provide additional means for transmission system stability. Synchronous condensers help provide stability to the transmission systems' inertia and voltage support that are lost as the coal units are retired and replaced with much smaller generating sources with less mass. If synchronous condensers are installed and utilized at the BRF site, the turbine bay of the powerhouse and the intake structure would be retained, as described in Table 3-20 of the Final EA, and potentially utilized for these units. More studies would need to be conducted to determine the viability of this option.</p>

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			economic resource and prevents its timely replacement.	If the synchronous condensers project is determined to be viable, a separate NEPA review would be conducted.
12	Warren L. Gooch, Mayor	City of Oak Ridge	<p><i>[This comment was provided in December 2018 during public review of the Potential Bull Run Fossil Plant Retirement Draft EA. Mark Watson (Oak Ridge City Manager) re-submitted the comment on behalf of the City of Oak Ridge during public review of the BRF Decontamination and Deconstruction Draft EA.]</i></p> <p>The Bull Run site of several hundred acres has access to rail, highway transportation and barge facilities. It has a ready supply of water for both consumption and cooling and is obviously positioned such that high levels of electric power is available. Experience at other industrial sites in Oak Ridge as part of Department of Energy (DOE) reindustrialization has demonstrated a strong need for the work to prepare a site such as the Bull Run plant for all services, leveling and soil stabilization. A consulting study for the return of the site to private sector hands and a review of usage possibilities for the site should be coordinated with state agencies such as TDOT, TDEC and the U.S. Corps of Engineers. Open and frequent inclusion of the City of Oak Ridge and Anderson County is a must.</p> <p>For such a site to be shut and left unusable, occupied by abandoned buildings, mountains of coal ash and rusting facilities is a waste and a significant</p>	<p>TVA actions to decommission, deactivate and decontaminate the site would minimize environmental and safety risks consistent with applicable laws and regulations. All disturbed areas would be covered with topsoil and seeded to establish a permanent vegetative cover or otherwise permanently stabilized.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			change to TVA's commitment to the Valley and its surrounding communities.	
13	Warren L. Gooch, Mayor	City of Oak Ridge	<p><i>[This comment was provided in December 2018 during public review of the Potential Bull Run Fossil Plant Retirement Draft EA. Mark Watson (Oak Ridge City Manager) re-submitted the comment on behalf of the City of Oak Ridge during public review of the BRF Decontamination and Deconstruction Draft EA.]</i></p> <p>Bull Run plant is located on a critical segment of roadway from Clinton Highway, through Claxton, crossing in to Oak Ridge on Edgemoor Road. Significant road improvements are anticipated through this corridor and said ROWs and dedications for bridge rebuilding must be participated in by TVA with grade separation from the adjacent railroad. These cumulative impacts of the closure must be accounted for in any assessment: financial Impacts to local governments, sensible environmental remediation, roadway and ROW enhancements, railroad integration for industrial use, removal of facilities and an established timeline for implementation for completion. All transportation issues should be prioritized on the regional Transportation Improvement Plan (TIP).</p>	<p>Cumulative impacts of the closure of BRF were assessed in 2019 Potential Bull Run Fossil Plant Retirement Final EA.</p> <p>Cumulative impacts for the decontamination and deconstruction of BRF are discussed in Section 3.20 of the Final EA and include moderate impacts to transportation and environmental justice communities from transport of borrow material or demolition debris. TVA would minimize impacts with use of best management practices identified in Section 2.3.2 of the Final EA and would mitigate any congestion with a traffic mitigation plan, as needed.</p>
14	Warren L. Gooch, Mayor	City of Oak Ridge	<p><i>[This comment was provided in December 2018 during public review of the Potential Bull Run Fossil Plant Retirement Draft EA. Mark Watson (Oak Ridge City Manager) re-submitted the comment on behalf of the City of Oak Ridge during public review of</i></p>	<p>Closure of BRF was evaluated in the Potential Bull Run Fossil Plant Retirement Final EA, published in February 2019. The TVA Board of Directors approved the retirement of BRF by December 2023. Please see responses to Comment #10, Comment #11, and Comment #12 regarding the alternatives evaluated in this document.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p><i>the BRF Decontamination and Deconstruction Draft EA.]</i></p> <p>Although it is our preference that Bull Run continue in its role as a productive employer and power resource, should the decision be made to permanently close the facility, the City of Oak Ridge strongly urges TVA to remove all abandoned structures, remove the coal ash to the degree possible and clear the land for Industrial use.</p> <p>Redevelopment of the site could eventually more than offset the economic damage to Oak Ridge and Anderson County that closing of the Plant will cause. It will make productive use of the resources of our region without the significant loss of agricultural or recreational lands and, most importantly, it will demonstrate TVA's true commitment to the wellbeing of our community.</p> <p>Thank you for your consideration of these remarks and we look forward to being a part of the process as it moves forward.</p>	
15	Douglas White	EPA	<p>Hazardous Materials and Wastes: BRF is currently a small-quantity generator of hazardous wastes. Demolition of BRF will potentially require the temporary production of large quantities of several regulated wastes including asbestos, lead, mercury, polychlorinated biphenyls, and volatile organic compounds. The Draft EA states that decontamination and demolition would limit the potential for contamination of groundwater from these sources and would have a positive impact on groundwater</p>	<p>Concur. The following text has been added to Section 2.3.2 and Section 3.11.2 of the Final EA, "TVA would use BMPs consistent with applicable laws and regulations, such as use of secondary containment for storage and handling of petroleum, oils, and lubricants (POL)" and "Efforts would be made to divert any recyclable materials (e.g., concrete, steel, and asphalt) away from landfills and repurpose the material when possible".</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>quality relative to the No-Action Alternative. Therefore, the impact to groundwater would be minor (Section 3.2.2.1 Environmental Consequences). The EPA understands that decontamination and demolition in support of the project will ensure that Resource Conservation and Recovery Act-regulated solid wastes generated are disposed of in accordance with federal and state regulations. The TVA indicates that Alternative A could create approximately 7,000-cubic yards of demolition debris, 9,000-cubic yards of asbestos-containing materials, and approximately 55,000-net tons of scrap metal, that would be hauled offsite to be recycled or disposed at an appropriate facility in accordance with all federal, state, and local laws and regulations.</p> <p>Recommendation: For the protection of the Melton Hill Reservoir, Waters of the United States (WOTUS), and as required by the Clean Water Act, the EPA recommends the use of secondary containment where storage and handling of Petroleum, Oils, and Lubricants (POL) will take place. Efforts should be made to divert any recyclable materials such as concrete, steel and asphalt away from landfills and repurpose the material instead.</p>	
16	Douglas White	EPA	Air Quality and Climate Change: The area of Anderson County, TN, in which BRF is located is in Maintenance Status with the National Ambient Air Quality Standards for Ozone and Particulate Matter (PM). The TVA identifies temporary fugitive PM produced by demolition of BRF as a	Concur. The following text has been added to Section 3.10.2 of the Final EA, "Additionally, measures to reduce diesel emissions would include, when practical, proper maintenance of vehicles, switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and

Comment Number	Name	Organization / Affiliation	Comment	Response
			potential impact to air quality. Mitigation measures for fugitive PM are also identified (Section 3.10 Air Quality). Overall, the EPA understands that coal plant retirements provide a net benefit to regional air quality. Recommendation: In concurrence with the air quality improvement measures identified by the Draft EA, the EPA recommends implementing measures to reduce diesel emissions, such as switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training or contracting policies. We also encourage controlling fugitive PM by watering or the application of other controlled materials.	reducing idling through operator training or contracting policies". Section 3.10.2 of the Final EA includes a description of BMPs that TVA would use for minimization of potential fugitive dust, including wetting equipment, covering waste or debris piles, using covered containers to haul waste and debris, and wetting or applying other controlled materials to unpaved vehicle access routes during hauling.
17	Douglas White	EPA	Environmental Justice: The project goal is to decontaminate land and remove soon-to-be retired coal plant infrastructure. Data from the EP's EJScreen (https://www.epa.gov/ejscreen) mapping tool shows that people over age 65 comprise 28% of the population within close proximity to the project area. This population is in the 87th and 86th percentiles in the state and the United States, respectively. The Draft EA states that nearest single-family residential areas are located along Edgemoor Road approximately 140 feet from the northwest boundary of the project area (Section 3.1.1.1 Land Use). The TVA has also identified low-income communities near the project area in its Environmental Justice	As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations. This team would continue to identify key regions and communities, and community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed. According to the analysis in the EA, impacts associated with the proposed action would be short term and minor for both environmental justice communities and non-environmental justice communities, and TVA

Comment Number	Name	Organization / Affiliation	Comment	Response
			(EJ) analysis and initiated the Bull Run Community Outreach Team (Section 3.19.2.1.2). Recommendation: The EPA encourages the TVA to continue coordination efforts with communities near the project area to address identified impacts and to disseminate project status updates. The EPA also recommends that the TVA ensure that populations near the project site that may bear greater impacts from potential air and noise emissions be protected through mitigation measures to the greatest extent practicable.	would ensure that BMPs are implemented to protect these communities in compliance with all applicable federal, state, and local laws and regulations.
18	Douglas White	EPA	Water Resources and Wetlands: The Draft EA states that the TVA will acquire a National Pollutant Discharge Elimination System construction stormwater permit and implement a stormwater pollution prevention plan to mitigate effects from the temporary disturbance of soils during decontamination and demolition. Best Management Practices (BMP), as described in the TVA's BMP manual and the Tennessee Department of Environment and Conservation Erosion and Sediment Control Handbook, will be used to avoid contaminating surface water near and downstream of construction sites. Streams, wetlands, and floodplains are present at the BRF reservation. The EPA understands that streams, wetlands, and WOTUS will not be impacted by Alternative A or B and a 30-foot buffer from WOTUS will be enforced by the TVA (Section 2.3.2 Best Management Practices). The EPA also understands that in-water work and work	To ensure pollutants do not enter Waters of the U.S., TVA would comply with all appropriate state and federal permit requirements in accordance with all applicable federal, state, and local laws and regulations, including monitoring of surface water industrial construction-related stormwater discharges and maintenance of appropriate BMPs as listed in The Tennessee Erosion and Sediment Control Handbook and outlined in the project-specific SWPPP.

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			<p>within the 100-year floodplain will be avoided except for the infill of water intake and discharge structures (Section 3.4 Floodplains).</p> <p>Recommendation: The EPA recommends monitoring surface water discharges in accordance with the TVA's stormwater and construction stormwater permits, and maintenance of BMPs, to ensure pollutants do not enter WOTUS.</p>	
19	Douglas White	EPA	<p>Biological Resources: Section 3.9 of the Draft EA indicates that the TVA has completed consultation with the U.S. Fish and Wildlife Service (FWS) for the proposed alternatives. The FWS identified Threatened or Endangered Species (TES) with the potential to occur within and near the BRF reservation, including several bat and bird species. Although BRF is primarily industrialized, existing structures may provide roosting locations for bats. During roosting seasons, these structures will be surveyed prior to demolition and coordination made with the FWS. No critical habitats exist within 3-miles of BRF. Recommendation: The EPA principally defers to the FWS regarding compliance with the Endangered Species Act and understands that the TVA will implement the results of their programmatic consultation with the FWS for the protection of TES.</p>	<p>As described in Section 2.3.1 (Mitigation Measures) and Section 3.9.2 of the Final EA, state- and federally listed bats have the potential to be affected by the proposed actions. A number of activities associated with the proposed action are addressed in TVA's 2018 programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with the ESA Section 7(a)(2). This programmatic consultation was updated in May 2023 to take into account the recent status change for the federally listed northern long-eared bat. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures that would be implemented as part of the proposed action. With adherence to identified conservation measures, survey requirements, and avoidance/consultation requirements, proposed actions are not likely to adversely affect gray bat, Indiana bat, and northern long-eared bat. Proposed actions would not jeopardize the continued existence of the tricolored bat. Proposed actions are not likely to impact populations of little brown bats.</p>
20	Lesley Cusick	RSI EnTech, LLC	<p>The following comments are submitted on behalf of RSI.</p> <p>In the matter of the Bull Run Fossil Plant Decontamination and Deconstruction Draft Environmental Assessment, RSI would like</p>	<p>Please see response to Comment #1.</p>

BRF Decontamination and Deconstruction

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			<p>to offer its support for the TVA's preferred alternative, the full demolition of all structures. The beneficial impacts of this alternative are diverse and would serve natural resources such as groundwater quality, aquatic life, and regional air quality. TVA's preferred alternative would also meet compliance obligations and incorporate best management practices that provide over and above enhancements to natural resources such as the Clinch River, its floodplain, and associated wetlands. The proposed restoration of native vegetation, where applicable, can have far reaching benefits, including to the support of pollinating insects. The spirit of NEPA will also be met by considering the "productive harmony" of man and the environment and those direct and indirect impacts experienced by neighboring properties and the many users of Haw Ridge Park through the proposed action which will include the removal of the stacks. RSI also supports the economically beneficial reuse opportunities that will be enabled by implementation of the preferred alternative. Not only can the property be reused for a variety of purposes that can return an investment to ratepayers, it can meet the needs of a growing population with diverse needs and interests. The preferred alternative is a means of job creation both in its execution and in the future development that may occur. The reuse of a brownfield is a win-win for the environment and the community. TVA and its public would be well served by following</p>	

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			<p>the long-term and highly successful beneficial reuse approach taken by the Department of Energy and its contractor community in implementing the Reindustrialization Program at the East Tennessee Technology Park. TVA can draw from a ready pool of demolition and remediation workers trained in exactly the skillset needed to move forward with the preferred alternative. Opportunities for coordination with DOE and its team may also be able to be pursued, bringing decades of experience in beneficial reuse to the TVA community.</p> <p>Thank you for your consideration of these comments.</p>	
21	Adam Hughes, Amanda Garcia, Axel Ringe, Amy Kelly, Brianna Knisley	Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club	<p>Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices and Sierra Club write to express concern about the potential for the Bull Run decontamination and deconstruction project (Project) to prematurely and arbitrarily limit the options available for construction debris and coal ash disposal, resulting in cumulatively significant impacts to adjacent and nearby low-income environmental justice communities. We are also concerned about the Project's potential to result in individually and cumulatively significant impacts on threatened and endangered bats and their habitat, including the northern long-eared bat, which the U.S. Fish & Wildlife Service (FWS) has recently determined is endangered rather than threatened, and the tricolored bat, which FWS has</p>	<p>Please see responses to Comment #22-2 and Comment #23-1 below, regarding cumulative impacts of coal combustion residuals (CCR) management and other actions at or in the vicinity of the Bull Run Fossil Plant. Although the cumulative impacts of CCR management actions are assessed in Section 3.20 of the EA, CCR management actions at Bull Run Fossil Plant site are out of scope for this project and would be covered under a separate environmental review as appropriate.</p> <p>Although impacts of the removal of the TVA owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.</p> <p>To avoid potential impacts to listed bats and other sensitive species, TVA would conduct extensive presence/absence surveys at least one month prior to demolition of structures to determine if migratory birds</p>

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			<p>proposed to list as endangered. The Draft Environmental Assessment (Draft EA) does not adequately disclose and analyze impacts to environmental justice communities and endangered species. Without adequate disclosure and analysis, TVA's determination that the Project will not significantly affect the environment does not have a reasoned basis. See 40 C.F.R. § 1501.3. TVA must disclose and analyze these impacts in an Environmental Impact Statement with a broader range of reasonable alternatives, including alternatives that examine rail transport of deconstruction debris, coal ash and fill material to avoid impacts to environmental justice communities. TVA should also identify project-specific measures to avoid impacts to threatened and endangered bat species.</p>	<p>or listed bat species are utilizing these buildings. In addition, a number of activities associated with the proposed action were addressed in TVA's programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with the ESA Section 7(a)(2) originally completed in April 2018 and updated in May 2023. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures.</p> <p>Based on the findings in the EA, implementing the Bull Run Fossil Plan Decontamination and Deconstruction project would not result in significant effects to the environment. Accordingly, an environmental impact statement is not required.</p> <p>Potential impacts to environmental justice communities associated with truck transport of borrow material or demolition debris (i.e., noise, dust) would be minor, localized, and temporary, as they would occur only during the construction period of the project and would be minimized through BMPs. In addition, if other projects in the vicinity of BRF occur concurrently with the proposed action, TVA contractors would be directed to select borrow sites and haul routes that are not within identified environmental justice communities when possible. This mitigation measure has been added to Section 2.3 of the Final EA.</p>
22-1	Adam Hughes, Amanda Garcia, Axel Ringe, Amy Kelly, Brianna Knisley	Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian	<p>The Draft EA arbitrarily limits options available for disposal of construction debris and coal ash, unnecessarily subjecting environmental justice communities to significant traffic, air pollution, noise and other impacts. TVA acknowledges in the Draft EA that the Project has the potential to have moderate cumulative impacts on low-income</p>	<p>Please see responses to Comment #21. Section 3.20 (Cumulative Impacts) and Table 3-20 of the Final EA list several past, present, and reasonably foreseeable future actions in the vicinity of the proposed project that could contribute to cumulative effects, including closure of TVA's coal combustion residuals (CCR) units at BRF. TVA is evaluating its CCR units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth</p>

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		Voices, and Sierra Club	<p>environmental justice communities near the Bull Run Plant, including “an increase in traffic, noise, exposure to fugitive dust, and exhaust emissions from the trucks used to transport the borrow material and demolition debris.” TVA further acknowledges that activities it may undertake to close its leaking, unlined coal ash pits may contribute to these cumulative impacts on environmental justice communities. But TVA dismisses these impacts of the Project on people who have long been harmed by TVA’s operations at Bull Run. NEPA requires more. First, TVA must acknowledge that its own activities have contributed to and continue to contribute to the environmental burdens borne by environmental justice communities near the Bull Run Plant. TVA has operated the Bull Run Plant for more than fifty years, spewing air pollution into the surrounding communities and discharging toxic water pollution into the Clinch River. Toxic coal ash remains in leaking, unlined pits built over blue line streams, including Worthington Branch, and immediately adjacent to the Clinch River and Bull Run Creek.</p> <p>How TVA handles construction debris and coal ash disposal from the Project has the potential to exacerbate pollution impacts in communities already overburdened by decades of TVA’s pollution. Yet rather than consulting the potentially affected communities about alternatives, TVA simply asserts that it might mitigate the purportedly “unavoidable” impacts to some</p>	<p>in the TDEC Commissioner’s Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. The CARA Plan would be subject to a public notice and comment period. TDEC must approve the CARA Plan, including the methods of closure for the CCR units at BRF. TVA would perform any additional environmental reviews if needed.</p> <p>As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations. This Team would continue to identify key regions and communities, and key community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.</p> <p>According to the analysis in the EA, impacts associated with the proposed action alternatives would be short term and minor for both environmental justice communities and non-environmental justice communities, and TVA would ensure that BMPs are implemented to protect these communities in compliance with all applicable federal, state, and local laws and regulations.</p> <p>The addition of deconstruction traffic associated with proposed actions for this project is minor, with</p>

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			<p>extent. Specifically, TVA states that it might mitigate the additional harms by adopting a handful of best management practices, or, perhaps—in TVA’s discretion—decide not to select borrow sites or haul routes through environmental justice communities. TVA’s noncommittal suggestion that it might avoid borrow sites or haul routes through environmental justice communities is belied by its description of Alternative A, in which TVA expressly states that the disposal site for construction debris and the location of borrow pits will be determined by “the contractor.” How can TVA avoid impacts when it delegates the crucial decisions to “the contractor”?</p>	<p>maximum forecasted traffic increases of 1.3 percent on area roadways. It is assumed that haul routes would use arterial or interstate roadways whenever possible. Therefore, the impact of transport of demolition debris to the surrounding roadway network would be minor and temporary.</p> <p>Additional discussion has been added to Section 3.12.2 of the Final EA to explain that TVA identified factors used to determine feasible modes of transport for hauling demolition debris and recyclable materials offsite and for transporting borrow to BRF. Those factors include volume of material; distance from BRF to a permitted landfill or borrow site; availability of the infrastructure to manage the transfer of material; cost effectiveness; and schedule. Rail transport could require the installation of loading and/or unloading infrastructure at BRF and/or at or near the landfill/disposal facility/borrow site, and it would require a rail transportation service in the form of a rail carrier. At landfills, material would need to be offloaded from the train to a stockpile area prior to being placed on trucks and conveyors or loaders to load the debris onto trucks and infrastructure to support trucking to the landfill site. The necessary environmental and construction permits to construct these facilities could easily take 18 to 24 months to acquire, if the said landfills and borrow sites are amenable to such additions. TVA determined that due to the closure schedule and the costs and environmental impacts associated with development and permitting of the required loading and unloading infrastructure, use of rail to transport demolition debris from and borrow material to BRF would not be feasible.</p> <p>However, mode of transport for scrap metal and other recyclable materials would be determined by the</p>

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				<p>demolition contractor and could include transport by truck and/or by rail. Scrap metal and other recyclable materials, unlike demolition debris, would not require the installation of loading/unloading infrastructure for rail transport; these materials can be loaded via excavator and unloaded via excavator and/or magnet.</p> <p>Although impacts of the removal of the TVA owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives in this EA, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.</p> <p>In addition, a mitigation measure has been added to Section 2.3.1 of the Final EA to address potential cumulative impacts to environmental justice communities. This measure states that if other projects in the vicinity, such as those listed in Table 3-20 of the Final EA, occur concurrently with the proposed action, careful consideration would be made by the contractor to identify and select haul routes and borrow site locations that are not within environmental justice communities, when possible.</p>
22-2	Adam Hughes, Amanda Garcia, Axel Ringe, Amy Kelly, Brianna Knisley	Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club	In addition, the Project appears to eliminate at least one potential alternative for disposal of construction debris and coal ash without disclosing and evaluating it. Specifically, the Draft EA acknowledges that the Bull Run Plant is served by railway. But there is no discussion in the Draft EA of the potential to use rail to transport some or all of the construction debris, reducing traffic, noise, and truck pollution on environmental justice communities. There is similarly no discussion of the potential to use rail to transport borrow material to the	As described in Section 3.12.2 of the Final EA, use of rail to transport demolition debris from BRF would not be feasible. However, mode of removal of scrap metal and other recyclable materials would be determined by the demolition contractor and could include transport by truck and/or rail. Although impacts of the removal of the TVA owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives in this EA, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.

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			<p>Project site. In fact, the Project includes removing TVA-owned rail infrastructure, without any discussion of how this might limit alternatives that incorporate rail transport to reduce impacts on environmental justice communities. TVA's omission of any consideration of the use of rail, and potentially its plan to remove on-site rail infrastructure, could also arbitrarily limit alternatives for the permanent disposal of the millions of tons of toxic coal ash currently sitting in leaking unlined pits at the Bull Run Plant. TVA's coal ash is leaching toxic contaminants into groundwater and must be moved to safe, dry lined storage. But it must be done equitably. In 2017, TVA decided it would build a new CCR landfill on land adjacent to the Plant, but it has rightly faced outcry from low-income environmental justice communities that would live next door to that landfill. Coal ash can be moved to a disposal site by rail, and this alternative should be considered by TVA and the Tennessee Department of Environment and Conservation. TVA should not take any action as part of this Project that would prematurely eliminate the potential for disposal of coal ash by rail. Instead, TVA should broaden the alternatives examined for this Project to also include rail transport of construction debris and borrow material. TVA owes it to the environmental justice communities affected by the Project to examine a broader range of options, including rail transport, to avoid exacerbating and prolonging the 50-plus</p>	<p>As discussed in Section 3.20.4.5, the Final Ash Impoundment Closure Programmatic Environmental Impact Statement Part I (Chapter 2) and Part II – Site-Specific NEPA Review: Bull Run Fossil Plant (Section 2.2.1.2) identified factors to determine whether transport of coal combustion residuals (CCR) by rail would be feasible.</p> <p>Due to the costs and environmental impacts associated with development and permitting of the required loading and unloading infrastructure, use of rail to transport demolition debris and CCR from BRF to landfills and borrow material to BRF would not be feasible.</p> <p>TVA generally disagrees with the commenters' overall characterization of CCR units and other related activities. TVA is evaluating its CCR units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth in the TDEC Commissioner's Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. TDEC must approve the CARA Plan, including the methods of closure for the CCR units at BRF. TVA would perform any additional environmental reviews if needed.</p> <p>Additionally, the Bull Run CCR impoundment closure was previously analyzed in the NEPA reviews described in Section 1.4 of the Final EA.</p>

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			years of pollution burdens imposed by TVA's activities.	
23-1	Adam Hughes, Amanda Garcia, Axel Ringe, Amy Kelly, Brianna Knisley	Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club	<p>The Draft EA fails to adequately analyze impacts to threatened and endangered bats.</p> <p>TVA cannot begin any activity associated with the Project until the agency satisfies its obligations under Section 7 of the Endangered Species Act ("ESA"), in light of the northern long-eared bat's (<i>Myotis septentrionalis</i>) new endangered status and related new information about the species. TVA must reinstate consultation with the United States Fish and Wildlife Service ("FWS") regarding the April 2018 programmatic biological opinion under which TVA purports to be operating and obtain a sufficient incidental take statement. Alternatively, because it is clear that the Project may affect the northern long-eared bat, TVA will be required to initiate project-specific formal consultation. TVA must also satisfy its obligations under the ESA concerning the tricolored bat (<i>Perimyotis subflavus</i>), which is proposed to be listed as endangered. At a minimum, TVA must address whether it is required to confer with FWS. However, TVA and FWS should proactively consider the tricolored bat during reinstated programmatic consultation or in project-specific consultation for the Project since the tricolored bat is likely to be listed before the Project is complete. The ESA embodies "a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies."</p>	<p>As described in Section 3.9 (Threatened and Endangered Species) of the EA, TVA used the USFWS Information for Planning and Consultation online tool, to get a list of species and critical habitats that may be present in the action area and determined that state- and federally listed bats have the potential to occur in the Project Area and may be affected by the proposed actions. As discussed in Section 2.3.1 (Mitigation Measures) and Section 3.9.2 of the EA, a number of activities associated with the proposed action are addressed in TVA's programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with the ESA Section 7(a)(2), originally signed in 2018. For those activities with potential to affect federally listed bats, TVA committed to implementing specific conservation measures that would be implemented as part of the proposed action. This programmatic consultation is a formal consultation. In response to the listing of the northern long-eared bat as endangered, TVA reinstated consultation on the programmatic consultation, and USFWS issues an updated Biological Opinion on May 1, 2023.</p> <p>As outlined in Section 2.3.1 (Mitigation Measures) of the EA, TVA would conduct extensive presence/absence surveys at least one month prior to demolition of structures to determine if migratory birds or listed bat species are utilizing the buildings. If colonies of bats or other protected wildlife species are observed in buildings proposed for demolition, TVA would strive to (and in most cases anticipates being able to) accommodate seasonal modification or removal of those buildings/structures. Risk to human safety, however, would take priority. For project-</p>

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			<p>Section 7 is “[t]he heart of the ESA,” and commands that each federal agency must “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.” To implement this mandate, the ESA establishes a consultation mechanism that “requires a federal agency to complete formal consultation with FWS if the agency determines that any action on its part ‘may affect’ any listed species or critical habitat.” The threshold for triggering the formal consultation requirement—the “may affect” standard—is low. Indeed, “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement.” The Project plainly meets the “may effect” threshold and triggers formal consultation. As noted in the Draft EA, the Project site includes potential habitat for both northern long-eared bat and tricolored bat. The tricolored bat has been found within three miles of the Project site, and the northern long-eared bat has been found within Anderson County.</p>	<p>specific cases in which TVA is unable to accommodate seasonal modification or removal, and federally listed bat species or other protected species are present, TVA would consult with the appropriate state and federal agencies to determine the best approach in the context of the project-specific circumstance.</p> <p>No caves for gray bat, Indiana bat, little brown bat, northern long-eared bat, or tricolored bat exist in the project area or would be impacted by the proposed actions. No tree removal is anticipated in association with the proposed action alternatives. Therefore, no forested summer roosting or foraging habitat for Indiana bat, little brown bat, northern long-eared bat, or tricolored bat would be impacted. No bats or evidence of bats was observed during preliminary building surveys. With adherence to identified conservation measures, survey requirements, and avoidance/consultation requirements, TVA has made the determination that proposed actions are not likely to adversely affect gray bat, Indiana bat, and northern long-eared bat. TVA has also determined that proposed actions would not jeopardize the continued existence of the tricolored bat, nor would actions be likely to impact populations of the little brown bat. As mentioned above, actions associated with this project have already been addressed in TVA’s Bat Programmatic Consultation with the USFWS which satisfies Section 7 ESA compliance regarding potential impacts to federally listed threatened and endangered species. Due to TVA’s non-jeopardy determination for tricolored bat, there is no requirement for Section 7 conference for this proposed endangered species.</p>
23-2	Adam Hughes, Amanda Garcia,	Southern Environmental Law Center, Statewide	TVA’s zoologists found that vacant buildings on the Project site could provide roosting for both bat species, and the Draft EA also states that the Project site includes	<p>Please see response to Comment #23-1.</p> <p>In response to the reclassification of the northern long-eared bat to endangered, TVA reinitiated consultation</p>

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	Axel Ringe, Amy Kelly, Brianna Knisley	Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club	<p>foraging and summer roosting habitat for both bat species “in and around trees, the Clinch River/Melton Hill Reservoir, and in wet low-lying areas south of the switchyard.” Although the Draft EA states the Project will not include tree-clearing, TVA acknowledges several Project activities that “may adversely affect federally listed bats,” including, among other things, drilling, blasting, grubbing, grading, acquisition and use of fill and borrow material, and demolition of existing structures. These activities may negatively impact northern long-eared bat and tricolored bat habitat and local populations writ large.</p> <p>TVA arbitrarily concludes that measures it has identified with reference to the 2018 Programmatic Bat Biological Opinion will adequately protect the northern long-eared bat and the tricolored bat. Not so. Although the northern-long eared bat was listed as threatened under the ESA at the time of that programmatic consultation, potential impacts to the species were analyzed pursuant to regulations issued under section 4(d) of the ESA, and those regulations contained less stringent protections than will apply to northern long-eared bats now given the species’ recent reclassification as endangered. Therefore, in that programmatic consultation, TVA did not account for impacts to northern long-eared bats from types of take which were exempted by the 4(d) regulations, and the biological opinion issued by FWS at the culmination of that consultation process did</p>	<p>with the USFWS, and the USFWS issued an updated Biological Opinion and incidental take statement on May 1, 2023. At present, the tricolored bat is a proposed endangered species under ESA. Due to TVA’s non-jeopardy determination for tricolored bat, there is no requirement for Section 7 conference.</p>

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			not include an incidental take statement for those activities. Further, the 2018 Programmatic Bat Biological Opinion did not evaluate potential take of the tricolored bat at all.	
23-3	Adam Hughes, Amanda Garcia, Axel Ringe, Amy Kelly, Brianna Knisley	Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club	The Draft EA also fails to disclose and analyze other reasonably foreseeable TVA projects that may result in cumulatively significant impacts to federally listed bat species, including northern long-eared bat, as well as state-listed and federally-proposed tricolored bat. These projects include the proposed retirement and replacement of the Kingston Fossil Plant, as well as the retirement and replacement of the Cumberland Fossil Plant. Both of these projects—including the connected actions to construct nearly 200 miles of new pipeline—may result in impacts to local bat populations, including through significant tree clearing activities. Because of its relative geographic proximity, the retirement and replacement of the Kingston Fossil Plant, in particular, has the potential to impact local bat populations. Despite the ongoing NEPA reviews for these projects by TVA and the Federal Energy Regulatory Commission, the Draft EA does not evaluate cumulative impacts with respect to threatened and endangered species at all. The Draft EA's failure to disclose and analyze the cumulatively significant impacts associated with the Project and other reasonably foreseeable projects underscores the importance of correcting TVA's arbitrary and unlawful reliance on the 2018 Programmatic Bat Biological Opinion.	<p>A cumulative impact analysis must consider the potential impact on the environment that may result from the incremental impact of a project when added to other past, present and RFFAs (40 CFR § 1508.7). Cumulative impact analysis is limited to those resource issues potentially adversely affected by project activities. Because TVA has made the determinations that proposed actions are not likely to adversely affect gray bat, Indiana bat, and northern long-eared bat; will not jeopardize the continued existence of the tricolored bat; and is not likely to affect populations of the little brown bat, cumulative impacts of this project in combination with other past, present, and reasonably foreseeable future actions to these species are not expected.</p> <p>Please see response to Comment #23-1 and Comment #23-2 regarding Section 7 ESA compliance.</p>

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			It is imperative that TVA and FWS ensure both the northern long-eared bat and tricolored bat are afforded the procedural and substantive protections they are due under the ESA. Addressing the shortcomings in TVA's current analysis will require supplementation of the Draft EA, and trigger the need to prepare an EIS under NEPA given the Project's individual and cumulative impacts to listed species.	
24	Jennifer Tribble	TDEC	<p>Air Pollution Control</p> <p>TDEC recommends TVA address air emissions from the operation and idling of mobile sources, evaluate alternatives to open burning for the disposal of uprooted trees and other vegetation, and minimize the generation of fugitive dust from the project through best management practices. TDEC encourages TVA to incorporate the state of Tennessee's fugitive dust and open burning requirements in the final EA.</p>	<p>TVA acknowledges that the state of Tennessee's regulations on fugitive dust and open burning should be considered as part of the Bull Run Fossil Plant Decontamination and Deconstruction project and would comply with these regulations as appropriate. Section 3.10.2.1 of the EA discusses BMPs that would be adhered to for minimization of fugitive dust and notes that the proposed project would be "subject to federal, state (Tennessee Division of Air Pollution Control), and county (Anderson County) regulations which impose permitting requirements and specific standards for expected air emissions". We have added a reference to the TDEC Rule 1200-03-08 for Fugitive Dust and a measure to reduce idling through operator training or contracting policies to this section in the Final EA. TVA does not anticipate that open burning would be conducted as part of the project.</p>
25	Jennifer Tribble	TDEC	<p>Water Resources</p> <p>TDEC notes that decommissioning of BRF does not include closure of the CCR impoundments. TVA has existing NPDES and construction stormwater permits. Modifications to the Multi-Sector General Stormwater Permit's Storm Water Pollution Prevention Plan (SWPPP) would be required to reflect the closure changes. A project specific construction stormwater</p>	<p>Section 1.7 of the Final EA lists all necessary permits for the proposed action, including the construction stormwater general permit and NPDES permit, modifications to the Storm Water Pollution Prevention Plan (SWPPP) and best management practices (BMP) plan, and Section 401 Water Quality Certification. Section 3.3.2 and Section 3.4.2 of the EA describe the proposed project and the avoidance of streams and the potential impacts to floodplains.</p>

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			permit and Surface Water Protection Plan (SWPP) will also be required.	
26	Jennifer Tribble	TDEC	<p>Solid Waste Management</p> <p>TDEC confirms that the assessment in the Draft EA already reflects that any wastes associated with the proposed activities in Tennessee will be managed in accordance with the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee. In some cases, the Rules and Regulations of the State of Tennessee, which has delegated authority from EPA, are more stringent than federal requirements pertaining to waste management. Such wastes include any materials destined for disposal.</p> <p>TDEC notes that Tennessee's Solid Waste Management program only dates back to 1972; there could be disposal in this area that predates the program of which TDEC is unaware, creating a potential legacy solid waste site. Any wastes which may be unearthed during the project would be subject to a hazardous waste determination and must be managed appropriately.</p> <p>The assessment also describes (Section 3.11.2. "Environmental Consequences" pp 62) that prior to demolition activities, "hazardous waste, PCBs, ACM, lead paint, and universal waste would require special removal, handling, labeling, and disposal by appropriately trained and licensed personnel and contractors." These materials would need to be disposed of at a facility designed and permitted to receive such hazardous materials.</p> <p>TDEC appreciates the opportunity to</p>	<p>TVA has included the statement in Section 3.11.2 of the EA that "These materials would need to be disposed of at a facility designed and permitted to receive such hazardous materials". TVA has added the following statement to Section 3.11.2 of the Final EA: "Any unknown wastes which may be unearthed during the project would be subject to a hazardous waste determination and must be managed appropriately."</p>

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			comment on this Draft EA. Please note that these comments are not indicative of approval or disapproval of the proposed action, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.	
27	David Gilbert	TDOT	Upon reviewing the Draft EA for the Bull Run Decontamination and Deconstruction Project, the Strategic Transportation Investments Division (STID) within TDOT would like to make the following comments. Given that Alternative A and B both involve excavation up to three feet below final grade, coordination will need to occur with TDOT if any easements are required within state ROW. In addition to this, it is also recommended that continual coordination occur with TDOT if future adjustments are planned to the existing access points in order to assure these are approved by TDOT's Region 1 Traffic Office and to assure these are incorporated into the active TDOT widening project along State Route 170 (PIN 124121.00).	TVA does not anticipate for the BRF Decontamination and Deconstruction project that there would be any changes to BRF access roads or that work would extend into state ROW and require easements. TVA would coordinate with TDOT as needed.
28	Axel Ringe	Tennessee Chapter Sierra Club	The Tennessee Chapter Sierra Club appreciates the opportunity to comment on the draft Environmental Assessment for the Bull Run Decontamination and Deconstruction project. The Chapter is a co-signer of the Southern Environmental Law Center's comment letter on this same issue, which we wholly agree with and support. However, we have some additional concerns we want to express here.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. As described in Section 3.19.2.1.2 of the EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations. This Team would continue to identify key regions and communities, and key community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local

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			TVA emphasizes economic development of the site, but makes no mention of repurposing the site for social development. The EAR makes a number of references to making the land suitable for economic development, but there is not as much emphasis on social development and community desires. The future of the land should be based on the desires of residents of Claxton and Anderson County and should be made in consultation with the Anderson County government. It should not only take economic factors into account.	leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.
29	Axel Ringe	Tennessee Chapter Sierra Club	TVA should reject Alternative C and adopt Alternative B only in consultation with local officials and the local community. Community members have spoken out repeatedly against leaving plant structures in place, as it would keep the land from reuse and impair long-term property values. TVA should rule out Alternative C as an option, and any structures left in place under Alternative B should be acceptable to the residents of Claxton and the Anderson County government.	<p>Section 2.1.3 (Description of Alternative C - No Action Alternative) states that Alternative C is not a reasonable alternative because it does not satisfy elements of the project purpose and need. However, being the No Action Alternative, it was discussed in the EA and used as a basis for comparison to the Action Alternatives (Alternatives A and B).</p> <p>Ongoing and future consultation efforts with the local community and government officials are discussed in the response to Comment #28.</p> <p>Regarding structures left in place under Alternative B, as described in Section 3.20 (Cumulative Impacts) of the Final EA, after BRF is decommissioned and deconstructed, there is an option for the site to utilize synchronous condensers, which would provide additional means for transmission system stability. Synchronous condensers help provide stability to the transmission systems' inertia and voltage support that are lost as the coal units are retired and replaced with much smaller generating sources with less mass. If synchronous condensers are installed and utilized at the BRF site, the turbine bay of the powerhouse and</p>

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				<p>the intake structure would be retained, as described in Table 3-20 of the Final EA, and potentially utilized for these units. More studies would need to be conducted to determine the viability of this option.</p> <p>If the synchronous condensers project is determined to be viable, a separate NEPA review would be conducted.</p>
30	Axel Ringe	Tennessee Chapter Sierra Club	<p>TVA should leave the rail infrastructure in place</p> <p>Alternative A includes dismantling the railroad tracks and rail bed. This would forestall the possibility of the railroad being used to move demolition debris and coal ash off-site. TVA needs to decide on the future disposition of the coal ash along with the decision on the plant structures to keep from tying their hands on future coal ash removal options.</p>	<p>See response to Comment #22-2 regarding the feasibility of rail transport of demolition debris and coal combustion residuals (CCR) at BRF. The Final EA has been revised to state that although impacts of removal of the TVA-owned railroad loop track, ties, and ballast are being assessed as part of the proposed action alternatives, the decision on the timing of removal would be made at a future date, pending TVA decisions on other site actions.</p>
31	Axel Ringe	Tennessee Chapter Sierra Club	<p>TVA must properly assess environmental impacts on vulnerable species. TVA has identified 4 osprey nests within 660 feet of the structures. Ospreys (<i>Pandion haliaetus</i>) are considered a vulnerable species in Tennessee, but the EA makes no mention of any mitigating actions TVA would take to protect this species. At the least, TVA should ensure that no blasting or other disruptive activities occur during nesting season.</p> <p>The northern long-eared bat (<i>Myotis septentrionalis</i>) has recently been reclassified as endangered under the Endangered Species Act. The U.S. Fish and Wildlife Service has indicated their intention to possibly reclassify the tri-colored bat (<i>Perimyotis subflavus</i>) as</p>	<p>In response to your comment regarding potential impacts to osprey nests in the project area, Section 3.9.2.1 of the EA states, "If the timing of deconstruction and demolition activities within 660 feet of these nests cannot be modified to avoid nesting seasons, coordination with USDA – Wildlife Services would be required for guidance to ensure compliance under the EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). Therefore, the proposed actions are not likely to adversely affect the osprey."</p> <p>In response to your comment regarding impacts to listed bat species, please see response to Comment #23-1 and Comment #23-2.</p>

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			endangered also. Both bat species have been documented as occurring in the local vicinity. The environmental assessment must take the bat population into account and satisfy TVA's obligations under Section 7 of the Endangered Species Act ("ESA"). TVA indicates in the EA that measures it has identified with reference to the April 2018 Programmatic Bat Biological Opinion will adequately protect the northern long-eared bat and the tricolored bat. This is incorrect, given the recent and probable reclassifications of the two bat species.	
32	Axel Ringe	Tennessee Chapter Sierra Club	TVA should consider possible effects of deconstruction on drinking water wells, 13 water wells are within a 1-mile radius of the project area, and it is unknown if these are being used for domestic purposes. TVA should commit to supporting the owners of these wells in continued water testing through the course of the deconstruction and beyond.	<p>Impacts to groundwater and associated drinking water wells in the vicinity of BRF are not expected from the proposed decontamination and deconstruction project. However, as part of TVA's commitment to environmental stewardship and in compliance with state and federal regulations, TVA continues to monitor the groundwater quality at the Bull Run Reservation to ensure water resources are not impacted by the coal combustion residuals (CCR) units on the reservation. TVA maintains a robust network of monitoring wells that are sampled regularly for groundwater quality, and there are no known groundwater issues from these units beyond TVA site boundaries.</p> <p>TVA is evaluating its CCR units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth in the TDEC Commissioner's Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. TDEC must approve the CARA Plan, including the methods of closure for</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
				<p>the CCR units at BRF. TVA will would perform any additional environmental reviews if needed.</p> <p>TVA proactively reports groundwater monitoring results to regulators and posts the results on the TVA website at this link: https://www.tva.com/Environment/Environmental-Stewardship/Coal-Combustion-Residuals/Bull-Run.</p> <p>In the long term, potential sources of environmental contamination associated with the buildings and structures at BRF would be removed through the decontamination and demolition of BRF (Alternatives A and B). Decontamination and demolition would therefore limit the potential for contamination of groundwater from these sources and would have a positive impact on groundwater quality relative to Alternative C (No Action Alternative).</p>
33	Matthew Aldrovandi	Tennessee Department of Agriculture	I have a question about the draft EA for the BRF. Why is the CCR impoundment not included in this EA? Are they required by NEPA to have a separate analysis? Thanks!	<p>TVA is evaluating its coal combustion residuals (CCR) units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth in the TDEC Commissioner's Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. TDEC must approve the CARA Plan, including the methods of closure for the CCR units at BRF. TVA would perform any additional environmental reviews if needed.</p> <p>Additionally, the Bull Run CCR impoundment closure was previously analyzed in these documents: -Ash Impoundment Closure Final EIS Part I Programmatic NEPA Review (2016) -Ash Impoundment Closure Final Programmatic EIS, Part II Site-Specific NEPA Review</p>

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				<p>-Bull Run Fossil Plant (2016) Bull Run Fossil Plant Ash Impoundment Closure Project, Supplemental Environmental Assessment (2017)</p> <p>-Bull Run Fossil Plant Ash Impoundment Closure Project, Supplemental Environmental Assessment (2019)</p> <p>These documents can be found on our website here: https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews</p>
34	Kevin Ironside	United Cleanup Oak Ridge (UCOR)	<p>My name is Kevin Ironside, and I am the Beneficial Reuse and End State Manager for United Cleanup Oak Ridge (UCOR). We are submitting the following comments on your Draft EA for consideration:</p> <p>Based on UCOR's experience completing the cleanup of the East Tennessee Technology Park (ETTP), the former K-25 Gaseous Diffusion Plant, Alternative A would provide additional land in Anderson County for future redevelopment. The site appears to have value as a potential future site for a small nuclear reactor, especially given the recent increase in nuclear companies initiating projects in Oak Ridge at ETTP (e.g., Triso-X, Ultra Safe Nuclear Corporation and Kairos Power). Alternative A would not only provide additional cleanup jobs in the region, of which there is already a highly skilled and trained cleanup workforce that depending on the exact timing of the work may coincide with the completion of the cleanup at Y-12 and ORNL, but also create additional future jobs once the Bull Run Fossil Plant footprint has been redeveloped thus contributing to the overall prosperity of the region.</p>	<p>TVA acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) include full or selective demolition of structures to three feet below final grade, would meet the purpose and need of the project, and would enhance the future economic development of the area.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			Please let us know if UCOR can be of any assistance as you move forward with this project.	
35	Dale Perkins	Individual	I believe the plant should be decommissioned and completely torn down. The concrete pads can remain and may be useful for future use. I would like to see the land closest to the lake used for retail and restaurants with a dock for transient use. The rest of the site would make a terrific park. I'd team with the Clinch Valley Trail Alliance to build multi-use trails. I'd preserve as many trees as possible. Much of the site could be added to the Oak Ridge Wildlife Management Area with controlled hunts to keep the deer population in check. "Eco-tourism" has become a significant economic driver in recent years. Having the Bull Run site as a compliment to Haw Ridge and Aspire Park will bring people to Anderson County.	<p>TVA acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) include full or selective demolition of structures to three feet below final grade, would meet the purpose and need of the project, and would enhance the future economic development of the area.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project.</p>
36	Angi Agle	Individual	Please retain any buildings or equipment that would enable Bull Run to be converted to a nuclear power facility. We will need the generating capacity in the near future. Bull Run is the perfect location for a small nuclear plant.	<p>Other energy sources to be used throughout TVA's service area have been considered in TVA's Final 2019 Integrated Resource Plan (IRP) and the associated IRP Final Environmental Impact Statement (EIS). The IRP identified the various generating resources that TVA intends to pursue to meet the energy needs of the Tennessee River Valley. TVA is evaluating a variety of other generation projects at other locations which are or will be addressed in separate NEPA evaluations.</p> <p>On May 19, 2023, TVA published a Notice of Intent to begin work on the next IRP that is slated to be completed in 2024.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
37	James Bollinger	Individual	Bull Run should be turned into a natural gas fired plant. If the area is contaminated by turning it into a gas fired plant will mean the land will continue to be under TVA control. This will continue to serve electricity to the 430,000 customers that you stated it can produce power too.	Please see response to Comment #36.
38	James Melton	Individual	Like to see cost estimate on options. To me the best would be to demolished the plant to put the area back as a benefit for society. To demolished means to do it the right way as far as the environment. Like to see what can be use at other facilities do so. Donate items to schools governments such as hvac units electrical hardware office supplies etc. Definitely would not like to see land sold to developers just to put houses up.	<p>TVA agrees that costs are an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) would meet the purpose and need of the project and would enhance the future economic development of the area.</p> <p>Section 1.7 of the EA lists all necessary environmental permits that would be adhered to for the proposed action, and Section 2.3 describes the best management practices and mitigation measures that would be employed to avoid or reduce adverse environmental effects. Chapter 3 of the EA describes environmental resources at and in the immediate vicinity of the Bull Run plant and the potential effects of the proposed action on those resources. TVA has concluded that there would be no major adverse effects to the environment in association with the proposed action.</p> <p>As described in Section 2.1.1, Alternative A could create approximately 55,000 net tons of scrap metal, that would be hauled offsite to be used at other TVA sites, recycled or disposed at an appropriate facility in accordance with all federal, state, and local laws and regulations. Scrap metal could also be sold to local or regional vendors.</p> <p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project.</p>
39	Allyn Lay	Individual	My opinion is to leave the coal fired Bull Run Power Plant in place. You don't know when or under what circumstances we may	TVA appreciates public interest in the facility. As a large, inflexible coal unit with medium operating costs and a high forced outage rate, the Bull Run plant does

Comment Number	Name	Organization / Affiliation	Comment	Response
			need coal fired power plants in the future. Germany is right now restarting coal fired power plants due to an unanticipated war in the Ukraine which altered its energy needs and supplies. It is foolish and wasteful to destroy big-ticket, already in place, costly to replace, assets when one discovers a critical need after the fact. I frequent the nearby Claxton Community Center property. The presence of the adjacent Bull Run Power Plant doesn't bother me a bit. Leave it where it is.	not fit current and likely future portfolio needs. Other energy sources to be used throughout TVA's service area have been considered in TVA's Final 2019 Integrated Resource Plan (IRP) and the associated IRP Final Environmental Impact Statement (EIS). The IRP identified the various generating resources that TVA intends to pursue to meet the energy needs of the Tennessee River Valley. TVA is evaluating a variety of other generation projects at other locations which are or will be addressed in separate NEPA evaluations. On May 19, 2023, TVA published a Notice of Intent to begin work on the next IRP that is slated to be completed in 2024.
40	Andrew Wentzel	Individual	We completely support the tearing down of the Bull Run Plant and would encourage a similar action on the Kingston plant	TVA appreciates your comment.
41	Elizabeth Peck	Individual	The Bull Run plant must be completely dismantled and the property safely returned to a natural state, or a state suitable for commercial or residential use. Anything less is a crime against the people of Claxton, Clinton and Powell, a crime against the planet, and a victory for corporate greed.	TVA agrees that environmental risks and redevelopment are important considerations, as indicated by their inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) would meet the purpose and need of the project and would enhance the future economic development of the area. Section 1.7 of the EA lists all necessary environmental permits that would be adhered to for the proposed action, and Section 2.3 describes the best management practices and mitigation measures that would be employed to avoid or reduce adverse environmental effects. Chapter 3 of the EA describes environmental resources at and in the immediate vicinity of the Bull Run plant and the potential effects of the proposed action on those resources. TVA has concluded that there would be no major adverse effects to the environment in association with the proposed action alternatives.

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Comment Number	Name	Organization / Affiliation	Comment	Response
				Future reuse of the Bull Run Fossil Plant site is out of scope for this project.
42	Joel Varnadore	Individual	I believe the TVA and the East TN community has a vest interest in keeping at least part of the plant standing in an idle and maintenance capacity. Energy generation is a constant worldwide issue and whilst the TVA doesn't need Bull Run to maintain its current capacities, having Bull Run on idle would allow the TVA more flexibility to renovate it or convert it to something like natural gas down the road instead. Decommissioning it complete guarantees we will never be able to rely on it for anything.	Please see response to Comment #39.
43	William Ditmore	Individual	We don't need to close anything during a energy emergency	TVA evaluated the environmental impacts associated with the retirement of the Bull Run Fossil Plant (BRF) in the Potential Bull Run Fossil Plant Retirement Environmental Assessment and identified retirement of BRF as the preferred action in the Finding of No Significant Impact (FONSI) published in February 2019. In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023. Please also see response to Comment #39.
44	Wanda Ditmore	Individual	Don't close it in times like these	See responses to Comment #39 and Comment #43.
45	Joseph Payne	Individual	Deconstructing and demolishing the plant. The Pleasantshell mussel makes up half the mussels in the Cinch river- and experts said 85.4% of them are gone forever. Having worked with TVA in the early years of the insulation and heatpump program and realizing the real lack of interest TVA has in saving money on clean energy options and then for many years subcontracting at the K-25 plants decommissioning and demolition, seeing the	As discussed in Subsection 3.6 of the EA, impacts to aquatic habitats under the proposed action are expected to be negligible. Therefore, there would likely be negligible impacts to any aquatic species, including mussels. As there are no extant populations of mussels in the vicinity of the Bull Run Plant, demolition activities would have no impacts on these species. Demolition of the facility or portions of the facility in an environmentally responsible manner to allow reuse of the property would enhance the economy of the area

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>prosperity that it brought to the area, I know my thoughts and voice fall on deaf ears. If you will go back to the 1990's and read the sample reports done by the Clinch River Environmental Restoration Program you will find that any further unsettling of the flyash caused by the burning of fossil fuels would only cause more irreputable damage to the once free flowing river. I just thank God that I grew up in the upper reaches of the Clinch river where only nonpoint source pollution and the building of new recreational facilities paying little attention to the river's health and more importantly to human health. I honestly don't know why I am even commenting, knowing that the only reason you ask is to cover you ass meeting regulations that mean nothing to TVA. I am sure your managers and directors have already decided what should be done and it sure as hell will be nothing to support belief that there is and has been a call for many years to stop entities such as yours from contributing to the problems that have been proven to be affecting our planet. So, do as you always do, cause more harm than good, except to your pocketbooks.</p>	<p>with the least impact to the environment. As a large, inflexible coal unit with medium operating costs and a high forced outage rate, Bull Run Fossil Plant does not fit current and likely future portfolio needs.</p> <p>Other energy sources to be used throughout TVA's service area have been considered in TVA's Final 2019 Integrated Resource Plan (IRP) and the associated IRP Final Environmental Impact Statement (EIS). The IRP identified the various generating resources that TVA intends to pursue to meet the energy needs of the Tennessee River Valley. TVA is committed to supporting the Administration's decarbonization goals and is executing a plan that will continue to dramatically cut emissions. TVA is already a leader among utilities in carbon reduction today. TVA's plans to achieve a 70% carbon reduction by 2030 and approximately 80% by 2035, which TVA believes can be achieved using existing technologies while maintaining reliability and affordability, as we continue to evaluate additional levers for deeper decarbonization.</p> <p>As TVA works to achieve our aspiration for net-zero carbon, TVA can make a unique contribution to President Biden's goal through TVA's innovative developments in emerging technologies including: energy storage, electric vehicle evolution, decarbonization options, connected communities, regional grid transformation, and advanced nuclear solutions. TVA is investing in research and development with peers to achieve utility scale testing and development of these new technologies, and we are working to partner with federal agencies and others to lead the nation in deployment.</p> <p>On May 19, 2023, TVA published a Notice of Intent to</p>

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Comment Number	Name	Organization / Affiliation	Comment	Response
				begin work on the next IRP that is slated to be completed in 2024. Please see response to Comment #33 regarding coal combustion residuals (CCR) units at Bull Run Fossil Plant.
46	K Koester	Individual	Needs to be torn down & cleaned up so ppl are safe that live near, upwind and downwind, not to mention streams	Demolition of the facility in an environmentally responsible manner to allow reuse of the property would enhance the economy of the area with the least impact to the environment. Therefore, the proposed action alternatives include full or selective demolition of structures to 3 feet below final grade. Section 1.7 of the EA lists all necessary environmental permits that would be adhered to for the proposed action, and Section 2.3 describes the best management practices and mitigation measures that would be employed to avoid or reduce adverse environmental effects, including potential effects to air and water. Chapter 3 of the EA describes environmental resources at and in the immediate vicinity of the Bull Run plant and the potential effects of the proposed action on those resources. TVA has concluded that there would be no major adverse effects to the environment in association with the proposed action alternatives.
47	Sara Wells	Individual	Deconstructing and demolishing the plant Is the best option based on my understanding of this plan.	TVA appreciates your comment.
48	Bobby Holcomb	Individual	I would like to see the land converted into a golf course and various recreational facilities. The area needs restaurants, entertainment venues, movies, parks and greenways. Not more residential or urban sprawl. Please consider a new golf course on part of it. The rest should be beautiful to enjoy as an outdoor recreation area.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review, as appropriate, that would include public and agency input. TVA acknowledges that the site may be attractive for future economic development.

Comment Number	Name	Organization / Affiliation	Comment	Response
49	Michael Calfee	Individual	Fusion energy breakthrough was announced today from LLL. My thought is that Bull Run would make a great pilot plant or first-generation facility, utilizing UT, ORNL, DOE and of course, TVA. I suspect the infrastructure exist at Bull Run to enable a major facility to more than replace the existing energy generated in an area known well by DOE.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project. Please see response to Comment #39.
50	Brian Tapp	Individual	I would encourage TVA to demolish and remove the improvements on the site and prepare the site for future light industrial use. With the land that is not useable for building RE-development, consider turning these areas into a park that would benefit the community. The Knoxville area's industrial vacancy rate is less than 1%, making it one of the toughest places in the southeast for occupiers to locate. At the same time, we have unprecedented demand from companies that want to locate in the Knoxville area. Having land that has been industrial would make for an excellent re-development opportunity. You can look just down the road at the former K-25 site in Oak Ridge as an example.	Demolition of the facility in an environmentally responsible manner to allow reuse of the property would enhance the economy of the area with the least impact to the environment. Therefore, the proposed action alternatives include full or selective demolition of structures to 3 feet below final grade. Future reuse of the Bull Run Fossil Plant site is out of scope for this project.
51	Mike West	Individual	I truly understand your concerns in this day and age of environmental nightmares. I also know Yuns are an organization that has considered a lot of different plans, but isn't America going to get caught with its pants down concerning power generation as a whole? All across the nation fossil powered power plant are shutting down. Solar and wind ain't I mean ain't going to be able to keep up with increasing demand. Natural gas is a lot cleaner but during an	Please see response to Comment #39.

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			American crisis one can always go to a coal pile and get fuel to generate electricity. I also understand, maybe I don't expenses incurred with keeping plant at least for alternative source of power. Can Kingston keep up with demand? Thank you for giving me an avenue of expressing concern. And I also don't live next door. But I'm sure our power partly comes from there.	
52	Kelly McClure	Individual	I would suggest leaving at least part of the plant intact for doing tours, maybe guided tours for a fee, similar to Brushy Mountain Penitentiary, because of the history of the place and I have always been curious about how all of it works. If it is necessary to demolish the whole thing, I would suggest making more hiking trails like at Hawridge because I have hiked all the trails there and need some new ones close to my house. Thank you.	As discussed in Section 3.16 of the EA, federal agencies, including TVA, are required by the National Historic Preservation Act (NHPA) (16 USC 470) and by NEPA to consider the possible effects of their undertakings on historic properties. Upon reaching agreement with the Tennessee State Historic Preservation Officer (SHPO) regarding BRF eligibility for the National Register of Historic Places and TVA's finding of adverse effect, TVA consulted further with the SHPO to identify mitigation measures. TVA and the SHPO have agreed on appropriate mitigation measures that are listed in a Memorandum of Agreement executed in April 2023 that is included in Appendix E of the Final EA. While mitigation cannot fully compensate for the loss of historic properties, it provides an opportunity to preserve and document the past for the public's education and appreciation. Future reuse of the Bull Run Fossil Plant site is out of scope for this project. Please see response to Comment #50 regarding action alternatives considered for this project.
53	David Hennessee	Individual	Leave Bullrun Plant on standby as needed	Please see responses to Comment #39 and Comment #43.
54	Lynda Vowell	Individual	Please keep Bullrun and maintain. You never know when it will be needed. England just reopened a coal mine this	Please see responses to Comment #39 and Comment #43.

Comment Number	Name	Organization / Affiliation	Comment	Response
			week due to high cost of energy due to extreme environmental policies.	
55	Eric Anderson	Individual	I feel that you should leave the plant standing. It's and icon to the Claxton community. I grew up in Claxton and was proud of the plant. Do what is necessary for any coal ash issues . If I had a vote however i would like to see it stay.	Please see responses to Comment #39 and Comment #43.
56	Kimberly Goode	Individual	I believe that the only real option is to fully decontaminate and dismantle the plant and restore the land to a habitable environment.	Please see response to Comment #46.
57	Joey Cronan	Individual	Don't give in to these leftist ideas.... We need fossil fuels don't shut it down. To bad we have a dirty corrupt president that needs to be put in prison along with his crack head son and also the rapist Clinton. Even if we go to electric we still need fossil fuels to produce the batteries you idiots. Funny how they are in a hurry to shut down production in 2023 and then demolish the site. They know Trump will reopen it. Our president violates the constitution on a daily basis the worse being as our president it is his sworn duty to protect the American people from a invasion. Allowing illegal alien's to cross our border is against the constitution and his sworn duty to put a stop to it. Impeach and then put this corrupt clown in prison. The U.S. is destroying itself just like the ancient Romans did. NO COUNTRY CAN SURVIVE WITH OPEN BORDERS. DON'T FORGET OUR CORRUPT MEDIA. THERE IS MORE OF US THAN THEM. LET'S GET TOGETHER AND RUN THESE UN AMERICAN POLITICIANS OUT OF OFFICE AND OUT OF OUR COUNTRY	Please see responses to Comment #39 and Comment #43.

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Comment Number	Name	Organization / Affiliation	Comment	Response
58	Kimberly Hood	Individual	I would like to see a complete demolition of the site. Then use the property for a park/dog park and historical site. Clean the site and make it a showplace as one crosses the Clinch River. Or, use it to filter water as it come down the River.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project. Please see response to Comment #50.
59	Benjamin White	Individual	Leave as is, we will need it again.	Please see responses to Comment #39 and Comment #43.
60	Jean Franse	Individual	Since there will be no activity at the bull, run steam plant. I think that it should be completely dismantled and no signs of it left making sure that no harmful contamination is left behind.	TVA appreciates your comment. Please see response to Comment #46.
61	Kermit Carver	Individual	Leave the plant alone. Continue operating as is.	Please see responses to Comment #39 and Comment #43.
62	Marvin Breeden	Individual	Leave it. We are the cleanest Country in the world and the green energy is a joke. so don't be woke. Shutting it down is a bad idea. the ones for it will be the first to cry and scream when they can't fix their mocha latte and stay cool or warm because the power is off.	Please see responses to Comment #39 and Comment #43.
63	Ronald Terry	Individual	I suggest TVA convert the Bull Run Plant into a combined Cycle plant using Frame 5 gas turbines and HRSG's to support the Steam Turbine. This would reduce emissions and be cleaned and environmentally safer.	Please see response to Comment #36.
64	Isaac Isaac	Individual	(none)	Comment form was left blank.
65	Nicole Hill	Individual	My childhood home was on New Henderson. In 2012 in was bought by TVA under false pretense of an ash plant being built. So my childhood home, my memories and my numerous childhood pets that are buried there (even though house has been demolished and the land refigured, I could walk the property and tell you where each	This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of BRF. Portions of the Bull Run Reservation that are not within the Proposed Decontamination and Deconstruction Project Area shown in Figure 1-2 of the Final EA are not included in the proposed action and are out of scope

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			pet is 'buried') was destroyed for the plans that were to never be. I feel and can contact many of the past neighbors of that residence that would feel like they were lied to by TVA to obtain property. I think they should stay open and move on with their plans of an ash plant or reimburse the families that were displaced by their lies. The families were told their house values would be nothing once the supposed ash plant would be built and they (TVA) left us with no other choices but to move. I feel cheated that I can't go back to my childhood HOME. I begged and pleaded with TVA then to make other arrangements and to not destroy my memories. Those pleas were cast away. Please don't let these	for this project. Future reuse of the Bull Run Fossil Plant site is also out of scope for this project.
66	Charles Street	Individual	Renewable energy is great but it is not dependable. Take for example the Texas freeze of 2021, which resulted in approximate 200 deaths (https://youtu.be/KdMqCUa7XJk). I would to elect to keep all or a part of the coal plant until renewable becomes a dependable energy or until we find a better alternative.	Please see response to Comment #39 and Comment #43.
67	Donna Cook	Individual	The site when closed permanently should be totally removed and the land kept as a greenway.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project.
68	Chris Wieland	Individual	Closure of the Bull Run coal-fire plant should be total, i.e., complete removal of all buildings and structures and removal of all remaining unburnt coal. Additionally, all ash should be excavated from the ash pile/dump and relocated to a landfill designed to meet RCRA standards. As a	Please see response to Comment #8 regarding management of coal combustion residuals at the Bull Run Reservation.

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			second option for the waste ash, the ash dump should be covered with an engineered low-permeability cap to reduce seepage and redirect water away from the ash, and the dump perimeter should be reinforced to provide structural stability to prevent a repeat of the Kingston disaster.	
69	Theresa Joyner	Individual	I would like to see the plant left intact. With electronics advancing the demand for energy will rise in the future. At some point, this plant may be critical in serving our community when green energy can't keep up.	Please see response to Comment #39 and Comment #43.
70	William Norman	Individual	The Bullrun Steamplant would be an excellent plant to convert to Municipal Waste to Energy Facility. It could possibly be the 'first' successful plant in the Nation, with railroad in place to deliver in railcars (in large box sized bundles) the waste that was once -shipped- to China. The U.N. report (below weblink) states that the Chinese are in the process of building 4 state-of-the-art facilities that turn rubbish into power. The "Municipal Waste to Energy Project" operates on a concession model to establish plants that burn municipal solid waste for the generation of electricity. The plants employ clean technology that do not require additional burning of fossil fuels, and live up to the highest international emission standards. Fast facts: 4 plants already operating 480 gigawatts of electricity generated annually 544,000 tons of carbon dioxide equivalent reduced per year Thank you,	Future reuse of the Bull Run Fossil Plant site is out of scope for this project.

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			https://unfccc.int/climate-action/momentum-for-change/activity-database/momentum-forchange-municipal-waste-to-energy-project	
71	Michael Bradshaw	Individual	Has converting the plant to natural gas been considered. What are the pros and cons? Thanks for your consideration.	Please see response to Comment #36.
72	Justin Quinn	Individual	I was reading the article and looking for feedback. I would love to help. We live in the new Harbor Pointe community right down the road and would like to understand the options being proposed and how I can help as a community member, understand how it could impact the area.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review, as appropriate, that would include public and agency input. As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations. This Team would continue to identify key regions and communities, and key community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.
73	Tim Barlow	Individual	Thank you for the opportunity to comment on Bull Run Fossil Plant's upcoming permanent shutdown. First, let me share a little background. My Dad worked on the construction of the plant and became an hourly trades employee in 1967 working there for 20+ years until Mr. Marvin Runyon eliminated his craft. He and my Mom lived within two miles of the plant until his death in 1999. I lived with them from 1967 until I went to college in the Fall of 1973. We were familiar with the "safe" fly ash that covered our cars and homes. Of course	Please see response to Comment #72 regarding future reuse and community engagement. Please see response to Comment #8 regarding management of coal combustion residuals at BRF. Future reuse of the BRF site is out of scope for this project. Portions of the Bull Run Reservation that are not within the Proposed Decontamination and Deconstruction Project Area shown in Figure 1-2 of the Final EA are not included in the proposed action and are also out of scope for this project.

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			<p>there were other airborne contaminants we were never told about.</p> <p>Four Points Supporting Total Demolition as the Only Safe Option:</p> <ol style="list-style-type: none"> 1. The ash storage in the Clinch River (Melton Hill Lake) must be dredged and totally removed. 2. The switch yard, plant, and coal piles must be removed and the grounds stripped of all contaminants. 3. To keep the land from commercial or residential use, the property should become a Tennessee Valley Authority solar farm. 4. And finally, the property on “the other side” of Henderson Road should be deeded to Anderson County or sold to private individuals. TVA took the property, but never used it. It should be put to use for community good or allowed to be put back on the tax rolls. Thanks for allowing me the opportunity to share my thoughts on this very important issue for everyone interested in the Claxton community and the water quality for the Clinch River. 	
74	Philip Nipper	Individual	I think a good use of the property, after deconstruction of the plant and associated buildings along with environmental clean-up, would be to work with DOE and ORNL and engineer/construct a solar power generating farm.	This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of BRF. Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review, as appropriate, that would include public and agency input.
75	Peter Jahn	Individual	These smoke stacks that are able to be seen from my neighborhood has severely decreased our property value. Many people view the stacks as a negative. My vote would be to at least deconstruct the tall	Removal of the smokestacks is included under both action alternatives that are being considered for decontamination and deconstruction of BRF. As stated in Section 2.1.3, the No Action Alternative, which would retain all structures including the smokestacks, is not a

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			stacks, for this is an eye sore whether decommissioned or not decommissioned. The area around is so beautiful and removing these stacks would help with the overall appeal. I truly think this is a fair compromise for the TVA to consider if they are looking for ways to save money.	reasonable option because it does not meet the purpose and need of the project.
76	Ron Bellamy	Individual	We drive by the plant 3-5 times a week. We have lived nearby for over 30 years. We believe it is time to dismantle the plant completely if it no longer serves it's intended function. After appropriate cleanup, the area could be turned into a public park with lake access. That would be very beneficial to area residents and visitors as well.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the BRF site is out of scope for this project.
77	Josh Sharpe	Individual	This site should be developed much like the island in pigeon forge. Create jobs commerce for taxes for local govt and not having to drive to sevier like for something we could put in a beautiful spot. It has room for parking on water dining as well as other shops and activities and matches well with greenway already in place! Could accommodate overflow parking while boat races are going on and keep this businesses thriving feeding all those athletes and spectators alike! If we're talking of putting red lights up in these area's anyway let's do more than slow traffic	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review, as appropriate, that would include public and agency input.
78	David Snavelly	Individual	Please remove the entire complex. Clean it up and allow it to be transformed for a more contemporary purpose.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the BRF site is out of scope for this project.

Comment Number	Name	Organization / Affiliation	Comment	Response
79	West Ma	Individual	<p>May I get in touch TVA management team to re-use this plant site for:</p> <ul style="list-style-type: none"> --300MW crypto mining, a data center to balance the reliability of the TVA transmission line. --Existing substation and transmission line be used for next large wind farm or solar farm ay size 500-2000 MW --A energy storage battery bank to use power at valley rate. --Above project gets preapproved as an EB5 immigration plan, particularly for jobs created for Indian native people and black people. --Immigrant investment could do those projects at lower CAPEX with higher ROI. A large crypto mining site creates power demand for wind and solar farms; Its flexibility could help VVA stabilize power peak demand while not making nuclear power plants in intermittent operation. <p>I am a crypto adviser based in Vancouver, BC, Canada. I was in Chattanooga two weeks ago and shot a TVA picture from the public library near the square.</p>	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review, as appropriate.
80	Tim Holt	Individual	<p>I highly recommended a full study into the practicality of converting the Bull Run Fossil Plant into a garbage incineration facility producing electricity as a beneficial byproduct. Many municipalities have developed these facilities. When you consider the cubic yards of landfill deposit daily, the average distance of haul, and the cost of eventual acquirement and environmental impact of a new landfill, there's more than the simple cost of operation we would have to take into</p>	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.

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			consideration. The Bull Run Site is more favorable for electric garbage collection vehicle access due to a shorter average haul time and distance and a less gradient course of travel. It is also already accessible via rail and could be made accessible to barge for efficient transport of wastes from other municipalities. Furthermore, it is already outfitted to distribute electricity to the network. The immediate costs of construction and operation may seem prohibitive but the final product is likely more environmentally beneficial than raw costs. I'm sure there's already much of this under consideration. Hopefully I've brought value to the exercise.	
81	Josh Cook	Individual	Please consider reaching out to Quaise Energy (info@quaise.energy) about repurposing the plant and equipment to take advantage of their novel geothermal energy strategy. They have the technology to quickly drill to the great depths suitable for geothermal power right next to existing power generation facilities. I believe this is a tremendous opportunity to efficiently and swiftly transform the facilities that are already here and functional into a zero waste/emission power generation solution that can greatly benefit our local region and also provide a shining example to the rest of the world how to effectively transition to clean energy without overtly disrupting our existing infrastructure.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
82	Gary Lawson	Individual	I would re open it and use all resources to power our country. It is a shame the democrats and some Republicans are ruining our country , we use to be a super	Please see response to Comment #39 and Comment #43.

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			power but not any more. By stop using fossil fuel we hurt our self in the long run china pollutes more than any other country so what we do to save the world is useless I vote more coal ,no ethanol gas and natural gas in our future. God knew we would use all this natural resources and he is not upset he is in control I guess he laughs at us alot.	
83	Tim Harty	Individual	Living close by, I would rather see the buildings etc. completely removed and the area returned to a natural environment with possible public access for walking trails, picnicking areas, etc.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
84	Nicholas Beaty	Individual	I wish it would stay open and run steam to get the water warmed up in the winter at the discharge for fantastic fishing opportunities.	Please see response to Comment #39 and Comment #43.
85	David Cass	Individual	David Cass-retired engineer Norfolk Southern Railroad. The Train transportation and existing coal chute gathering Hopper System seems Ideal for processing all glass recycling processed and mixed with highway materials asphalt and concrete . Existing Coal residue ash could possibly be contained within concrete mixing agents to safely clean the site at low or no cost,,, possibly making a profit if Combined with recycled products of glass as well as Recycled chipped Plastic products. I have professional Engineering contacts That have designed and re-purposed : Dalton carpet industry waste into electricity. Georgia chicken farm waste into methane. Mega-farm retrieval of waste to methane, fertilizer, Clear water and electricity. These	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.

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			things mentioned above, are in operation; not just a dream or thought! TVA probably not interested in Developing and operating these other industries but other successful corporations may. The very, very near horizon of lithium components/processing could possibly utilize existing BR facilities. I have lived in Knoxville my entire life. I am thankful and proud of the heritage of Tennessee Valley Authority. Make us all proud by being frugal and re-purposeful	
86	Virginia Jones	Individual	I would like to suggest that TVA consider whether the fuel used at Bull Run Steam Plant might not be wood pellets instead of coal. Both produce air pollution, but couldn't trees which absorb CO2 cover the area beside the Plant? As the lesser of two evils? There are serious reasons for not closing the Bull Run site according to the Mayor of Oak Ridge: https://www.wbir.com/article/news/oak-ridge-mayor-expresses-concerns-aboutpotential-environmental-mpacts-of-bull-run-closure/51-2fbbb9b7-b2c3-4cbc-beaf-9d89401a9d45 . As a near by resident, about a mile from the river and two miles from the plant, I am not too keen on chemical discharges into the river. I think this idea is worth looking into before TVA makes a decision to close Bull Run.	Please see response to Comment #39 and Comment #43. Please also see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.
87	Justin Holland	Individual	I think it would be awesome to turn Bull Run into a museum. My father worked at the Johnsonville coal plant when I was a kid and I remember so vividly visiting there and seeing all of the equipment. I think Bull Run is the perfect size to become a museum and there would be great synergy	Please see response to Comment #52 regarding preservation of historic resources.

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			with the AMSE that is already in Oak Ridge. Hopefully, this is something you can consider doing as it would add great value to the community and region, not to mention as a PR vehicle for TVA.	
88	Ron Greene	Individual	Secure and maintain the plant for future power generation. Or convert to gas.	Please see response to Comment #39 and Comment #43.
89	Wiley Peck	Individual	I was a part of the TVA/Local Community Group that met monthly regarding the future plans after shutdown. Covid restrictions shut down this group. It has always been a concern of mine for our local community near the Bull Run plant for the “aftermath” or “legacy” that TVA will chose to leave. It can be a great success story if greed and irresponsibility are not allowed to be that legacy. Profit was the driver for creating the BRSP and profit is the primary driver for the shut down. I challenge TVA and our Tennessee legislature to not allow greed and sloth to get in the way of completely dismantling the BRSP site and returning it to healthy public use within a reasonable time frame (3 years or less). It would be a travesty to allow for anything less.	<p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations. This Team would continue to identify key regions and communities, and key community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.</p> <p>The TVA Board of Directors has approved the retirement of BRF by December 2023. If TVA decides to decontaminate and deconstruct the Bull Run plant, these activities would occur over an approximately 24-month period that would likely begin shortly after closure of the plant. This would be followed by a 12-month site restoration period.</p>
90	Michael Mcamis	Individual	with all the rolling blackouts seems to me we need bull run operating at full capacity instesd of shutting it down	Please see response to Comment #39 and Comment #43.
91	James Romines	Individual	Leave standing	Please see response to Comment #39 and Comment #43.

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92	Sharon Shelton	Individual	For robust growth in our region, we need cheap and abundant energy. Secondly , I thought Tn was well positioned for future power needs since the new nuclear plant went on line earlier this year, but apparently the 8 degree temperatures beginning on December 23, 2020 proved otherwise. I understand the power deficit came from the Bull Run power plant and thus the need for rolling blackouts. This is not acceptable	Please see response to Comment #39 and Comment #43.
93	Janel Ellison	Individual	After reviewing the Environmental Assessment, I would support Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade. However, caution should be taken with what toxic materials are buried as fill.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.
94	Kenneth Weaver	Individual	Do not shut down Bull Run Steam Plant! A couple of cold days and TVA is doing rolling blackouts. What happens if you shut down Bull Run; will you have to do rolling blackouts when it gets down to 30 degrees? TVA needs to leave Bull Run on line. TVA has spent Hundreds of millions on Bull Run over the years up dating it.	Please see response to Comment #39 and Comment #43.
95	Derek Henry	Individual	Of the three options presented, I support: Demolish the whole plant. The rolling blackouts of the last days show us that we cannot rely on fossil fuels for our energy needs, and the extreme weather we are experiencing shows us that we all share the externalized costs of polluting energy technologies. To this end, this plant should be destroyed in full so that remediation will also be complete.	TVA appreciates your comment.
96	Mark Stevenson	Individual	Before the Christmas cold snap, I was concerned about the closure of a generating asset that has benefit of having	Please see response to Comment #39 and Comment #43.

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			fuel stored on-site. But now that EPB has resorted to rolling blackouts for the first time in it's history, I am horrified that this is even under consideration. All of which leads me to ask if the Bull Run facility was generating at the time of the outage? If not and we still had blackouts, what will life be like without Bull Run? As I recall, part of TVA's original charter involved providing electricity to the entire Tennessee River Valley. Are we now abandoning the benefit for which TVA is best known?	
97	Veta Hietanen	Individual	Maintain in case of terrorism or other problems. ALSO with Jerry Binkley	Please see response to Comment #39 and Comment #43.
98	Josh Walker	Individual	Know Bull Run is generally used as back up power. But considering what this cold blast just showed us, our system has some vulnerabilities. Especially way valley is growing. Think it would be wise to change it to natural gas plant	Please see response to Comment #39. Future reuse of the BRF site is out of scope for this project.
99	Bob Inklebarger	Individual	Leaving Bull Run as is only providing upkeep on the site.	Please see response to Comment # 43 regarding closure of BRF. Section 2.1.3 (Description of Alternative C - No Action Alternative) of the EA states that leaving the facility in "as-is" condition is not a reasonable alternative because it does not satisfy elements of the project purpose and need and would likely present a higher risk than Alternatives A or B for the potential to contaminate soil and groundwater as systems and structures degrade. The action alternatives of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project, and would enhance the future economic development of the area.
100	Greg Mills	Individual	Due to the rolling blackouts requested by TVA on December 23-24, 2022, Alternative C (No Action) needs to be the current	Please see response to Comment #39, Comment #43, and Comment #99.

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			choice for TVA. The TVA service area is expected to continue to have population growth for the foreseeable future, yet TVA was unable to meet the electricity needs of the existing population. TVA does not need to decommission and demolish existing generating assets until replacement generating assets are both constructed and operational. Bull Run needs to remain as is until TVA develops and executes a more accurate generating plan for the Tennessee Valley's electrical needs. The December 2022 rolling blackouts occurred even though electric vehicles currently comprise only a small fraction of the vehicles on the road in this region	
101	Sharon Manning	Individual	We would be interested in qualifying to bid the environmental, abatement, decontamination and potential dismantlement services for this project once you determine the best course of action. I'd be happy to partner with you on the options for this property. Thanks in advance for the opportunity! Sherri Manning smanning@goterra.com	TVA appreciates your comment.
102	Dianne and Lawrence Lane	Individual	Suggestions for future of land, As citizens of Tn, my husband and I enjoy visiting Bull Run Park and use the ramp to access Melton Hill Lake for fishing and boating. We are in favor of the decommissioning activities, including draining, removal of ash, information, technology, and records. Retain the buildings as a museum for future generations. Restore the 250 acres back to the people as usable space of Bull Run Reservation, as part of Bull Run Park.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. See response to Comment #52 regarding preservation of historic resources.

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			Open for public use for recreation and fishing, like Kingston Plant. The area is being developed around it with many new homes. Foreseeing an increasing population, prepare a place for these families to go. This land is already set aside for protection. TVA has a history of considering the needs of communities, and this park project would reflect your consideration and forward thinking. Thank you for considering comments.	
103	Kim Day	Individual	Please reconsider any thoughts on demolition. We need all the TVA plants to stay up and running. After the Christmas weekend rolling blackouts, it should prove that we need fossil, gas, and nuclear power more than ever.	Please see responses to Comment #39 and Comment #43.
104	Jonathan Wellman	Individual	I have concerns of a decommissioning or a partial one with talks of leaving the turbine bay and switch yard for a potential synchronous condenser. I do not know how the property would be able to be demolished if there will still be the turbine bay. I also have concerns that if they are to move forward with the synchronous condenser that by demolishing the boiler and boiler building, it would interfere with the structural integrity of the rest of the building. I wish that TVA would be clearer about this and give more information on if it will happen or not. This could potentially change the entire decommissioning process but not much has been said to the public. Another concern is the loss of generation by closing down this plant. This plant's generation will be even more crucial in the coming summers and winters. By	Regarding potential use of the turbine bay for a synchronous condensers project, if the project is determined to be viable, a separate NEPA review would be conducted that would include public and agency input. Please see responses to Comment #39 and Comment #43 regarding energy needs of the Tennessee River Valley and closure of the plant.

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			losing this asset, I feel that we are losing grid stability. This affects everyone in the Knoxville area when the region cannot get the voltage support. This winter storm has shown how vulnerable TVA's system is. I do not feel any more confident that brownouts will not continue in the coming years with the loss of megawatts this plant can provide. This doesn't just affect the Oak Ridge and Clinton communities but all who live in TVA's service area.	
105	Jason Colbert	Individual	To whom it concerns I believe closing any more power plants down in the state of Tennessee is a mistake. I was out of power Friday the 23rd of December 2022, because TVA already has a lack of power, for 4.5 hours on the coldest night in a very long time in the state of Tennessee. I know many people in my area that not only lost power, but their water froze and pipes busted in the freezing temperatures. Big government is pushing the electric vehicle agenda now and we for sure do not have the grid for that if TVA can not handle a cold snap and have to shut power off. So I believe in my summary we need every power producer we currently have and maybe we need some more back online	Please see responses to Comment #39 and Comment #43.
106	Jeff Campbell	Individual	Do you realize we recently had rolling blackouts and your wanting to take this away? Who is pushing this? I worked on the electrical equipment commissioning there when billions was spent on the scrubbers and now you want to shut it down? this is stupid!!!	Please see responses to Comment #39 and Comment #43.
107	Jeff Campbell	Individual	Why is this plant being shut down? I worked there a few years back when the	Please see responses to Comment #39 and Comment #43.

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			new scrubbers was being installed at several plants and billions spent on it and now you want to shut it down? Do you remember the rolling blackouts a week ago? In the 43 years of utility work I done I've never seen such ignorance from a government ran utility. You push more and more EV's yet take away the source to charge them? This has got to be Biden lobbyists putting money into your pockets!! You have a CEO which doesn't need to be making millions more than any other government person including the president , why? I bet he doesn't even understand the theory of electricity. You people are destroying our country!	
108	Sarah Halcott	Individual	<p>I routinely drive through Anderson County/ Oak Ridge for my work commute 2-3 times a week. We also kayak on the Clinch River during summers. We also are residents that rely on TVA utility sources to be consistent and reliable. In regards to the environmental report, I offer the following comments:</p> <p>(1) Based on the report, there is only 1 section that will result in moderate impact under Alternative C. This is the Hazardous Waste section. There are other minor impact sections; however the other Alternatives also hold minor impacts. With the knowledge of this report, Alternative C still seems the best option for continued reliability for Tennesseans in the service area.</p> <p>(2) The report does not seem to take into account the fact that TVA does not currently produce enough power as it</p>	Please see responses to Comment #39, Comment #43, and Comment #99.

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			currently operates to account for the demand of basic power for its service area. Demolishing a plant because of minor impacts and 1 potential moderate impact long term does not excuse the complete demolition of a power source BEFORE a safer alternative is built and in use. (3) Based on the initial descriptions of the 3 Alternatives, it is obvious which method takes precedence. Being that Alternative A is given full description while Alternative C is barely given a few lines. The review is flawed when it skews towards one method over the other from the onset. I do not support TVA's decision to rid our area of an energy plant before it has replaced it with another functional energy source that can provide equal or more energy that consistently and reliably meets the basic utility demands of its customers. As of December 2022, it is apparent TVA is not prepared to do this. TVA was founded to produce energy for the Appalachian area and residents there. I am accepting of newer, cleaner energy for a better environment. Cutting off an energy source that has been utilized for decades without a working alternative in place to take over immediately is NOT acceptable.	
109	James Disney	Individual	I would like to see the plant stay open. We need the energy and we need the local jobs. I am a 10 year TVA employee at Watts Bar Nuclear. Invest and keep it running so we can have the electricity!!!	Please see responses to Comment #39 and Comment #43.
110	Michael Robinson	Individual	I think it's ridiculous to be closing this facility when you are obviously having problems supplying adequate supplies of	Please see responses to Comment #39 and Comment #43.

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			power now. This shows an incredible lack of planning and foresight!	
111		Individual	Keep the stream plant open. Literally no local is in favor of shutting this place down. We love having reliable strong power with our cold winters and hot summers	Please see responses to Comment #39 and Comment #43.
112	Dan Robbins	Individual	Pls completely remove all current Bull Run structures, decontaminate the area, and create a solar farm	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the BRF site is out of scope for this project.
113	Nancy West	Individual	I feel like this has been a poor decision from the beginning. Although it may be too late since the plant has not been maintained properly for the past 10 years and has safety concerns in addition to all the reliability issues due to poor previous decisions. It is real waste of TVA financial and Human Resources. With all the intelligent people TVA still retains there has to be a way to find a better option to benefit the people of the TVA Valley. This plant belongs to all the people of the Valley and not just the people now running TVA that are making a poor decision. Listen to the people who currently work there and the ones who are retired that have the knowledge to turn this situation around to benefit the people who actually own it	Please see responses to Comment #39 and Comment #43.
114	S Harris	Individual	The Bull Run plant is directly adjacent to many areas that are heavily used for recreation by the public (Melton Hill Greenway, Haw Ridge Park, Claxton Community Park, UT Rowing, etc.) As such, leaving the plant abandoned i.e. "No Action Alternative" is absolutely an unacceptable option. Leaving the site standing as-is will make it a public safety	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. See response to Comment #52 regarding preservation of historic resources. See response to Comment #99 regarding the No Action Alternative. Future reuse of the BRF site is out of scope for this project.

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			and environmental hazard, reduce surrounding property values, become a serious eyesore, and the conversation to demolish it will only be pushed for several years until the public demands it. Full decontamination and demolition is the preferred option and the land could be made for public use, expanding the recreational theme of the area, if residual safety hazards can be mitigated. If full demolition is not possible, a partial demolition should include a plan to make the site a community asset via industrial tourism (see Sloss Furnaces in Birmingham, AL, etc). A partial demolition could open avenues for an educationa/historic site on the modernization of fossil power technology, which matches the theme in the surrounding Oak Ridge area on science, energy, and history	
115	Karen Moore	Individual	We haved lived across the street from bull run fot 24 yrs and until full reports after kingston spill did not realize what had been released in the air because you said it was safe. there is no telling what it may have done to our health. it is time for u to clean and what u have done to our community and leave the land as u found it like u. this community has endured enough and it's not fair to the future generations to be exposed or see this thing just sit their for yrs to come. it could become a nice property for us to enjoy if u just remove the waste i caused and help the water and animals dependent on it for the future. leaving it as is is not acceptable. Would you	<p>Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.</p> <p>Section 2.1.3 (Description of Alternative C - No Action Alternative) of the EA states that leaving the facility in "as-is" condition is not a reasonable alternative because it does not satisfy elements of the project purpose and need and would likely present a higher risk than Alternatives A or B for the potential to contaminate soil and groundwater as systems and structures degrade. The action alternatives of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project and would enhance the future economic development of the area.</p>

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			want this near your home or in your community ?! God is watching what you do to others and the land. Don't make us ashamed of TVA by leaving your mess. It's not fair that we have endured all the fallout and then get left with it when u shit down. i plan to join a lawsuit with my community if you resort to that outcome. do the right thing. CLEAN IT UP	As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities and environmental justice populations in site activities and future reuse of the site. This Team would continue to identify key regions and communities, and key community leaders and organizations, to engage in environmental justice outreach. The Bull Run Community Outreach Team would engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.
116	Dennis Baxter	Individual	The plant site should be reused as a power generating facility producing base load power to the TVA grid. The cost of construction would be a lot less since some of the infrastructure already exist, such as, the condenser cooling water system and skimmer wall. It makes sense to build a clean coal fired power plant or a small modular reactor to support the power grid that failed a few weeks ago. Power demand that occurred creating rolling blackouts was a risk that was ignored but now needs to be addressed. We need more reliable power, ie. coal, gas or nuclear, not unreliable power sources of wind turbines or solar panels that cost more than reliable power sources	Future reuse of the BRF site is out of scope for this project. Please see responses to Comment #39 and Comment #43.
117	Michael Cooper	Individual	It is unfortunate that Bull Run is going to shut down. I feel that it should be left open and some money be put into the plant. We have lost enough coal burners valley wide already and with the rolling blackouts that	Please see responses to Comment #39 and Comment #43.

Comment Number	Name	Organization / Affiliation	Comment	Response
			we just had I don't think we need to lose another one.	
118	Sarah Gunter	Individual	<p>My name is Sarah Gunter. I reside in Clinton approximately 4.6 miles from Bull Run Fossil Plant along with my six children, husband, and two dogs. I am concerned that the plant will not be deconstructed because of costs and worry about the risks to the children and especially adolescents who would see this abandoned plant as an abandoned cool building to explore. The old science museum was empty for a while before tearing down and some local Oak Ridge teenagers got inside and did some vandalism but no children were injured. However, the steam plant is a colossal building with dangers around every corner for curious people. My other concern is with the cost and threat to the environment in the act of demolition. I know it will be a huge cost to the taxpayers and perhaps even a threat to our wonderful parks that exist along the Clinch river. I would like to see the building demolished with the lowest cost and least threat to the environment. Once the building and outbuildings are destroyed I think that TVA should consider donating the land either for housing or public use such as a park.</p>	<p>Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. See response to Comment #99 regarding the No Action Alternative. Please see response to Comment #7 regarding potential impacts to natural areas, parks, and recreation. Future reuse of the BRF site is out of scope for this project.</p>
119	Tyler Mayes	Individual	<p>I am hopeful that TVA will choose a disposition for the plant that benefits the citizens of Anderson County. If TVA elects to demolish the site in its entirety, I request that TVA engages in discussions with TDEC sooner rather than later. As of 6:00 p.m. January 12, 2023, TDEC advised they</p>	<p>Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Once a decision for decontamination and deconstruction of BRF is made, TVA would ensure that appropriate TDEC air, land, and/or water permits are acquired and appropriate coordination is conducted with agencies to comply with</p>

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
			have not had communications with TVA regarding the disposition of the plant. Please address that. As for my opinion, I would like TVA to remove the site and create a green space that the constituency can enjoy for generations. As a County Commissioner in this area, I ultimately want to ensure the citizens are heard. With that being said, majority of the folks I have talked to want it gone and replaced with an area that offers green space, lake access for water recreation, and possible solar panel installation. Thank you for allowing the citizens to comment publicly on this very important project.	federal, state, and local regulations. Future reuse of the BRF site is out of scope for this project.
120	Mike Plank	Individual	This area should be developed for public hunting. A marsh for waterfowl or dove field would make great use of this land.	Future reuse of the BRF site is out of scope for this project.
121	Stephen Verran	Individual	First, I'm concerned about pollution into the river. It's a high recreation area and water supply for Oak Ridge. 2nd After deconstruction of BRF, the area could be used as solar farm. Large area, and panels wouldn't interfere with testing after removing BRF. Everyone is talking about TVA's lack of ability to produce enough electricity for electric vehicles and during high demand. FYI: Though the statement issued during the rolling blackout stated that was to reduce demand on the grid, most misunderstood or didn't hear it. I would like to know if TVA is planning on upgrading the grid to cover greater demands and possible costs involved.	Please see response to comment #18 regarding potential impacts to water resources. See response to Comment #39 regarding energy sources and TVA generating projects. Future reuse of the BRF site is out of scope for this project.

Comment Number	Name	Organization / Affiliation	Comment	Response
122	Leo York	Individual	As the decision has been made to close the plant, I would like to see the entire plant deconstructed and the area cleared and prepared for other industrial use by the county. This site has river barge, railway and interstate access via the Pellissippi Parkway. All surplus land could be managed by either the county or state. The planned expansion of the coal ash disposal area is an excellent site for a new elementary and middle school, fire department, community center, library, a sports park and activity park with walking and biking trails. District 1 has no current county parks save the kids park at the community center and the Bull Run Boat Launch area. Currently not in favor of ash removal as it will require the same handling as was used at the Kingston cleanup. Disposal was not good for the poor community it was removed to. With the planned widening of SteRte 170 commercial development will follow.	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. Please see response to Comment #8 regarding management of coal combustion residuals at BRF.
123	Mary Ruth Childress	Individual	I live on Mehaffey Rd. in Claxton. When the steam plant closes I would like to see it deconstructed and the whole area used for something environmentally safe that will benefit the Claxton Community!	Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
124	Roger Gregg	Individual	My power was already shut off at times this past summer by rolling black outs even with Bull Run up and running! How do you plan to make up for the loss? From what I understand, it was one of the "clean" coal plants. Don't let green bullies take away a viable resource and take my power away when you can't keep up even with Bull Run!	Please see responses to Comment #39 and Comment #43.

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
			Now with the big push for EVs, even more blackouts will be in our future!	
125	Michael Reedy	Individual	I have lived Next door to bull run since it was built. TVA, if it is dead serious about closing the plant after the black outs a few weeks ago should clean it up. After making it safe for habitation, should make it into an industrial park to bring JOBS into Claxton.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
126	David Douglas	Individual	Leave it OPEN. Update what needs and start generating power.	Please see responses to Comment #39 and Comment #43.
127	Tammy Moore	Individual	deconstruct and demolish the plant	TVA appreciates your comment.
128	Monique Creekmore	Individual	I firmly believe the Bull Run Power Complex, including all buildings and support structures, should be completely demolished and undergo 100% clean-up and abatement. It is in the best interest of the community to remove all fly ash and all asbestos containing materials and to return the land to a natural state. Recently my family and I were looking to buy a home and I would not consider anything close to the Bull Run facility. Even though I knew it was scheduled for decommissioning, I am not comfortable exposing my family and children to the toxic substances present in the immediate area due to the operation of the coal plant.	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. See response to Comment #8 regarding management of coal combustion residuals at BRF.
129	Jeff Coppala	Individual	Do not touch this plant. Coal is an essential component of our energy portfolio. Green energy is a part time and extremely expensive. We need economical and plenteous energy. Christmas 2022 demonstrated the failure of TVAs strategy of moving away from coal.	Please see responses to Comment #39 and Comment #43.
130	Taylor Fife	Individual	I have seen. I public information campaign for how TVA plans to increase power levels	Please see responses to Comment #39 and Comment #43.

Comment Number	Name	Organization / Affiliation	Comment	Response
			reliably to match and then keep up with power requirements in the area with population growth. I can not be in favor of decommissioning current power supply options while blackouts have been so recent. The power from Bull Run is not being replaced. Keep it running until TVA has the capability to increase power input well past even current levels with Bull Run	
131	Charles Ridge	Individual	I'm against right out against yhe closing of the Bull Run Steam Plant. We already have enough problems with power outages, how will it help by closing down another source of power. Energy generated by wind or solar is not a reliable source and will not support the community...	Please see responses to Comment #39 and Comment #43.
132	George Smith	Individual	We need the power! Tired of the blackouts and closing will make worse!	Please see responses to Comment #39 and Comment #43.
133	Erich Jacobs	Individual	We live here in claxton and we believe the plant should be deconstructed and hopefully expand the park next to it with fields for our children to play. as long as it was safe and clean. we only have the one park and it would be nice if there were more options. for sports maybe baseball hockey soccer football... Anything would be wonderful. thank you for listening	Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
134	Crystal Brown	Individual	Our family is in favor of FULL and complete demolition of the Bull Run facility.	TVA appreciates your comment.
135	Daniel Wellhung	Individual	Honestly, wirhout any hint or proof that TVA is implementing a new, cleaner form of energy (nuclear, TRISO/FCM FUEL), to replace bull run coal plant, I think TVA is making a HUGE IGNORANT mistake. This past 5 day cold winter event we had in dec 2022, which caused TVA to implement rolling blackouts WHILE NOT STARTING	Please see responses to Comment #39 and Comment #43. See response to Comment #8 regarding management of coal combustion residuals at BRF.

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>UP BULLRUN PLANT 1 TIME, is more than enough proof so that a deaf, dumb and blind man could see this. But, TVA is about maximizing shareholders value for its board of directors and could care less about the paying consumer!!</p> <p>You boneheads are shutting down a coal burning power plant without any source of electricity generation to replace it. This alone is more than enough proof to me that TVA could care less about the paying consumer.</p> <p>If you do vacate the bull run power plant, just make certain you take your mountainous coalash pile with you.</p>	
136	Justin Gellespie	Individual	<p>I think moving away from coal power is a mistake. For many years (almost 100 years) the Tennessee valley area has benefitted from cheap and reliable power generation. This past December, for the first time ever, my community experienced rolling blackouts due to the cold. Rolling blackouts are more and more common in "green" states that no longer base energy production on reliable sources like coal and oil. I fear Tennessee is heading down that path, of lessening reliability while adding cost which puts further strain on senior citizens and lower wage citizens. Please confine to diversity our energy production but stop the rush to remove coal and gas as consequential sources.</p>	Please see responses to Comment #39 and Comment #43.
137	Kimberly Dodson	Individual	<p>Personally I'm thankful they have stopped production as it was operating. If nothing else to stop the sickness in our valley. I've lived on Bull Run Road my whole life, got married to a Navy man and moved away</p>	Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and

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			for a few years and back to our home on Bull Run. There are so many people around me who have died with cancer!!! My Mamaw and Papaw who live within eye shot of our house. My Cousin who lived next door and my great Uncle. We lost our oldest son to cancer when he was 10 years old and his twin sister before they were born. If I am not mistaken there was a young boy that had cancer around the same time our son did. When I was little I can remember getting up in the morning and everything would be covered my black soot. I have had Chronic bronchitis that started when I was a baby. So, there has to be a connection to all of that horrible stuff that we all had to breathe all of our lives. The cancer and sickness on Bull Run Road alone should say something. As for what to do with the property I would like to see something go in there for the community, a business that would bring in jobs.	minimization of impacts to the environment. Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate.
138	Susan Feliciano	Individual	Where is our area going to get its electricity once this plant is shut down? Are we going to try to buy it from Kingston, or even from some over-strapped area farther away in the US? After spending so much on the scrubber project, why not keep it going, producing affordable power in a clean manner? I feel like getting rid of Bull Run will create an energy crisis in this area and just add to the crises in the rest of the country.	Please see responses to Comment #39 and Comment #43.
139	William Dean	Individual	With regards to TVA's EA on the Bull Run Fossil plant I am shocked and saddened that "Alternative A - Full Demolition" excludes key components of the TVA foot	This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of the Bull Run Fossil Plant buildings and structures. Management of

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Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>print and activity. Namely, these are ash ponds and pits that border the Clinch River and Bull Run Creek and contain various ash and CCR components.</p> <p>These areas are clearly depicted in Fig.1-1; Fig 1-2 (From Draft EA) as part of the BRF property, yet curiously, these are left out of decontamination plans.</p> <p>Please be a good corporate neighbor and remove ALL the hazardous products from this property, particularly those lying in and along our waterways. Do consider that addressing the waste pits now as part of the initial clean up will be the most effective and efficient time for this endeavor. While TVA may consider ash pits to be non-toxic, there remains much debate about that notion and even a likelihood of re-classification. Therefore it behooves both the Corporation and the public to remedy the matter now versus waiting for calamity to happen or consensus to force change. Therefore I support a TOTAL Decontamination and removal of contaminants from ALL facilities and waste pits contained within the BRF property boundary as opposed to the narrowly defined clean-up zone depicted in Fig 1-1 of the Draft EA released Dec 2022</p>	<p>coal combustion residuals on the Bull Run Reservation is out of scope for this project. See response to Comment #8 regarding management of coal combustion residuals at BRF.</p>
140	Vickie Gray	Individual	<p>We have lived on Henderson Hollow, all my life. Our property is down from WKUD intakes and across from the ash ponds. Each year we have ash on our homes that have to be pressure washed. Imagine what we are breathing! TVA has annexed our families properties for years for development, they should have to clean up</p>	<p>Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment. Future reuse of the Bull Run Fossil Plant site is out of</p>

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			their mess and take it all away!! We are tired of failed promises and that they have our best interests in mind! The whole complex should be taken down and removed so that this land can be used for our future generations!!! We are a small town and cannot afford to clean-up their mess for them!!	scope for this project and would be covered under a separate environmental review as appropriate.
141	Melanie Mayes	Individual	Of the three alternatives presented, I support Alternative A -- full demolition of all structures to 3 feet below grade. Given the age and lack of efficiency of the plant, it is unlikely to ever be resurrected for power production, consequently the obvious choice is full demolition. This would allow the property to potentially be reused in some other fashion, and would release TVA from most maintenance issues. HOWEVER, I am shocked that the coal combustion residues (CCR) are going to be left in place under this plan. These materials present hazards to the local community, in terms of their potential for collapse (a la Kingston plant), the potential for dust-borne contaminants being spread into the immediate community, and in terms of their hazardous constituents (a variety of heavy metals present in CCR). It is well-known (although doesn't appear to be mentioned in the EA) that there is a long history of finding concentrations of heavy metals and contaminants in groundwater wells around the CCR. Rainwater infiltration into the CCR will continue to leach metals and contaminants from the CCR into the groundwater and likely also the nearby surface waters....since the CCR appear to	<p>This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of the Bull Run Fossil Plant buildings and structures. Management of coal combustion residuals on the Bull Run Reservation is out of scope for this project. See response to Comment #8 regarding management of coal combustion residuals at BRF. See response to Comment #32 regarding potential impacts to groundwater.</p> <p>Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.</p>

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			<p>be built right up to the edge of the Clinch River. Higher groundwater can also "bathtub" into the CCR and thereby leach contaminated materials into groundwater. Groundwater and surface water are likely to be intimately connected in this location due to proximity of the Clinch and other minor tributaries.</p> <p>This is a problem that will only get worse over time, and as TVA is not around to do continued monitoring and testing of the groundwater. I attended the Jan 2023 TDEC meeting in which the NPDES permit renewal was discussed -- and even though TDEC wouldn't provide many details, they again mentioned that there are leachable metals coming from the CCR at Bull Run. Please, I urge you, to clean up the CCR thoroughly. The costs of such an activity are only going to escalate overtime. Please clean it up now so that our community can truly reclaim the land and use it for other purposes. Don't walk away and saddle our community with a long-term contamination problem in our ground and surface waters. The surface waters supply two districts in Knoxville as well as Oak Ridge's water district -- the intakes are just downstream of this plant. Our community has supported TVA -- please don't walk away from this mess.</p> <p>I am speaking as a private citizen, but one who obtained her MS and PhD degrees by studying the transport of heavy metals and radionuclides in geologic materials. I recognize the hazards here. It appears you are hoping for "dilution is the solution to</p>	

Comment Number	Name	Organization / Affiliation	Comment	Response
			pollution", but it is not acceptable to walk away and leave all this material in place. Consequently, I find this EA to be an inadequate assessment of the hazards present at the site. It is not a full evaluation of the alternatives that should be considered.	
142	Robert Hertwig	Individual	As a homeowner who lives near and passes by Bull Run plant daily I urge TVA to completely dismantle the plant and leave the property safe for future development by the the community and local government. Of major concern beyond the above is the safety of the water that will leach into the Clinch River and Bull Run Creek affecting the drinking and recreational use of the water. Some landowners even have their water wells that may be affected by contamination. My final concern is the concentration of PCBs on the land and in the water bottoms. This will need to be addressed as part of the plan and TVA's continued responsibility for all related environmental issues at the site.	Please see response to Comment #32 regarding potential impacts to groundwater. See response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment, including water resources. Section 3.11.2.1 of the EA describes how solid and hazardous waste would be handled. All waste would be handled in accordance with all applicable federal, state, and local regulations and disposed in an existing, facility permitted for each specific waste.
143	Daniel Fowler	Individual	Don't take this facility off-line. We need the power it provides, and renewable is far from ready.	Please see responses to Comment #39 and Comment #43.
144	Olaf Storaasli	Individual	TN legislators voted NOT to close Bull Run (I watched proceedings) but to keep it open, on standby for blackouts, & help with our influx of new families moving to our area. Despite the title, nuclear's not ready politically, but this talk's a great background: https://www.youtube.com/watch?	Please see responses to Comment #39 and Comment #43.

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			v=YgKKuBLGIAE I agree with our TN legislators NOT to close Bull Run as electricity demand increases. OlafTN.com	
145	Stephen Todd	Individual	TVA, Please make you decisions regarding Bull Run based on data regarding environmental concerns growth projections and economic benefit to consumers. Please consider the future benefits of the entire population. Please ignore opinions based on politics and blind bias. Thank you.	TVA appreciates your comment.
146	Ira Kaplan	Individual	I pass the Bull Run fossil fuel plant about once a week. Recently, my wife who follows how the Climate is Collapsing, asked me: what's all that black stuff. "Coal" I replied. I've followed the Bull Run coal ash problem for two years. Fukushima's waste water of millions of gallons of radioactive waste is about to be 'dumped' into the Pacific Ocean. Many other scenarios between the importance of not dumping the Bull Run coal ash fines into the Clinch River to the Fukushima controversy exist. Now we are told not to eat any freshwater fish as they are contaminated. A whole town near Scottsdale lost it's water supply. What are we thinking? I am 70 without any children. I hope to live through the beginning of Climate Collapse. Please, do not bow to the wealthy. Don't place others in harms way.	<p>This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of the Bull Run Fossil Plant buildings and structures. Management of coal combustion residuals on the Bull Run Reservation is out of scope for this project. See response to Comment #8 regarding management of coal combustion residuals at BRF.</p> <p>Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.</p>
147	Ted F.	Individual	I would like to encourage you to select 'Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade'. This would have the greatest short and long term positive impact on the site,	This EA evaluates the potential environmental and socioeconomic impacts of the proposed decontamination and deconstruction of the Bull Run Fossil Plant buildings and structures. Management of coal combustion residuals on the Bull Run Reservation

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			community, and TVA's reputation for responsibly closing and completing demolition of their facilities. Long term I hope that this site can become an asset for the local community by providing public green space, bike and hiking trails, wildlife habitat, and general public recreation. The Draft Environmental Assessment was unclear on what would happen with the fly ash piles located adjacent to the Clinch River (short or long term). This should be addressed with demolition.	is out of scope for this project. See response to Comment #8 regarding management of coal combustion residuals at BRF. Future reuse of the BRF site is out of scope for this project.
148	Richard Hamby	Individual	The Bull Run facility, like all TVA installations, are an integral part of our regional history. And inspired 1000s of people, like myself, to consider the monumental impact of the TVA in culture, engineering, even architecture & art. And - to pursue dreams, education, and pride in those facilities. Understanding the desire to be more eco-conscious there is no doubt that on-demand sources of power are still essential. I propose keeping BRF in working condition in case of supply chain or other issues requiring coal. Or, using the facility as an other form of power generation as the land and much of the infrastructure can be modified for use with LNG or as a possible pathfinder location for other technologies. Especially given its proximity to the University of Tennessee, and Oak Ridge. The land is effectively unusable for other purposes without	Please see responses to Comment #39 and Comment #43. See response to Comment #52 regarding preservation of historic resources.

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			exhaustive expense - which would ultimately be imposed on citizens via tax or rate support. Whatever decision is made, I oppose any that ultimately makes the site unused by TVA for the purposes of power generation, research, or ecology.	
149	Ben Taylor	Individual	My recommendation is to keep the plant open and operational. With the recent rolling blackouts TVA can use any energy sources they can possibly keep operational. I work for a major air compressor company in the Knoxville area and we are seeing problems still arising from the blackout periods. I also know lots of other contractors HVAC, Plumbing, and Electrical and they have commented to me that they are seeing issues from it as well.	Please see responses to Comment #39 and Comment #43.
150	Clifford Boyle	Individual	I am in favor of keeping power generation at this location. Either coal or natural gas. Solar and wind generation has not been adequate to meet the needs of East Tennessee. We need to keep electric generation in place that can be brought on line as demands increase. Rolling blackouts shouldn't be an option.	Please see responses to Comment #39 and Comment #43.
151	William Gwinn	Individual	I support Tennessee Citizens for Wildlife Planning's position: ". . . full demolition of all structures to three feet below the final grade." TCWP adds an additional addendum: "railroad tracks should be left in place to transport coal ash. Rail transport is economical and appears to be the optimal way to remove coal ash." I concur that this is the most responsible	Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment, including water resources. See response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.

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			approach both for our citizens' health, the future usability of the area, and for averting leakage of coal ash into the Clinch River, a vital source of water for the area	
152	Wolf Naegeli	Individual	Removal of all the coal ash is at least as important as removal of the structures. Recent horrendous flooding disasters in many parts of the country, including Appalachia, have been noted of drastically exceeding what was previously considered a 100-year flood! That is a serious warning for TVA not to be complacent in assuming that the coal ash can be safely kept on site. It would be a criminal mistake for TVA to dismantle the rail infrastructure before the coal ash has been removed because that would make it more costly, difficult and time-consuming to properly eliminate the hazard let alone remedy the consequences if a reasonably foreseeable disaster should strike before complete cleanup has been achieved!	Please see response to Comment #8 and Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.
153	Nancy & John Munro	Individual	My husband and I are long-time residents of Oak Ridge, Tennessee and have a comment with regard to the Draft EA on the Deconstruction and Decontamination of the Bull Run Fossil plant. Of the three alternatives, we urge you to select Alternative 1, full demolition of all structures to three feet below the final grade, except that we urge its modification to include leaving railroad tracks in place to allow for transporting coal ash. The removal of coal ash would be most safely and economically accomplished via rail transport	TVA appreciates your comment. Please see response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.

Comment Number	Name	Organization / Affiliation	Comment	Response
154	Melissa Capps	Individual	<p>TVA talks about making the land suitable for economic development, but there is not as much emphasis on social development and community desires. The future of the land should be based on the desires of residents of Claxton and Anderson County and should be made in consultation with the Anderson County government. It should not only take economic factors into account. Community members have spoken out against leaving plant structures in place, as it would keep the land from reuse and impair long-term property values. TVA should rule out Alternative C as an option, and any structures left in place under Alternative B should be acceptable to the residents of Claxton and the Anderson County government.</p> <p>Alternative A includes dismantling the railroad tracks and rail bed. This would keep the railroad from being used to move coal ash off-site. TVA needs to make a decision on the future of the coal ash along with the decision on the plant structures to keep from tying their hands on coal ash removal options.</p>	<p>Future reuse of the Bull Run Fossil Plant site is out of scope for this project and would be covered under a separate environmental review as appropriate. Please see response to Comment #99 regarding the No Action Alternative.</p> <p>See response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.</p> <p>As described in Section 3.19.2.1.2 of the Final EA, TVA has established a Bull Run Community Outreach Team to engage the local communities. This team would continue to identify key regions and communities, and community leaders and organizations, to engage with local leaders and provide regular updates as the project progresses. Communication could occur through website updates, postcards, fliers, media releases, newspaper advertisements, and/or social media content as needed.</p>
155	Melissa Capps	Individual	<p>TVA has identified 4 osprey nests within 660 feet of the structures. Ospreys are listed as a vulnerable species, but the EA makes no mention of any mitigating actions TVA would take to protect this species.</p> <p>The northern long-eared bat has recently been reclassified as endangered. The environmental assessment must take the bat population into account. TVA should commit to continuing Payment in Lieu of</p>	<p>Please see response to Comment #31 regarding potential impacts to osprey and their nests. Please see response to Comments #23-1 and 23-2 regarding potential impacts to listed bat species.</p> <p>In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023. Once BRF has closed, TVA will seek to place as many affected employees as possible into other TVA positions if they are willing to relocate. TVA is sensitive to local</p>

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			Tax (PILOT) payments through the plant's decommissioning and deconstruction to support Claxton through economic transition.	economic impacts and would conduct additional assessments to determine the best reuse of the BRF site. As discussed in Section 3.19.2.1.1 of the EA, TVA acknowledges that demolition and deconstruction activities and the associated influx in the workforce is expected to result in a minor, short-term increased economic opportunity. TVA also acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project and would enhance the future economic development of the area.
156	Melissa Capps	Individual	13 water wells are within a 1-mile radius of the project area, and it is unknown if these are being used for domestic purposes. TVA should commit to supporting the owners of these wells in continued water testing through the course of the deconstruction and beyond.	Please see response to Comments #32 regarding potential impacts to groundwater quality.
157	Joy Ruble	Individual	I would like to see the plant left as is for the time being. It is irresponsible to close plants before we have replacements for the loss of energy production. I understand the desire for cleaner energy, but I would like to see TVA make the transition in a responsible and intelligent way. We do not need to be dependent on other states for energy nor do we need to have more rolling blackouts in our area.	Please see responses to Comment #39 and Comment #43.
158	James Owens	Individual	Please consider repurposing this site for energy storage, as I believe this will significantly improve the stability of the power grid without the need for additional	Future reuse of the BRF site is out of scope for this project.

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			generation assets. Since all the grid connections already exist at this site, I think it would be ideal. In addition to the commercial scale storage, smaller scale storage demonstration units could also be sited here, and in conjunction with nearby Oak Ridge National Labs could provide a stepping stone for commercialization of new storage concepts that have evolved beyond the lab.	
159	Mark Watson	Individual	Formal comments are being sent via email and postal mail.	Comment noted. Mark Watson's formal comments and TVA's responses are included as Comments #3 through #9 above.
160	Sheila Atkins	Individual	The coal plant should not be closed down. We need the electricity it provides. We didn't even have enough power for everyone in December when the temperatures got so cold. We should leave the plant open.	Please see responses to Comment #39 and Comment #43.
161	Barsha Ruble	Individual	Bull Run should be left as it is. It should not be closed at all.	Please see responses to Comment #39 and Comment #43.
162	Ellery Meyers	Individual	Why are you shutting down power plant? is it only because of cries of Global Warming? We need more power not less. Especially if insane people insist on more electric vehicles.	Please see responses to Comment #39 and Comment #43.
163	Sharon Todd	Individual	I have been a resident of the Claxton Community for more than 60 years. This community has been subjected to toxic emissions from Bull Run Steam Plant from 1967 until scrubbers were installed on the plant in 2008. TVA installed a free car wash so residents could get the toxic dust off their vehicles lest it corrode the paint; houses across from Bull Run were painted due to corrosion from the fumes. My uncle asked the question that if the fumes would	<p>Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements. Please see response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.</p> <p>Removal of the smokestacks is included under both action alternatives that are being considered for decontamination and deconstruction of BRF. As stated in Section 2.1.3, the No Action Alternative, which would</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>do that to vehicles and houses, what were they doing to our lungs?</p> <p>The installation of the scrubbers did not eliminate the toxins, but redirected them into the coal ash and ultimately into the water supply accessed by two utility districts, West Knox Utility District and Hallsdale-Powell Utility District. These two utility district serve not only the Claxton Community, but other areas in Powell and Knoxville.</p> <p>The alternatives listed in the Environmental Assessment do not address the removal of the coal ash, resulting in a legacy of water pollution for many generations.</p> <p>Alternative A includes dismantling the railroad tracks and rail bed, thus eliminating an option for coal ash removal. The stacks must be removed if the site is to be repurposed for future development.</p> <p>The residents of Claxton and East Tennessee deserve to have a repurposed site that does not continue the legacy of air and water pollution.</p>	<p>retain all structures including the smokestacks, is not a reasonable option because it does not meet the purpose and need of the project.</p> <p>See response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.</p> <p>Please see response to Comment #32 regarding potential impacts to groundwater.</p>
164	David Campbell	Individual	<p>As an Anderson County, Tennessee citizen, a fisherman, a lifelong environmental voter, and a ardent outdoorsman, I'd like to comment on the decommissioning of the Bull Run Steam Plant. Of course, the toxic coal ash must be removed, so the rails should remain until that task is accomplished. In the whole process, TVA must be observant of the requirement of the resident Osprey and Long Eared bats that have made the plant area home.</p> <p>Whenever there is a disappearance of an</p>	<p>Please see response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation. See response to Comment #31 regarding potential impacts to osprey and their nests. Please see response to Comments #23-1 and 23-2 regarding potential impacts to listed bat species.</p> <p>Please see response to Comment #32 regarding potential impacts to groundwater. See response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment, including water resources.</p>

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>economic bastion in any community, that community will feel the economic repercussions for a long time. It is thus important that TVA should commit to continuing Payment in Lieu of Tax (PILOT) payments through the plant's decommissioning and deconstruction to support the Claxton community through this economic transition.</p> <p>Finally, TVA should ALWAYS follow the motto to "Do No Harm!" and enter into regular and continuing monitoring of the water wells that local people are dependent upon for their domestic water uses. It is entirely likely that to ignore the importance of keeping community water clean and clear would result in toxic seepage into these water sources.</p> <p>I hope TVA will take their duty to the community that has supported them for many years seriously and provide whatever protections, at whatever cost, to guard against the pollution of their land and to promote the Bull Run Steam Plant property as a clean and useful area for the Claxton community and for Anderson County.</p>	<p>In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023. Once BRF has closed, TVA will seek to place as many affected employees as possible into other TVA positions if they are willing to relocate. TVA is sensitive to local economic impacts and would conduct additional assessments to determine the best reuse of the BRF site.</p> <p>As discussed in Section 3.19.2.1.1 of the EA, TVA acknowledges that demolition and deconstruction activities and the associated influx in the workforce is expected to result in a minor, short-term increased economic opportunity. TVA also acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project and would enhance the future economic development of the area.</p>
165	Bonnie Shoemaker	Individual	<p>As a lifelong resident of Anderson county with many years of experience working with environmental compliance actions, in particular Clean Water Act compliance, at the Department of Energy facilities in Oak Ridge, and a love of the beautiful East Tennessee natural resources, I submit the following comments:</p> <p>TVA should remove all structures from the Bull Run site and return it to restorative status that would be acceptable for</p>	<p>Please see response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation. See response to Comment #31 regarding potential impacts to osprey and their nests. Please see response to Comments #23-1 and 23-2 regarding potential impacts to listed bat species and coordination efforts with the USFWS.</p> <p>Please see response to Comment #32 regarding potential impacts to groundwater. See response to Comment #46 regarding TVA's commitment to</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>economic or community use, as specified in Alternative A. However, exception should be made for removal of the railroad system to allow its use for future clean up and removal of coal ash in the impoundment areas outside of the site covered by this Environmental Assessment.</p> <p>Any determination of the demolition and deconstruction activities should be done with involvement of Claxton area residents and the Anderson county government. Extreme consideration should be given to wildlife habitat disturbance in the area, in particular osprey nests and endangered species in the area, with direct involvement and coordination with local and state wildlife resources agencies.</p> <p>Extreme consideration should also be given to determination of the uses of the 13 water wells in the immediate project area to ensure any domestic water uses are not impacted.</p> <p>Payment in lieu of taxes should be continued by TVA through completion of the project in economic support of the residents of Claxton.</p>	<p>avoidance and minimization of impacts to the environment, including water resources. See response to Comment #17 regarding TVA's community involvement efforts.</p> <p>In February 2019, the TVA Board of Directors approved the retirement of BRF by December 2023. Once BRF has closed, TVA will seek to place as many affected employees as possible into other TVA positions if they are willing to relocate. TVA is sensitive to local economic impacts and would conduct additional assessments to determine the best reuse of the BRF site.</p> <p>As discussed in Section 3.19.2.1.1 of the EA, TVA acknowledges that demolition and deconstruction activities and the associated influx in the workforce is expected to result in a minor, short-term increased economic opportunity. TVA also acknowledges that making the land available for future economic development is an important consideration, as indicated by its inclusion in the project Purpose and Need (Section 1.2 of the EA). The action alternatives (Alternatives A or B) of full or selective demolition of structures to three feet below final grade would meet the purpose and need of the project and would enhance the future economic development of the area.</p>
166	John Todd Waterman	Individual	<p>Thank you for the opportunity to comment on my community's future! I live about four miles from the Bull Run Fossil Plant. Like many of my fellow Anderson Countians and our officials, I'm deeply concerned and invested in our future. Now that the need for Bull Run's power is ending, I fondly hope TVA will repay us all for the long years we have tolerated BRF's harmful impacts on our health and our property values.</p>	<p>Section 3.18 of the EA discusses TVA's commitment to public health and safety and compliance with all applicable regulations, permitting, and monitoring requirements.</p> <p>As discussed in Subsection 3.15 of the EA, impacts to natural areas, parks, and recreation under the proposed action are expected to be short term and minor. These indirect impacts would include construction noise, visual intrusions, and stormwater runoff, which would be minimized through the use of</p>

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>Given the unreliability and cost of operating BRF, and that soon neither its power nor its switching station will be needed, only the decontamination and deconstruction option makes sense. The site should be restored not just to its relatively pristine pre-BRF state, but to one appropriately compatible with the beautiful, protected Oak Ridge parks opposite it, Haw Ridge Park and Melton Lake Park, a national rowing venue. Further, NEPA requires BRF's surrounding EJ community – whose property values have long been suppressed by BRF's smoke, and thousands of whom we know from the statistics were sickened or killed by BRF's smoke (though we could not see their and their loved ones' agonized faces through the statistics) – be spared any further health or other harmful impacts from the decontamination and deconstruction. Coal smoke's health effects have long been known. My father, Knoxville's first thoracic surgeon, told me as a child that living in Knoxville during the winter was equivalent to being a heavy smoker because of all the coal smoke.</p> <p>Though TVA does not address Bull Run's already-leaking coal ash impoundments because TDEC will decide how TVA must address them, the likely excavation and removal of those millions of tons of toxic material must be addressed in the Environmental Assessment. In Tennessee and elsewhere, coal ash is being excavated and removed to sites where it can be stored high, dry, lined, and away from potentially contaminated waterways. EJ</p>	<p>standard construction BMPs and coordination with recreational organizations and land managers of nearby areas.</p> <p>See response to Comment #46 regarding TVA's commitment to avoidance and minimization of impacts to the environment.</p> <p>See response to Comment #22-2 regarding rail infrastructure at BRF and management of coal combustion residuals on the Bull Run Reservation.</p> <p>See response to Comment #17 regarding community outreach efforts and potential impacts to environmental justice communities.</p> <p>Section 3.11.2.1 of the EA describes how solid and hazardous wastes, including asbestos, would be handled. All waste would be handled in accordance with all applicable federal, state, and local regulations and disposed in an existing, facility permitted for each specific waste.</p>

Comment Number	Name	Organization / Affiliation	Comment	Response
			<p>requires also that it not be trucked through or to minority communities as was done with Kingston coal ash and is now being done with the Allen Plant's dangerously contaminating ash. Dump trucks are poorly-suited to coal ash removal because of the huge number of loadings and trips and dumpings required, dangerously exposing workers and drivers, and because dump trucks cannot be tightly sealed to ensure toxic, respirable coal ash does not become respirably airborne along populated roadways enroute, unjustly exposing other motorists and their passengers and local community residents. Proper bagging and removal could be more safely and more economically accomplished on such an industrial scale by sealed barges or trains. Thus BRF's rail lines should remain in place until TDEC and/or the outspoken, insistent Bull Run community demand BRF's coal ash be safely excavated and removed.</p> <p>We understand there is also much asbestos buried on the BRF site. Asbestos removal requires even more stringent protections to ensure neither workers nor community members nor motorists are harmed. Plans for safely accomplishing that should be included in the EA.</p>	
167	Penny Cabe	Individual	Is it broken? Than fix it! It cost more to tear down and replace than to fix. Climate Change is a HOAX! Follow the money. The surrounding "community" KNEW it was there before they Bought. Don't like it. The pompous and pretentious can move. We need fossil fuel energy. We need all forms.	TVA appreciates your comment.

BRF Decontamination and Deconstruction

Comment Number	Name	Organization / Affiliation	Comment	Response
			The "Green" can not sustain current needs nor will it in the near future. If it needs more catalytic filters do it. Stupid people do stupid things and Al Gore has made 300 million scaring stupid and you can't fix stupid.	

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#123]
Date: Thursday, February 2, 2023 4:38:20 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Name	Terry Frank
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Close by

I sincerely appreciate the opportunity to provide a comment.

After reading the Draft Environmental Assessment and the description and analysis of the alternatives provided, including the affected environment and environmental consequences, I write to express preference for "Alternative A-Full Demolition of All Structures to Three Feet Below Final Grade." While my personal assessment of the Draft Environmental Assessment concludes that Alternative A creates the least long-term risk to the community, it is noteworthy that it also provides the best opportunity for repurposing and redevelopment of the site for the economic benefit of the community, and region.

In addition, the Draft Environmental Assessment notes that the structures and facilities of Claxton Community Park, Claxton Community Center, CCR Impoundments, BRF Visitor's Overlook/Entry Monument, and Switchyard are not part of this Alternative. However, I wish to take this opportunity to note decommissioning and demolition of the Bull Run Fossil Plant is also an opportunity to move the Claxton Community Center and Claxton Community Park. This opportunity would provide the greatest opportunity for a clean site. Given TVA's legacy of recreation and community involvement, decommissioning and demolition of Bull Run Fossil Plant provides an opportunity for TVA to further partner with Anderson County to relocate these beloved community amenities, in a way that provides the benefit of a fully clean footprint for redevelopment.

I have also mailed a letter on letterhead.

Sincerely,

Mrs. Terry Frank
Anderson County Mayor

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#96]
Date: Tuesday, January 17, 2023 12:18:54 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Rick Meredith
Address	<input type="checkbox"/> Anderson County Chamber of Commerce 245 N Main Street, Ste 200 CLINTON, TENNESSEE 37716 United States
Phone Number	(865) 457-2559
Email	janet@andersoncountychamber.org
How close are the route options to your property?	Close by
The Anderson County Chamber of Commerce, Clinton, TN, requests that the Bull Run Fossil Plant be totally demolished and repurposed for mixed use: Recreational, Retail, Industry and Community Facilities. The Chamber also encourages TVA to complete the demolition safely and expeditiously so the site can be adapted for both public and private sector opportunities as soon as possible.	

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#117]
Date: Wednesday, February 1, 2023 9:51:49 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Mark Watson
Address	<input type="checkbox"/> City of Oak Ridge 200 South Tulane Ave Oak Ridge, Tennessee 37830 United States
Phone Number	<div></div>
Email	<div></div>
How close are the route options to your property?	Not near
Formal comments are being sent via email and postal mail.	



February 1, 2023

VIA EMAIL: brkunkle@tva.gov

Brittany Kunkle
NEPA Specialist

Tennessee Valley Authority
400 West Summit Hill Drive, WT 11B
Knoxville, TN 37902
Phone: [865-632-6470](tel:865-632-6470)

***Bull Run Fossil Plant Decontamination and Deconstruction Draft
Environmental Assessment Project Number 2022-8 (December 2022)***

Dear Ms. Kunkle:

I am writing on behalf of the City of Oak Ridge, Tennessee, in response to the Tennessee Valley Authority's (TVA) December 5, 2022, release of the subject document for public comment.

The City of Oak Ridge is a long-time partner with TVA and continues to be a major stakeholder in the closure, decontamination, and deconstruction of the Bull Run Fossil Plant. Given the proximity of the site, planning for disposition and beneficial reuse of the property is of utmost importance to our community.

In 2018, TVA issued a draft environmental assessment (EA) regarding the possible closure of the facility. The City of Oak Ridge reviewed that document and City Council transmitted the attached comment letter to communicate significant concerns related to the proposed closure. I am attaching the letter dated December 18, 2018, and request that it be included in the City's response for public comment on the current draft EA.

TVA made the decision in January 2019 to retire the Bull Run Fossil Plant by 2023 and is now assessing decommissioning and demolition of existing plant structures that the agency deems will not be necessary in the future.

The City has identified a number of issues related to this current assessment and submits the following comments:

1. According to Page 19 of the draft EA, TVA has not at this time identified a



preferred alternative. However, Alternative A --- Full Demolition of All Structures to Three Feet Below Final Grade—most closely aligns with the City’s desire for timely demolition and economic redevelopment of the site. As stated in the City’s 2018 letter, the removal of equipment but leaving the buildings and structure in place is not a viable option. The City strongly urges TVA to make the financial commitment to completing the D&D as quickly as possible so that the site does not languish. Socioeconomic benefits such as re-employment of the local, skilled workforce during D&D can be realized sooner to help offset the loss of jobs due to the plant closure.

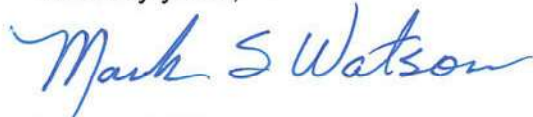
2. The City urges TVA to coordinate with the Tennessee Department of Transportation (TDOT) to prioritize the Edgemoor Road (SR170) construction project, urging the restoration of the western portion as Phase 1. The proposed widening of Edgemoor Road from 2-lanes to 4-lanes has been in TDOT’s planning stages for two decades. The timely expansion is vital to the beneficial repurposing of the TVA’s Bull Run Fossil Plant property and should be initiated in coordination with the D&D of Bull Run. Synching the projects is needed to make the most efficient and effective use of both TVA and TDOT resources. Additionally, the large number of commuters to the Department of Energy facilities in Oak Ridge creates an important coordination effort with our community and the associated bridge crossing at the Bull Run Fossil Plant.
3. The City of Oak Ridge/Anderson County has borne a significant environmental burden associated with legacy waste management practices by the federal government. Given the TVA’s status as a Natural Resource Trustee of the Department of Energy’s Oak Ridge Reservation, the City believes that TVA has a special responsibility to ensure that the agency and its contractors strictly adhere to the mitigation measures and best management practices as described in Section 2.3 of the draft EA. Given recent growth in population and economic activity, the City further requests that metal/waste recycling and waste disposition occur only at licensed and bonded facilities *outside of the Oak Ridge* city limits.
4. As noted in the EA, the Bull Run site is in close proximity to major natural areas, parks and recreation such as Haw Ridge and Melton Lake. These amenities are also economic drivers for the city, region, and state. The City urges TVA to conduct its D&D activities in full consideration of the nearby world-class rowing venue and protection thereof by continuing to comply with permit requirements. Assuming the shutdown will occur by December 2023 and current permitted standards are met, the City of Oak Ridge does not have significant concerns about the recent permit reissuance to TVA for the Bull Run Fossil Plant.
5. The scope of this environmental assessment does not include long-term Bull Run coal ash storage or specific future development options for the site. The

document states that separate evaluations will be conducted for those projects. Beneficial reuse/economic development by TVA or the community cannot be accomplished until these evaluations occur. Thus, the City strongly urges TVA to initiate the necessary studies needed to complete these assessments, as all are inter-related to support successful repurposing of the site.

6. Finally, the Environmental Assessment #2022-8 does not cover a defined timetable to begin and complete the demolition. This action by TVA has created an expectation in the community and particularly adjacent areas. Future development in Oak Ridge is observant in anticipating this project. However, the lack of definitive timetables for studies, assessments, external and off-site improvements and TDOT improvements create uncertainty for this sector of Anderson County, the City of Oak Ridge and impact Knox County. This should NOT be a project that is continually delayed or have flexible priority to the ultimate demolition and redevelopment.

Thank you for the opportunity to respond to the draft EA, and I strongly urge your consideration of these comments. Now, more than ever, it is critical that TVA and the City of Oak Ridge maintain clear lines of communications to make this transformative progress for our community and region. I am available at (865) 425-3550 should you have any questions or need clarification.

Sincerely yours,

A handwritten signature in blue ink that reads "Mark S. Watson".

Mark S. Watson, Ph.D.
City Manager

Attachment: *Letter to Ms. Ashley Pilakowski from Oak Ridge Mayor on Draft Potential Bull Run Fossil Plant Retirement Environmental Assessment. December 18, 2018*

cc: Mayor and Members of Oak Ridge City Council

CITY OF OAK RIDGE



OFFICE OF THE MAYOR
TELEPHONE (865) 425-3432

POST OFFICE BOX 1 • OAK RIDGE, TENNESSEE 37831-0001

December 18, 2018

VIA E-Mail: aapilakowski@tva.gov

Ms. Ashley Pilakowski
Tennessee Valley Authority
400 West Summit Hill Drive WT 11B
Knoxville, TN 37902

**SUBJECT: DRAFT POTENTIAL BULL RUN FOSSIL PLANT RETIREMENT
ENVIRONMENTAL ASSESSMENT: TVA Project 2018-35**

Dear Ms. Pilakowski:

The City of Oak Ridge appreciates the opportunity to comment on the *Draft Potential Bull Run Fossil Plant Retirement Environmental Assessment: TVA Project 2018-35*. The contents of the letter were considered by the City Council on December 10, 2018 with that body voting to approve the transmittal of these comments.

The Bull Run Fossil Plant has provided reliable power to the citizens of the Tennessee Valley for over fifty years. It is a fixture to the citizens of Oak Ridge, both as a symbol of the commitment of Tennessee Valley Authority to provide low cost, reliable power to our community and maintaining strict compliance with safety and environmental policies that protect our region and its citizens.

We consider the possible loss of this resource to be of grave concern. At the most immediate level, the loss of 100 high paying jobs and the associated impacts on the transportation industry, tourism (through impact on the fisheries), and the multiplied effects of these economic input both to our City and to Anderson County, would appear much more consequential than indicated in the report.

The City Council understands that the operation or closure of a generation asset is a financial decision made in an effort to provide economical electric power. However, while we understand that the plant has moved from an 80% capacity factor to a 33% capacity factor, we are concerned that by considering elimination of the plant, TVA is moving away from its commitment to a diverse fuel mix and toward over dependence on natural gas. One can hardly recall TVA's own dire warnings of high load and appeals for conservation during both high and low temperature extremes over the last several years without questioning if elimination of a generation resource is, in fact, desirable from the perspective of a robust, reliable power system.

All of that said, perhaps the most troubling aspect of the proposal is the Alternative B, where the plant is closed and the equipment removed, but its buildings and structures remain in place. This scenario both unacceptably removes an important economic resource and prevents its timely replacement.

The Bull Run site of several hundred acres has access to rail, highway transportation and barge facilities. It has a ready supply of water for both consumption and cooling and is obviously positioned such that high levels of electric power is available. Experience at other industrial sites in Oak Ridge as part of Department of Energy (DOE) reindustrialization has demonstrated a strong need for the work to prepare a site such as the Bull Run plant for all services, levelling and soil stabilization. A consulting study for the

return of the site to private sector hands and a review of usage possibilities for the site should be coordinated with state agencies such as TDOT, TDEC and the U.S. Corps of Engineers. **Open and frequent inclusion of the City of Oak Ridge and Anderson County is a must!**

For such a site to be shut and left unusable, occupied by abandoned buildings, mountains of coal ash and rusting facilities is a waste and a significant change to TVA's commitment to the Valley and its surrounding communities.

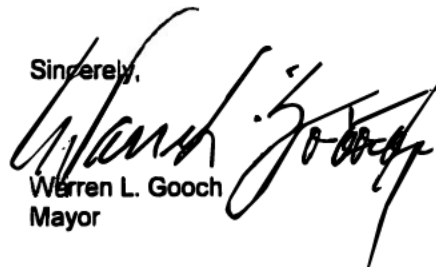
Bull Run plant is located on a critical segment of roadway from Clinton Highway, through Claxton, crossing in to Oak Ridge on Edgemoor Road. Significant road improvements are anticipated through this corridor and said ROWs and dedications for bridge rebuilding must be participated in by TVA with grade separation from the adjacent railroad. These cumulative impacts of the closure must be accounted for in any assessment: financial impacts to local governments, sensible environmental remediation, roadway and ROW enhancements, railroad integration for industrial use, removal of facilities and an established timeline for implementation for completion. All transportation issues should be prioritized on the regional Transportation Improvement Plan (TIP).

Although it is our preference that Bull Run continue in its role as a productive employer and power resource, should the decision be made to permanently close the facility, the City of Oak Ridge strongly urges TVA to remove all abandoned structures, remove the coal ash to the degree possible and clear the land for industrial use.

Redevelopment of the site could eventually more than offset the economic damage to Oak Ridge and Anderson County that closing of the Plant will cause. It will make productive use of the resources of our region without the significant loss of agricultural or recreational lands and, most importantly, it will demonstrate TVA's true commitment to the wellbeing of our community.

Thank you for your consideration of these remarks and we look forward to being a part of the process as it moves forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Warren L. Gooch", is written over the typed name and title.

Warren L. Gooch
Mayor

cc: Lamar Alexander, United States Senator
Marsha Blackburn, United States Senator
Chuck Fleischmann, United States Congressman
Randy McNally, Lt. Governor
Ken Yager, State Senator
Kent Calfee, State Representative
John Ragan, State Representative

From: [White, Douglas](#)
To: [Kunkle, Brittany Renee](#)
Cc: [Kajumba, Ntale](#); [Buskey, Traci P.](#)
Subject: EPA Comments Bull Run Fossil Plant Decon and Demo Draft EA
Date: Thursday, February 2, 2023 5:15:02 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Ms. Brittany Kunkle
NEPA Specialist
Tennessee Valley Authority
400 West Summit Hill Drive, WT 11B
Knoxville, Tennessee 37902
(brkunkle@tva.gov)

Re: EPA Comments on the Draft Environmental Assessment for the Bull Run Fossil Plant Decontamination and Deconstruction, Anderson County, Tennessee

Dear Ms. Kunkle:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced document in accordance with Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The Tennessee Valley Authority (TVA) is conducting an Environmental Assessment (EA) to evaluate the impacts of the proposed decontamination and demolition of the Bull Run Fossil Plant (BRF).

The BRF is situated on a 750-acre reservation at the confluence of the Clinch River and Bullrun Creek, in Anderson County, Tennessee (TN). The coal-fired steam-generating plant is the only single-generator plant in the TVA coal fleet, with a net generating capacity of 889-megawatts. The Draft EA states that lower cost nuclear power has displaced BRF for baseload generation (Section 1.1 Intro). Consistent with the TVA's 2019 Integrated Resource Plan (IRP), an EA for BRF retirement was completed in 2019 and the TVA Board of Directors approved the retirement of BRF by December 2023.

The TVA developed and analyzed two Action Alternatives and the No-Action Alternative. The TVA considered a third alternative: deenergizing, idling, and maintaining BRF, but eliminated this alternative from further discussion. Under the No-Action Alternative, the TVA would leave BRF as-is. The TVA acknowledges that the No-Action Alternative is not a reasonable alternative. The Draft EA indicates that the TVA will select a Preferred-Action Alternative at a future date, following further analysis and public input. The TVA's Action Alternatives include:

- **Alternative A:** Decontamination, demolition, and disposal of all structures at BRF to within three feet below final grade.
- **Alternative B:** All actions of Alternative A, except for leaving the turbine bay and intake structure of the powerhouse intact.

Based on our review of the Draft EA and described in our detailed comments, the EPA has developed recommendations for the TVA for the implementation of preventative measures and mitigations that would reduce the environmental impacts of the proposed alternatives. The EPA has enclosed detailed technical comments for your consideration (See enclosure).

The EPA appreciates the opportunity to review the Draft EA for the proposed decontamination and deconstruction of Bull Run Fossil Plant. To discuss technical recommendations further, please contact Douglas White, Project Manager in the NEPA Section at white.douglas@epa.gov or at 404-562-8586.

Enclosure

EPA Comments on the Draft Environmental Assessment for the Bull Run Fossil Plant Decontamination and Deconstruction, Anderson County, Tennessee

Hazardous Materials and Wastes: BRF is currently a small-quantity generator of hazardous wastes. Demolition of BRF will potentially require the temporary production of large quantities of several regulated wastes including asbestos, lead, mercury, polychlorinated biphenyls, and volatile organic compounds. The Draft EA states that decontamination and demolition would limit the potential for contamination of groundwater from these sources and would have a positive impact on groundwater quality relative to the No-Action Alternative. Therefore, the impact to groundwater would be minor (Section 3.2.2.1 Environmental Consequences). The EPA understands that decontamination and demolition in support of the project will ensure that Resource Conservation and Recovery Act-regulated solid wastes generated are disposed of in accordance with federal and state regulations. The TVA indicates that Alternative A could create approximately 7,000-cubic yards of demolition debris, 9,000-cubic yards of asbestos-containing materials, and approximately 55,000-net tons of scrap metal, that would be hauled offsite to be recycled or disposed at an appropriate facility in accordance with all federal, state, and local laws and regulations.

Recommendation: For the protection of the Melton Hill Reservoir, Waters of the United States (WOTUS), and as required by the Clean Water Act, the EPA recommends the use of secondary containment where storage and handling of Petroleum, Oils, and Lubricants (POL) will take place. Efforts should be made to divert any recyclable materials such as concrete, steel and asphalt away from landfills and repurpose the material instead.

Air Quality and Climate Change: The area of Anderson County, TN, in which BRF is located is in Maintenance Status with the National Ambient Air Quality Standards for Ozone and Particulate Matter (PM). The TVA identifies temporary fugitive PM produced by demolition of BRF as a potential impact to air quality. Mitigation measures for fugitive PM are also identified (Section 3.10 Air Quality). Overall, the EPA understands that coal plant retirements provide a net benefit to regional air quality.

Recommendation: In concurrence with the air quality improvement measures identified by the Draft EA, the EPA recommends implementing measures to reduce diesel emissions, such as switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training or contracting policies. We also encourage controlling fugitive PM by watering or the application of other controlled materials.

Environmental Justice: The project goal is to decontaminate land and remove soon-to-be retired coal plant infrastructure. Data from the EPA's EJScreen (<https://www.epa.gov/ejscreen>) mapping tool shows that people over age 65 comprise 28% of the population within close proximity to the project area. This population is in the 87th and

86th percentiles in the state and the United States, respectively. The Draft EA states that nearest single-family residential areas are located along Edgemoor Road approximately 140 feet from the northwest boundary of the project area (Section 3.1.1.1 Land Use). The TVA has also identified low-income communities near the project area in its Environmental Justice (EJ) analysis and initiated the Bull Run Community Outreach Team (Section 3.19.2.1.2).

Recommendation: The EPA encourages the TVA to continue coordination efforts with communities near the project area to address identified impacts and to disseminate project status updates. The EPA also recommends that the TVA ensure that populations near the project site that may bear greater impacts from potential air and noise emissions be protected through mitigation measures to the greatest extent practicable.

Water Resources and Wetlands: The Draft EA states that the TVA will acquire a National Pollutant Discharge Elimination System construction stormwater permit and implement a stormwater pollution prevention plan to mitigate effects from the temporary disturbance of soils during decontamination and demolition. Best Management Practices (BMP), as described in the TVA's BMP manual and the Tennessee Department of Environment and Conservation Erosion and Sediment Control Handbook, will be used to avoid contaminating surface water near and downstream of construction sites. Streams, wetlands, and floodplains are present at the BRF reservation. The EPA understands that streams, wetlands, and WOTUS will not be impacted by Alternative A or B and a 30-foot buffer from WOTUS will be enforced by the TVA (Section 2.3.2 Best Management Practices). The EPA also understands that in-water work and work within the 100-year floodplain will be avoided except for the infill of water intake and discharge structures (Section 3.4 Floodplains).

Recommendation: The EPA recommends monitoring surface water discharges in accordance with the TVA's stormwater and construction stormwater permits, and maintenance of BMPs, to ensure pollutants do not enter WOTUS.

Biological Resources: Section 3.9 of the Draft EA indicates that the TVA has completed consultation with the U.S. Fish and Wildlife Service (FWS) for the proposed alternatives. The FWS identified Threatened or Endangered Species (TES) with the potential to occur within and near the BRF reservation, including several bat and bird species. Although BRF is primarily industrialized, existing structures may provide roosting locations for bats. During roosting seasons, these structures will be surveyed prior to demolition and coordination made with the FWS. No critical habitats exist within 3-miles of BRF.

Recommendation: The EPA principally defers to the FWS regarding compliance with the Endangered Species Act and understands that the TVA will implement the results of their programmatic consultation with the FWS for the protection of TES.

Douglas White
U.S. Environmental Protection Agency / Region 4
Strategic Programs Office / NEPA Section
61 Forsyth Street, SW
Atlanta, GA 30303-8960
404-562-8586

From: [Cusick, Lesley](#)
To: [Kunkle, Brittany Renee](#)
Subject: Bull Run Fossil Decontamination and Deconstruction Environmental Assessment Comments from RSI
Date: Thursday, February 2, 2023 2:57:36 PM
Attachments: [image001.png](#)

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Dear Ms. Kunkle,

The following comments are submitted on behalf of RSI.

In the matter of the Bull Run Fossil Plant Decontamination and Deconstruction Draft Environmental Assessment, RSI would like to offer its support for the TVA's preferred alternative, the full demolition of all structures. The beneficial impacts of this alternative are diverse and would serve natural resources such as groundwater quality, aquatic life, and regional air quality. TVA's preferred alternative would also meet compliance obligations and incorporate best management practices that provide over and above enhancements to natural resources such as the Clinch River, its floodplain, and associated wetlands. The proposed restoration of native vegetation, where applicable, can have far reaching benefits, including to the support of pollinating insects. The spirit of NEPA will also be met by considering the "productive harmony" of man and the environment and those direct and indirect impacts experienced by neighboring properties and the many users of Haw Ridge Park through the proposed action which will include the removal of the stacks.

RSI also supports the economically beneficial reuse opportunities that will be enabled by implementation of the preferred alternative. Not only can the property be reused for a variety of purposes that can return an investment to ratepayers, it can meet the needs of a growing population with diverse needs and interests. The preferred alternative is a means of job creation both in its execution and in the future development that may occur. The reuse of a brownfield is a win-win for the environment and the community. TVA and its public would be well served by following the long-term and highly successful beneficial reuse approach taken by the Department of Energy and its contractor community in implementing the Reindustrialization Program at the East Tennessee Technology Park. TVA can draw from a ready pool of demolition and remediation workers trained in exactly the skillset needed to move forward with the preferred alternative. Opportunities for coordination with DOE and its team may also be able to be pursued, bringing decades of experience in beneficial reuse to the TVA community.

Thank you for your consideration of these comments.

Lesley

Lesley Cusick | *Community and Stakeholder Engagement,
Regulatory Process Improvement and Innovation, Beneficial Reuse*

RSI EnTech, LLC



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February 2, 2023

Via Email to brkunkle@tva.gov; nepa@tva.gov

Brittany Kunkle
NEPA Specialist
Tennessee Valley Authority
400 West Summit Hill Drive, WT 11B
Knoxville, TN 37902

RE: Bull Run Plant Decontamination and Deconstruction Environmental Assessment

Dear Ms. Kunkle:

Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices and Sierra Club write to express concern about the potential for the Bull Run decontamination and deconstruction project (Project) to prematurely and arbitrarily limit the options available for construction debris and coal ash disposal, resulting in cumulatively significant impacts to adjacent and nearby low-income environmental justice communities. We are also concerned about the Project's potential to result in individually and cumulatively significant impacts on threatened and endangered bats and their habitat, including the northern long-eared bat, which the U.S. Fish & Wildlife Service (FWS) has recently determined is endangered rather than threatened, and the tricolored bat, which FWS has proposed to list as endangered.

The Draft Environmental Assessment (Draft EA) does not adequately disclose and analyze impacts to environmental justice communities and endangered species. Without adequate disclosure and analysis, TVA's determination that the Project will not significantly affect the environment does not have a reasoned basis. *See* 40 C.F.R. § 1501.3. TVA must disclose and analyze these impacts in an Environmental Impact Statement with a broader range of reasonable alternatives, including alternatives that examine rail transport of deconstruction debris, coal ash and fill material to avoid impacts to environmental justice communities. TVA should also identify project-specific measures to avoid impacts to threatened and endangered bat species.

I. The Draft EA arbitrarily limits options available for disposal of construction debris and coal ash, unnecessarily subjecting environmental justice communities to significant traffic, air pollution, noise and other impacts.

TVA acknowledges in the Draft EA that the Project has the potential to have moderate cumulative impacts on low-income environmental justice communities near the Bull Run Plant, including “an increase in traffic, noise, exposure to fugitive dust, and exhaust emissions from the trucks used to transport the borrow material and demolition debris.”¹ TVA further acknowledges that activities it may undertake to close its leaking, unlined coal ash pits may contribute to these cumulative impacts on environmental justice communities.² But TVA dismisses these impacts of the Project on people who have long been harmed by TVA’s operations at Bull Run.³

NEPA requires more. First, TVA must acknowledge that its own activities have contributed to and continue to contribute to the environmental burdens borne by environmental justice communities near the Bull Run Plant.⁴ TVA has operated the Bull Run Plant for more than fifty years,⁵ spewing air pollution into the surrounding communities and discharging toxic water pollution into the Clinch River. Toxic coal ash remains in leaking, unlined pits built over blue line streams, including Worthington Branch, and immediately adjacent to the Clinch River and Bull Run Creek.

How TVA handles construction debris and coal ash disposal from the Project has the potential to exacerbate pollution impacts in communities already overburdened by decades of TVA’s pollution. Yet rather than consulting the potentially affected communities about alternatives,⁶ TVA simply asserts that it might mitigate the purportedly “unavoidable” impacts to some extent. Specifically, TVA states that it might mitigate the additional harms by adopting a handful of best management practices, or, perhaps—in TVA’s discretion—decide not to select borrow sites or haul routes through environmental justice communities.

¹ Draft EA, 108.

² *Id.*

³ *Id.*

⁴ Council on Environmental Quality, *Environmental Justice Guidance Under the National Environmental Policy Act*, 13 (1997) (“Agencies should consider relevant public health data and industry data concerning the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards, to the extent such information is reasonably available.”)

⁵ Draft EA, 1.

⁶ Council on Environmental Quality, *Environmental Justice Guidance Under the National Environmental Policy Act*, 15 (1997) (“Agencies should encourage the members of the communities that may suffer a disproportionately high and adverse human health or environmental effect from a proposed agency action to help develop and comment on possible alternatives to the proposed agency action as early as possible in the process.”)

TVA's noncommittal suggestion that it might avoid borrow sites or haul routes through environmental justice communities is belied by its description of Alternative A, in which TVA expressly states that the disposal site for construction debris and the location of borrow pits will be determined by "the contractor."⁷ How can TVA avoid impacts when it delegates the crucial decisions to "the contractor"?

In addition, the Project appears to eliminate at least one potential alternative for disposal of construction debris and coal ash without disclosing and evaluating it. Specifically, the Draft EA acknowledges that the Bull Run Plant is served by railway.⁸ But there is no discussion in the Draft EA of the potential to use rail to transport some or all of the construction debris, reducing traffic, noise, and truck pollution on environmental justice communities. There is similarly no discussion of the potential to use rail to transport borrow material to the Project site. In fact, the Project includes *removing* TVA-owned rail infrastructure,⁹ without any discussion of how this might limit alternatives that incorporate rail transport to reduce impacts on environmental justice communities.

TVA's omission of any consideration of the use of rail, and potentially its plan to remove on-site rail infrastructure, could also arbitrarily limit alternatives for the permanent disposal of the millions of tons of toxic coal ash currently sitting in leaking unlined pits at the Bull Run Plant. TVA's coal ash is leaching toxic contaminants into groundwater and must be moved to safe, dry lined storage. But it must be done equitably. In 2017, TVA decided it would build a new CCR landfill on land adjacent to the Plant,¹⁰ but it has rightly faced outcry from low-income environmental justice communities that would live next door to that landfill. Coal ash can be moved to a disposal site by rail, and this alternative should be considered by TVA and the Tennessee Department of Environment and Conservation.¹¹ TVA should not take any action as part of this Project that would prematurely eliminate the potential for disposal of coal ash by rail. Instead, TVA should broaden the alternatives examined for *this* Project to also include rail transport of construction debris and borrow material.

⁷ Draft EA, 9.

⁸ Draft EA, 64 ("BRF is served by one CSX rail line to the south of the site.")

⁹ Draft EA, 11.

¹⁰ <https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews/Bull-Run-Fossil-Plant-Landfill-Management-of-Coal-Combustion-Residuals>.

¹¹ Draft EA 103, Table 3-20 ("TVA could consider several options of closure of these facilities including Closure-by-Removal with CCR transported to an offsite landfill and Closure-in-Place. The viable closure options would be evaluated in accordance with the TDEC order and through consultation with TDEC.")

TVA owes it to the environmental justice communities affected by the Project to examine a broader range of options, including rail transport, to avoid exacerbating and prolonging the 50-plus years of pollution burdens imposed by TVA's activities.¹²

II. The Draft EA fails to adequately analyze impacts to threatened and endangered bats.

TVA cannot begin any activity associated with the Project until the agency satisfies its obligations under Section 7 of the Endangered Species Act ("ESA"),¹³ in light of the northern long-eared bat's (*Myotis septentrionalis*) new endangered status and related new information about the species.¹⁴ TVA must reinitiate consultation with the United States Fish and Wildlife Service ("FWS") regarding the April 2018 programmatic biological opinion under which TVA purports to be operating and obtain a sufficient incidental take statement.¹⁵ Alternatively, because it is clear that the Project may affect the northern long-eared bat, TVA will be required to initiate project-specific formal consultation.¹⁶

TVA must also satisfy its obligations under the ESA concerning the tricolored bat (*Perimyotis subflavus*), which is proposed to be listed as endangered.¹⁷ At a minimum, TVA must address whether it is required to confer with FWS.¹⁸ However, TVA and FWS should proactively consider the tricolored bat during reinitiated programmatic consultation or in project-specific consultation for the Project since the tricolored bat is likely to be listed before the Project is complete.

The ESA embodies "a conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies."¹⁹ Section 7 is "[t]he heart of the ESA,"²⁰ and commands that each federal agency must "insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any

¹² Council on Environmental Quality, *Environmental Justice Guidance Under the National Environmental Policy Act*, 15 (1997) ("When the agency has identified a disproportionately high and adverse human health or environmental effect on low-income populations, minority populations, or Indian tribes from either the proposed action or alternatives, the distribution as well as the magnitude of the disproportionate impacts in these communities should be a factor in determining the environmentally preferable alternative. In weighing this factor, the agency should consider the views it has received from the affected communities, and the magnitude of environmental impacts associated with alternatives that have a less disproportionate and adverse effect on low-income populations, minority populations, or Indian tribes.")

¹³ 16 U.S.C. § 1536.

¹⁴ See 87 Fed. Reg. 73488–73504 (Nov. 30, 2022).

¹⁵ 40 C.F.R. § 402.16(a)(2); see also *id.* § 402.16(a)(4); Draft EA at 55–56.

¹⁶ 40 C.F.R. § 402.14(a).

¹⁷ See 87 Fed. Reg. 56381–92 (Sept. 14, 2022).

¹⁸ See 50 C.F.R. § 402.10.

¹⁹ *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 185 (1978).

²⁰ *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 495 (9th Cir. 2011).

endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.”²¹ To implement this mandate, the ESA establishes a consultation mechanism that “requires a federal agency to complete formal consultation with FWS if the agency determines that any action on its part ‘may affect’ any listed species or critical habitat.”²² The threshold for triggering the formal consultation requirement—the “may affect” standard—is low.²³ Indeed, “[a]ny possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement.”²⁴

The Project plainly meets the “may effect” threshold and triggers formal consultation. As noted in the Draft EA, the Project site includes potential habitat for both northern long-eared bat and tricolored bat.²⁵ The tricolored bat has been found within three miles of the Project site, and the northern long-eared bat has been found within Anderson County.²⁶ TVA’s zoologists found that vacant buildings on the Project site could provide roosting for both bat species, and the Draft EA also states that the Project site includes foraging and summer roosting habitat for both bat species “in and around trees, the Clinch River/Melton Hill Reservoir, and in wet low-lying areas south of the switchyard.”²⁷ Although the Draft EA states the Project will not include tree-clearing, TVA acknowledges several Project activities that “may adversely affect federally listed bats,” including, among other things, drilling, blasting, grubbing, grading, acquisition and use of fill and borrow material, and demolition of existing structures.²⁸ These activities may negatively impact northern long-eared bat and tricolored bat habitat and local populations writ large.

TVA arbitrarily concludes that measures it has identified with reference to the 2018 Programmatic Bat Biological Opinion will adequately protect the northern long-eared bat and the tricolored bat.²⁹ Not so. Although the northern-long eared bat was listed as threatened under the ESA at the time of that programmatic consultation, potential impacts to the species were analyzed pursuant to regulations issued under section 4(d) of the ESA, and those regulations contained less stringent protections than will apply to northern long-eared bats now given the species’ recent reclassification as endangered. Therefore, in that programmatic consultation, TVA did not account for impacts to northern long-eared bats from types of take which were exempted by the 4(d) regulations, and the biological opinion issued by FWS at the culmination of that consultation process did not include an incidental take statement for those activities.³⁰

²¹ 16 U.S.C. § 1536(a)(2).

²² *Kraayenbrink*, 632 F.3d at 495 (citing 16 U.S.C. § 1536(a)(2)–(c); 50 C.F.R. § 402.14(a)).

²³ *Cal. ex rel. Lockyer v. U.S. Dep’t of Agriculture*, 575 F.3d 999, 1018 (9th Cir. 2009).

²⁴ 51 Fed. Reg. 19926, 19949 (June 3, 1986); *see also Lockyer*, 575 F.3d at 1018–19 (same).

²⁵ Draft EA at 50.

²⁶ *Id.* at 50–51.

²⁷ *Id.* at 51.

²⁸ Draft EA, Appendix A, Table 3.

²⁹ *Id.* at 55–56; *see also* Appendix A, Table 4.

³⁰ 2018 Biological Opinion at 48.

Further, the 2018 Programmatic Bat Biological Opinion did not evaluate potential take of the tricolored bat at all.

The Draft EA also fails to disclose and analyze other reasonably foreseeable TVA projects that may result in cumulatively significant impacts to federally listed bat species,³¹ including northern long-eared bat, as well as state-listed and federally-proposed tricolored bat. These projects include the proposed retirement and replacement of the Kingston Fossil Plant, as well as the retirement and replacement of the Cumberland Fossil Plant.³² Both of these projects—including the connected actions to construct nearly 200 miles of new pipeline—may result in impacts to local bat populations, including through significant tree clearing activities.³³ Because of its relative geographic proximity, the retirement and replacement of the Kingston Fossil Plant, in particular, has the potential to impact local bat populations. Despite the ongoing NEPA reviews for these projects by TVA and the Federal Energy Regulatory Commission, the Draft EA does not evaluate cumulative impacts with respect to threatened and endangered species *at all*.³⁴

The Draft EA’s failure to disclose and analyze the cumulatively significant impacts associated with the Project and other reasonably foreseeable projects underscores the importance of correcting TVA’s arbitrary and unlawful reliance on the 2018 Programmatic Bat Biological Opinion. It is imperative that TVA and FWS ensure both the northern long-eared bat and tricolored bat are afforded the procedural and substantive protections they are due under the ESA. Addressing the shortcomings in TVA’s current analysis will require supplementation of the Draft EA,³⁵ and trigger the need to prepare an EIS under NEPA given the Project’s individual and cumulative impacts to listed species.³⁶

Sincerely,

Adam Hughes
East Tennessee Organizer, Statewide
Organizing for Community eMpowerment

Amanda Garcia
Senior Attorney
Southern Environmental Law Center

³¹ 40 C.F.R. § 1508.1(g).

³² See 86 Fed. Reg. 31780–31781 (June 15, 2021); TVA, *Cumberland Fossil Plant Retirement Final Environmental Impact Statement* (2022) (hereinafter “Cumberland FEIS”); 88 Fed. Reg. 3767–3771 (Jan. 20, 2023).

³³ 86 Fed. Reg. at 31781; Cumberland FEIS at 372–80; East Tennessee Natural Gas, LLC, *Ridgeline Expansion Project draft Resource Report 3*, FERC Docket No. PF22-7-000, Sections 3.3, 3.5 (Dec. 2022).

³⁴ Draft EA, 101.

³⁵ 40 C.F.R. § 1502.9(c)(1).

³⁶ *Id.* § 1501.3(b).

Axel Ringe
Water Quality Chair
Tennessee Chapter Sierra Club

Amy Kelly
Tennessee Campaign Representative
Sierra Club

Brianna Knisley
Tennessee Campaign Manager
Appalachian Voices

CC via email:

Robert Wilkinson, TDEC, Robert.S.Wilkinson@tn.gov

Emily Vann, TDEC OGC, Emily.Vann@tn.gov

David Pelren, U.S. Fish & Wildlife Service, david_pelren@fws.gov

From: [Amanda Garcia](#)
To: [Kunkle, Brittany Renee](#); [nepa](#)
Cc: [REDACTED]

Date: Thursday, February 2, 2023 5:17:18 PM
Attachments: [2023-02-02 Conservation Groups Comments on Bull Run Deconstruction EA.pdf](#)

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Dear Ms. Kunkle:

Please see the attached comments on the draft Bull Run Deconstruction and Decontamination EA submitted by Southern Environmental Law Center, Statewide Organizing for Community eMpowerment, Appalachian Voices, and Sierra Club. These comments raise concerns about cumulative impacts on low-income environmental justice communities, including impacts from coal ash remediation activities, as well as impacts to endangered bat species.

I also submitted a copy of the text of these comments online, but unfortunately the form did not allow me to attach a document, so the text in the form does not include the footnotes. The footnotes are available in the attached version.

Sincerely,
Amanda

Amanda Garcia (she/her/hers)
Senior Attorney and Director, Tennessee Office

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

southernenvironment.org

From: [Kunkle, Brittany Renee](#)
To: [Porath, Rebecca](#); [Baker, Sheliah D](#); [McCluskey, Stacey Sweatt](#)
Cc: [Brundige, Jennifer Lynn](#); [Freeman, Carol](#)
Subject: FW: TDEC Comments on Bull Run Fossil Plant Decontamination and Deconstruction Draft EA
Date: Wednesday, January 18, 2023 3:07:02 PM
Attachments: [image001.png](#)
[TDEC Comment - TVA Bull Run Fossil Plant Decontamination and Deconstruction - Draft EA.pdf](#)

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Rebecca,

We received the email below and comment (attached) from TDEC today.

Thank you!

From: Jennifer Tribble <Jennifer.Tribble@tn.gov>
Sent: Wednesday, January 18, 2023 9:49 AM
To: Kunkle, Brittany Renee <brkunkle@tn.gov>
Cc: Bryan Davidson <Bryan.Davidson@tn.gov>
Subject: TDEC Comments on Bull Run Fossil Plant Decontamination and Deconstruction Draft EA

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Dear Ms. Kunkle:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority's (TVA) *Bull Run Fossil Plant Decontamination and Deconstruction Draft Environmental Assessment* (Draft EA). The Bull Run Fossil Plant (BRF) is in Anderson County, Tennessee, approximately 5 miles east of downtown Oak Ridge and 13 miles west of Knoxville. BRF is operated by TVA on a 750-acre reservation on the east side of Melton Hill Reservoir near Clinch River Mile 48. TDEC has reviewed the Draft EA and has the following comments, provided in the attached document.

Please note that these comments are not indicative of approval or disapproval of the proposed action, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Best,
Jenn



Jennifer Tribble, PhD | Director

Office of Policy & Planning
Tennessee Tower, Second Floor
312 Rosa L. Parks Ave., Nashville, TN 37243
c. 615-210-7139

jennifer.tribble@tn.gov

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STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

DAVID W. SALYERS, P.E.
COMMISSIONER

BILL LEE
GOVERNOR

January 19, 2023

Via Electronic Mail to brkunkle@tva.gov

Brittany Kunkle
Tennessee Valley Authority
400 W. Summit Hill Drive, WT11B-K
Knoxville, TN 37902

Dear Ms. Kunkle:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority's (TVA) *Bull Run Fossil Plant Decontamination and Deconstruction Draft Environmental Assessment* (Draft EA). The Bull Run Fossil Plant (BRF) is in Anderson County, Tennessee, approximately 5 miles east of downtown Oak Ridge and 13 miles west of Knoxville. BRF is operated by TVA on a 750-acre reservation on the east side of Melton Hill Reservoir near Clinch River Mile 48. The Draft EA analyzes the environmental impacts associated with the following options for the future disposition of BRF:

Alternative A - Full Demolition of All Structures to Three Feet Below Final Grade: Includes the proposed decontamination and demolition of the powerhouse and buildings and structures within the proposed decontamination and deconstruction project area to 3 feet below final grade.

Alternative B - Selective Demolition of All Structures to Three Feet Below Final Grade, Retain Turbine Bay of Powerhouse and Intake Structure: Includes the actions described under Alternative A, except the turbine bay of the powerhouse and the intake structure would remain in place. The plant staff and regular maintenance activities would be greatly reduced under this alternative from current levels for the active plant, and personnel from other TVA sources would be used, as necessary, to assist with performing operations and maintenance activities for the remaining powerhouse and associated structures.

Alternative C – No Action Alternative: TVA would not perform any deconstruction or other disposition activities at BRF. If the facility is left in the "as-is" condition, it likely would present a higher risk than Alternatives A or B for the potential to contaminate soil and groundwater as systems and structures degrade. As such, this alternative is not analyzed as a reasonable alternative, and is discussed in the Draft EA as a basis for comparison to the Action Alternatives.

TDEC is the environmental and natural resource regulatory agency in Tennessee with delegated responsibility from the U.S. Environmental Protection Agency (EPA) to regulate sources of air pollution; solid and hazardous waste; radiological health issues; underground storage tanks; and water resources. TDEC's comments are made in the context of the proposed action alternatives. TDEC has reviewed the Draft EA and has the following comments:

Air Pollution Control

TDEC recommends TVA address air emissions from the operation and idling of mobile sources, evaluate alternatives to open burning for the disposal of uprooted trees and other vegetation, and minimize the generation

of fugitive dust from the project through best management practices. TDEC encourages TVA to incorporate the state of Tennessee's fugitive dust¹ and open burning² requirements in the final EA.

Water Resources

TDEC notes that decommissioning of BRF does not include closure of the CCR impoundments. TVA has existing NPDES and construction stormwater permits. Modifications to the Multi-Sector General Stormwater Permit's Storm Water Pollution Prevention Plan (SWPPP) would be required to reflect the closure changes.³ A project specific construction stormwater permit and Surface Water Protection Plan (SWPP) will also be required.⁴

Solid Waste Management

TDEC confirms that the assessment in the Draft EA already reflects that any wastes associated with the proposed activities in Tennessee will be managed in accordance with the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee.⁵ In some cases, the Rules and Regulations of the State of Tennessee, which has delegated authority from EPA, are more stringent than federal requirements pertaining to waste management. Such wastes include any materials destined for disposal.

TDEC notes that Tennessee's Solid Waste Management program only dates back to 1972; there could be disposal in this area that predates the program of which TDEC is unaware, creating a potential legacy solid waste site. Any wastes which may be unearthed during the project would be subject to a hazardous waste determination and must be managed appropriately.

The assessment also describes (Section 3.11.2. "Environmental Consequences" pp 62) that prior to demolition activities, "hazardous waste, PCBs, ACM, lead paint, and universal waste would require special removal, handling, labeling, and disposal by appropriately trained and licensed personnel and contractors." These materials would need to be disposed of at a facility designed and permitted to receive such hazardous materials.

TDEC appreciates the opportunity to comment on this Draft EA. Please note that these comments are not indicative of approval or disapproval of the proposed action, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,



Jenn Tribble, Director
Office of Policy and Planning
Tennessee Department of Environment and Conservation
Jennifer.Tribble@tn.gov

¹ <https://publications.tnsosfiles.com/rules/1200/1200-03/1200-03-08.20180904.pdf>

² <https://publications.tnsosfiles.com/rules/1200/1200-03/1200-03-04.pdf>

³ <https://www.tn.gov/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/npdes-industrial-stormwater-general-permit/npdes-stormwater-multi-sector-general-permit-for-industrial-activities-tnr050000.html>

⁴ <https://www.tn.gov/environment/permit-permits/water-permits1/npdes-permits1/npdes-stormwater-permitting-program/npdes-stormwater-construction-permit.html>

⁵ TDEC Division of Solid Waste Management Rule 0400 Chapters 11 and 12

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#31]
Date: Tuesday, December 13, 2022 9:00:35 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 **M.** 423-582-7619 **E.** Jsrober2@tn.gov
1101 Market Street Chattanooga, TN 37402

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 8:34 AM
To: New Trans Line <ntl@tn.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#31]

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Name	David Gilbert
Address	<input type="checkbox"/> 505 Deaderick St. Suite 1000 Nashville, TN 37243 United States
Phone Number	(615) 741-0772
Email	michael.gilbert@tn.gov
How close are the route options to your property?	Not near

Upon reviewing the Draft EA for the Bull Run Decontamination and Deconstruction Project, the Strategic Transportation Investments Division (STID) within TDOT would like to make the following comments. Given that Alternative A and B both involve excavation up to three feet below final grade, coordination will need to occur with TDOT if any easements are required within state ROW. In addition to this, it is also recommended that continual coordination occur with TDOT if future

adjustments are planned to the existing access points in order to assure these are approved by TDOT's Region 1 Traffic Office and to assure these are incorporated into the active TDOT widening project along State Route 170 (PIN 124121.00).



Sierra Club
Tennessee Chapter
P.O. Box 113
Powell, TN 37849

February 2, 2023

Via Email to brkunkle@tva.gov

Brittany Kunkle
NEPA Specialist
Tennessee Valley Authority
400 West Summit Hill Drive, WT 11B
Knoxville, TN 37902

RE: Bull Run Plant Decontamination and Deconstruction Environmental Assessment

Dear Ms. Kunkle:

The Tennessee Chapter Sierra Club appreciates the opportunity to comment on the draft Environmental Assessment for the Bull Run Decontamination and Deconstruction project. The Chapter is a co-signer of the Southern Environmental Law Center's comment letter on this same issue, which we wholly agree with and support. However, we have some additional concerns we want to express here.

TVA emphasizes economic development of the site, but makes no mention of repurposing the site for social development

- The EAR makes a number of references to making the land suitable for economic development, but there is not as much emphasis on social development and community desires. The future of the land should be based on the desires of residents of Claxton and Anderson County and should be made in consultation with the Anderson County government. It should not only take economic factors into account.

TVA should reject Alternative C and adopt Alternative B only in consultation with local officials and the local community

- Community members have spoken out repeatedly against leaving plant structures in place, as it would keep the land from reuse and impair long-term property values. TVA should rule out Alternative C as an option, and any structures left in

place under Alternative B should be acceptable to the residents of Claxton and the Anderson County government.

TVA should leave the rail infrastructure in place

- Alternative A includes dismantling the railroad tracks and rail bed. This would forestall the possibility of the railroad being used to move demolition debris and coal ash off-site. TVA needs to decide on the future disposition of the coal ash along with the decision on the plant structures to keep from tying their hands on future coal ash removal options.

TVA must properly assess environmental impacts on vulnerable species

- TVA has identified 4 osprey nests within 660 feet of the structures. Ospreys (*Pandion haliaetus*) are considered a vulnerable species in Tennessee, but the EA makes no mention of any mitigating actions TVA would take to protect this species. At the least, TVA should ensure that no blasting or other disruptive activities occur during nesting season.
- The northern long-eared bat (*Myotis septentrionalis*) has recently been reclassified as endangered under the Endangered Species Act. The U.S. Fish and Wildlife Service has indicated their intention to possibly reclassify the tri-colored bat (*Perimyotis subflavus*) as endangered also. Both bat species have been documented as occurring in the local vicinity. The environmental assessment must take the bat population into account and satisfy TVA's obligations under Section 7 of the Endangered Species Act ("ESA"). TVA indicates in the EA that measures it has identified with reference to the April 2018 Programmatic Bat Biological Opinion will adequately protect the northern long-eared bat and the tricolored bat. This is incorrect, given the recent and probable reclassifications of the two bat species.

TVA should consider possible effects of deconstruction on drinking water wells

- 13 water wells are within a 1-mile radius of the project area, and it is unknown if these are being used for domestic purposes. TVA should commit to supporting the owners of these wells in continued water testing through the course of the deconstruction and beyond.

Sincerely,

/s/

Axel C. Ringe
Water Quality Chair
Tennessee Chapter Sierra Club

CC via email:

Robert Wilkinson, TDEC, Robert.S.Wilkinson@tn.gov

Emily Vann, TDEC OGC, Emily.Vann@tn.gov

David Pelren, U.S. Fish & Wildlife Service, david_pelren@fws.gov

From: Matthew Aldrovandi <Matthew.Aldrovandi@tn.gov>

Sent: Wednesday, December 14, 2022 9:09 AM

To: Kunkle, Brittany Renee <brkunkle@tn.gov>

Subject: Draft EA for BRF

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Dear Ms. Kunkle:

I have a question about the draft EA for the BRF. Why is the CCR impoundment not included in this EA? Are they required by NEPA to have a separate analysis?

Thanks!

Kind regards,



MATTHEW ALDROVANDI | Area Forester

211 N Indiana Ave

LaFollette, TN 37766

p. 423-566-3715 c. 423-201-5009

matthew.aldrovandi@tn.gov

www.tn.gov/agriculture/forests



From: [Kunkle, Brittany Renee](#)
To: [Matthew Aldrovandi](#)
Subject: RE: Draft EA for BRF
Date: Monday, December 19, 2022 3:31:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Mr. Aldrovandi

TVA is evaluating its coal ash management units at BRF under the oversight of the Tennessee Department of Environment and Conservation (TDEC) through a process set forth in the TDEC Commissioner's Order. After the environmental investigations have been performed and the data has been presented to TDEC, TVA will submit a Corrective Action / Risk Assessment (CARA) Plan to TDEC to address closure and actions needed to address any unacceptable risks. TDEC must approve the CARA Plan, including the methods of closure for the coal ash management units at BRF. TVA will perform any additional environmental reviews if needed.

Additionally, the Bull Run CCR impoundment closure was previously analyzed in these documents.

Ash Impoundment Closure Final EIS Part I Programmatic NEPA Review (2016)

Ash Impoundment Closure Final Programmatic EIS, Part II Site-Specific NEPA Review Bull Run Fossil Plant (2016)

Bull Run Fossil Plant Ash Impoundment Closure Project, Supplemental Environmental Assessment (2017)

Bull Run Fossil Plant Ash Impoundment Closure Project, Supplemental Environmental Assessment (2019)

These documents can be found on our website here: [Bull Run Ash Impoundment Closure \(tva.com\)](#)

Thank you,

Brittany Kunkle
NEPA Specialist
Environmental Resource Compliance



W. 865-632-6470 **M.** 865-307-6736 **E.** brkunkle@tva.gov
400 West Summit Hill Drive, Knoxville, TN 37902

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From: [Ironsides, Kevin E \(KXI\)](#)
To: [Kunkle, Brittany Renee](#)
Subject: UCOR comments on the Bull Run D&D EA
Date: Thursday, February 2, 2023 11:17:58 AM

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Brittany,

My name is Kevin Ironside, and I am the Beneficial Reuse and End State Manager for United Cleanup Oak Ridge (UCOR).

We are submitting the following comments on your Draft EA for consideration.

UCOR has completed their review of TVA's Draft Environmental Assessment for the Bull Run Fossil Plant Decontamination and Deconstruction and offers the following comments for consideration as you develop your Final EA and select your preferred alternative.

Based on UCOR's experience completing the cleanup of the East Tennessee Technology Park (ETTP), the former K-25 Gaseous Diffusion Plant, Alternative A would provide additional land in Anderson County for future redevelopment. The site appears to have value as a potential future site for a small nuclear reactor, especially given the recent increase in nuclear companies initiating projects in Oak Ridge at ETTP (e.g., Triso-X, Ultra Safe Nuclear Corporation and Kairos Power). Alternative A would not only provide additional cleanup jobs in the region, of which there is already a highly skilled and trained cleanup workforce that depending on the exact timing of the work may coincide with the completion of the cleanup at Y-12 and ORNL, but also create additional future jobs once the Bull Run Fossil Plant footprint has been redeveloped thus contributing to the overall prosperity of the region.

Please let us know if UCOR can be of any assistance as you move forward with this project.

Best regards,
Kevin Ironside

Kevin Ironside

Mobile: [REDACTED]

UCOR
An Amentum-led partnership with Jacobs and Honeywell

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From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Cc: [Adams, Tanya L](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#1]
Date: Tuesday, December 13, 2022 4:29:42 PM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 6:40 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#1]

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Name	Dale Perkins
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by

I believe the plant should be decommissioned and completely torn down. The concrete pads can remain and may be useful for future use. I would like to see the land closest to the lake used for retail and restaurants with a dock for transient use. The rest of the site would make a terrific park. I'd team with the Clinch Valley Trail Alliance to build multi-use trails. I'd preserve as many trees as

possible. Much of the site could be added to the Oak Ridge Wildlife Management Area with controlled hunts to keep the deer population in check. "Eco-tourism" has become a significant economic driver in recent years. Having the Bull Run site as a compliment to Haw Ridge and Aspire Park will bring people to Anderson County.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#2]
Date: Tuesday, December 13, 2022 9:17:10 AM
Attachments: [image001.png](#)

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Civil Design Tech, Transmission Siting
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 9:55 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#2]

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Name	Angi Agle
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

Please retain any buildings or equipment that would enable Bull Run to be converted to a nuclear power facility.

We will need the generating capacity in the near future. Bull Run is the perfect location for a small nuclear plant.

From: [Pilakowski, Ashley Anne](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Ask the PLIC [#3431]
Date: Wednesday, December 14, 2022 8:20:50 AM

FYI -

From: Fiedler, Scott Allen <safiedler@tva.gov>
Sent: Wednesday, December 14, 2022 7:43 AM
To: Brooks, Scott <sbrooks@tva.gov>; Pilakowski, Ashley Anne <aapilakowski@tva.gov>
Cc: TVAINFO <tvainfo@tva.gov>
Subject: FW: Ask the PLIC [#3431]

We have a Bull Run gas plant supporter. Wanted to share in case you want to capture his contact info and comment.

From: Public Land Information Center (PLIC) <plc@tva.gov>
Sent: Monday, December 12, 2022 11:26 AM
To: TVAINFO <tvainfo@tva.gov>
Subject: FW: Ask the PLIC [#3431]

See email below. Thanks.

From: Question from tva.com <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 10:37 AM
To: Public Land Information Center (PLIC) <plc@tva.gov>
Subject: Ask the PLIC [#3431]

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First Name: * James

Last Name: * Bollinger

Email: *

Phone #: *

City (where property with question or issue is located): * Knoxville

State (where property with question or issue is located): * TN

Question or Issue: * Bull Run should be turned into a natural gas fired plant. If the area is contaminated by turning it into a gas fired plant

will mean the land will continue to be under TVA control. This will continue to serve electricity to the 430,000 customers that you stated it can produce power too.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#3]
Date: Tuesday, December 13, 2022 9:16:41 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



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1101 Market Street Chattanooga, TN 37402

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 10:44 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#3]

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Name	James Melton
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

Like to see cost estimate on options.
To me the best would be to demolished the plant to put the area back as a benefit for society. To demolished means to do it the right way as far as the environment.
Like to see what can be use at other facilities do so. Donate items to schools governments such as hvac units electrical

hardware office supplies etc.

Definitely would not like to see land sold to developers just to put houses up.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#4]
Date: Tuesday, December 13, 2022 9:16:16 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 11:50 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#4]

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Name	Allyn Lay
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

My opinion is to leave the coal fired Bull Run Power Plant in place. You don't know when or under what circumstances we may need coal fired power plants in the future. Germany is right now restarting coal fired power plants due to an unanticipated war in the Ukraine which altered its energy needs and supplies. It is foolish and wasteful to destroy big-ticket, already in place, costly to replace, assets when one discovers a critical need after the fact. I frequent the nearby Claxton

Community Center property. The presence of the adjacent
Bull Run Power Plant doesn't bother me a bit. Leave it where it is.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#6]
Date: Tuesday, December 13, 2022 9:15:25 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 12:57 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#6]

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Name	Elizabeth Peck
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

The Bull Run plant must be completely dismantled and the property safely returned to a natural state, or a state suitable for commercial or residential use. Anything less is a crime against the people of Claxton, Clinton and Powell, a crime against the planet, and a victory for corporate greed.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#7]
Date: Tuesday, December 13, 2022 9:14:59 AM
Attachments: [image001.png](#)

John Roberts, RLS
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 1:14 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#7]

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Name	Joel Varnadore
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

I believe the TVA and the East TN community has a vest interest in keeping at least part of the plant standing in an idle and maintenance capacity. Energy generation is a constant worldwide issue and whilst the TVA doesn't need Bull Run to maintain its current capacities, having Bull Run on idle would allow the TVA more flexibility to renovate it or

convert it to something like natural gas down the road instead. Decommissioning it complete guarantees we will never be able to rely on it for anything.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#8]
Date: Tuesday, December 13, 2022 9:14:42 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 2:07 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#8]

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Name	William Ditmore
------	-----------------

Address	<div><input type="checkbox"/></div> <div></div>
---------	---

Email	
-------	--

<div></div> are the route options to your property?	Not near
---	----------

We dont need to close anything during a energy emergency
--

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#9]
Date: Tuesday, December 13, 2022 9:14:21 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 2:09 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#9]

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Name	Wanda Ditmore
------	---------------

Address	<div><input type="checkbox"/></div> <div></div>
---------	---

Email	
-------	--

How close are the route options to your property?	Not near
---	----------

Dont close it in times like these	
-----------------------------------	--

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#10]
Date: Tuesday, December 13, 2022 9:13:56 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 3:27 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#10]

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Name	Joseph Payne
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

Deconstructing and demolishing the plant.

The Pleasantshell mussel makes up half the mussels in the Cinch river– and experts said 85.4% of them are gone forever.

Having worked with TVA in the early years of the insulation and heatpump program and realizing the

real lack of interest TVA has in saving money on clean energy options and then for many years subcontracting at the K-25 plants decommissioning and demolition, seeing the prosperity that it brought to the area, I know my thoughts and voice fall on deaf ears.

If you will go back to the 1990's and read the sample reports done by the Clinch River Environmental Restoration Program you will find that any further unsettling of the flyash caused by the burning of fossil fuels would only cause more irreputable damage to the once free flowing river.

I just thank God that I grew up in the upper reaches of the Clinch river where only nonpoint source pollution and the building of new recreational facilities paying little attention to the river's health and more importantly to human health.

I honestly don't know why I am even commenting, knowing that the only reason you ask is to cover you ass meeting regulations that mean nothing to TVA. I am sure your managers and directors have already decided what should be done and it sure as hell will be nothing to support belief that there is and has been a call for many years to stop entities such as yours from contributing to the problems that have been proven to be affecting our planet.

So, do as you always do, cause more harm than good, except to your pocketbooks.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#11]
Date: Tuesday, December 13, 2022 9:13:25 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
1101 Market Street Chattanooga, TN 37402

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 3:40 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#11]

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Name	K Koester
Address	<input type="checkbox"/> [REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near
	Needs to be torn down & cleaned up so ppl are safe that live near, upwind and downwind, not to mention streams

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#12]
Date: Tuesday, December 13, 2022 9:12:39 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 6:22 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#12]

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Name	Sara Wells
Address	<input type="checkbox"/> [Redacted]
Phone Number	[Redacted]
Email	[Redacted]
How close are the route options to your property?	[Redacted]

Deconstructing and demolishing the plant Is the best option based on my understanding of this plan.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#13]
Date: Tuesday, December 13, 2022 9:12:16 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 6:26 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#13]

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Name	Bobby Holcomb
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

I would like to see the land converted into a golf course and various recreational facilities. The area needs restaurants, entertainment venues, movies, parks and greenways. Not more residential or urban sprawl. Please consider a new golf course on part of it. The rest should be beautiful to enjoy as an outdoor recreation area.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#14]
Date: Tuesday, December 13, 2022 9:11:57 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 7:20 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#14]

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Name	Michael Calfee
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
[Redacted]	[Redacted]
How close are the route options to your property?	Close by

Fusion energy breakthrough was announced today from LLL. My thought is that Bull Run would make a great pilot plant or first-generation facility, utilizing UT, ORNL, DOE and of course, TVA.

I suspect the infrastructure exist at Bull Run to enable a

major facility to more than replace the existing energy generated in an area known well by DOE.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#15]
Date: Tuesday, December 13, 2022 9:11:42 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 8:23 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#15]

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Name	Brian Tapp
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

I would encourage TVA to demolish and remove the improvements on the site and prepare the site for future light industrial use. With the land that is not useable for building RE-development, consider turning these areas into a park that would benefit the community.

The Knoxville area's industrial vacancy rate is less than 1%, making it one of the toughest places in

the southeast for occupiers to locate. At the same time, we have unprecedented demand from companies that want to locate in the Knoxville area. Having land that has been industrial would make for an excellent re-development opportunity. You can look just down the road at the former K-25 site in Oak Ridge as an example.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#16]
Date: Tuesday, December 13, 2022 9:11:14 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 8:36 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#16]

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Name	Mike West
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

I truly understand your concerns in this day and age of environmental nightmares. I also know Yuns are an organization that has considered a lot of different plans, but isn't America going to get caught with its pants down concerning power generation as a whole? All across the nation fossil powered power plant are shutting down. Solar and wind ain't I mean ain't going to be able to keep up with increasing demand. Natural gas is a lot cleaner but during an American crisis one can always

go to a coal pile and get fuel to generate electricity. I also understand, maybe I don't expenses incurred with keeping plant at least for alternative source of power. Can Kingston keep up with demand? Thank you for giving me an avenue of expressing concern. And I also don't live next door. But I'm sure our power partly comes from there.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#17]
Date: Tuesday, December 13, 2022 9:09:59 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 8:43 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#17]

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Name	Kelly McClure
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

I would suggest leaving at least part of the plant intact for doing tours, maybe guided tours for a fee, similar to Brushy Mountain Penitentiary, because of the history of the place and I have always been curious about how all of it works. If it is necessary to demolish the whole thing, I would suggest making more hiking trails like at Hawridge because I have

hiked all the trails there and need some new ones close to my house. Thank you.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#18]
Date: Tuesday, December 13, 2022 9:07:52 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 9:49 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#18]

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Name	David Hennessee
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near
Leave Bullrun Plant on standby as needed	

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#19]
Date: Tuesday, December 13, 2022 9:07:38 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 10:08 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#19]

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Name	Lynda Vowell
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

Please keep Bullrun and maintain. You never know when it will be needed. England just reopened a coal mine this week due to high cost of energy due to extreme environmental policies.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#20]
Date: Tuesday, December 13, 2022 9:07:10 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 10:08 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#20]

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Name	Eric Anderson
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

I feel that you should leave the plant standing. It's and icon to the Claxton community. I grew up in Claxton and was proud of the plant. Do what is necessary for any coal ash issues . If I had a vote however i would like to see it stay.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#21]
Date: Tuesday, December 13, 2022 9:06:54 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 11:29 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#21]

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Name	Kimberly Goode
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
[Redacted] are the route options to your property?	Not near

I believe that the only real option is to fully decontaminate and dismantle the plant and restore the land to a habitable environment.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#22]
Date: Tuesday, December 13, 2022 9:03:59 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Monday, December 12, 2022 11:38 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#22]

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Name	Joey Cronan
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by

Don't give in to these leftist ideas.... We need fossil fuels don't shut it down. To bad we have a dirty corrupt president that needs to be put in prison along with his crack head son and also the rapist Clinton. Even if we go to electric we still need fossil fuels to produce the batteries you idiots. Funny how they are in a hurry to shut down production in 2023 and then demolish the site. They know Trump will reopen it. Our president violates the constitution on a daily basis the worse being as our

president it is his sworn duty to protect the American people from a invasion. Allowing illegal alien's to cross our border is against the constitution and his sworn duty to put a stop to it. Impeach and then put this corrupt clown in prison. The U.S. is destroying itself just like the ancient Romans did. NO COUNTRY CAN SURVIVE WITH OPEN BORDERS. DON'T FORGET OUR CORRUPT MEDIA. THERE IS MORE OF US THAN THEM. LET'S GET TOGETHER AND RUN THESE UN AMERICAN POLITICIANS OUT OF OFFICE AND OUT OF OUR COUNTRY

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#23]
Date: Tuesday, December 13, 2022 9:03:32 AM
Attachments: [image001.png](#)

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Sent: Tuesday, December 13, 2022 4:35 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#23]

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Name	Kimberly Hood
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by

I would like to see a complete demolition of the site. Then use the property for a park/dog park and historical site. Clean the site and make it a showplace as one crosses the Clinch River.

Or, use it to filter water as it come down the River.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#24]
Date: Tuesday, December 13, 2022 9:02:49 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 5:37 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#24]

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Name	Benjamin White
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by
Leave as is, we will need it again.	

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#25]
Date: Tuesday, December 13, 2022 9:02:32 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 6:44 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#25]

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Name	Jean Franse
Address	<input type="checkbox"/> [Redacted]
Phone Number	[Redacted]
Email	[Redacted]
How close are the route options to your property?	[Redacted]

Since there will be no activity at the bull, run steam plant. I think that it should be completely dismantled and no signs of it left making sure that no harmful contamination is left behind.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#26]
Date: Tuesday, December 13, 2022 9:02:11 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 6:51 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#26]

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Name	Kermit Carver
Address	<div><input type="checkbox"/></div> <div>[REDACTED]</div>
Phone Number	[REDACTED]
How close are the route options to your property?	[REDACTED]
Leave the plant alone. Continue operating as is.	



From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#27]
Date: Tuesday, December 13, 2022 9:01:57 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 7:39 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#27]

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Name	Marvin Breedon
Address	<input type="checkbox"/> [Redacted Address]
[Redacted Field]	[Redacted Field]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted Field]

Leave it. We are the cleanest Country in the world and the green energy is a joke. so don't be woke. Shutting it down is a bad idea. the ones for it will be the first to cry and scream when they can't fix their mocha latte and stay cool or warm because the power is off.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#28]
Date: Tuesday, December 13, 2022 9:01:32 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
1101 Market Street Chattanooga, TN 37402

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Sent: Tuesday, December 13, 2022 8:18 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#28]

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Name	Ronald Terry
Address	<div><input type="checkbox"/></div> <div></div>
Phone Number	
Email	
<div></div> are the route options to your property?	<div></div>

I suggest TVA convert the Bull Run Plant into a combined Cycle plant using Frame 5 gas turbines and HRSG's to support the Steam Turbine. This would reduce emissions and be cleaned and environmentally safer.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#29]
Date: Tuesday, December 13, 2022 9:01:08 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 8:19 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#29]

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Name	Isaac Isaac
Address	<input type="checkbox"/> [REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#30]
Date: Tuesday, December 13, 2022 9:00:56 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 8:27 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#30]

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Name	Nicole Hill
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

My childhood home was on New Henderson. In 2012 it was bought by TVA under false pretense of an ash plant being built. So my childhood home, my memories and my numerous childhood pets that are buried there (even though house has been demolished and the land refigured, I could walk the property and tell you where each pet is 'buried') was destroyed for the plans that were to never be. I feel and can contact many of the past neighbors of that residence that would feel like they were

lied to by TVA to obtain property. I think they should stay open and move on with their plans of an ash plant or reimburse the families that were displaced by their lies. The families were told their house values would be nothing once the supposed ash plant would be built and they (TVA) left us with no other choices but to move. I feel cheated that I can't go back to my childhood HOME. I begged and pleaded with TVA then to make other arrangements and to not destroy my memories. Those pleas were cast away. Please don't let these

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#32]
Date: Tuesday, December 13, 2022 8:58:51 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 8:48 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#32]

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Name	Charles Street
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
[Redacted]	[Redacted]
How close are the route options to your property?	[Redacted]

Renewable energy is great but it is not dependable. Take for example the Texas freeze of 2021, which resulted in approximate 200 deaths (<https://youtu.be/KdMqCUa7XIk>). I would to elect to keep all or a part of the coal plant until renewable becomes a dependable energy or until we find a better alternative.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#33]
Date: Tuesday, December 13, 2022 9:17:39 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 9:12 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#33]

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Name	Donna Cook
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

The site when closed permanently should be totally removed and the land kept as a greenway.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#34]
Date: Tuesday, December 13, 2022 12:02:38 PM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 9:42 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#34]

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Name	Chris Wieland
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

Closure of the Bull Run coal-fire plant should be total, i.e., complete removal of all buildings and structures and removal of all remaining unburnt coal. Additionally, all ash should be excavated from the ash pile/dump and relocated to an landfill designed to meet RCRA standards. As a second option for the waste ash, the ash dump should be covered

with an engineered low-permeability cap to reduce seepage and redirect water away from the ash, and the dump perimeter should be reinforced to provide structural stability to prevent a repeat of the Kingston disaster.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#35]
Date: Tuesday, December 13, 2022 12:03:17 PM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 11:42 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#35]

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Name	Theresa Joyner
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

I would like to see the plant left in tact. With electronics advancing the demand for energy will rise in the future. At some point, this plant may be critical in serving our community when green energy can't keep up.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#36]
Date: Tuesday, December 13, 2022 4:32:03 PM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 2:56 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#36]

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Name	William Norman
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

The Bullrun Steamplant would be an excellent plant to convert to Municipal Waste to Energy Facility. It could possibly be the 'first' successful plant in the Nation, with railroad in place to deliver in railcars (in large box sized bundles) the waste that was once -shipped- to China. The U.N. report (below weblink) states that the Chinese are in the process of building 4 state-of-the-art facilities that turn rubbish into power.

The “Municipal Waste to Energy Project” operates on a concession model to establish plants that burn municipal solid waste for the generation of electricity. The plants employ clean technology that do not require additional burning of fossil fuels, and live up to the highest international emission standards.

Fast facts:

4 plants already operating

480 gigawatts of electricity generated annually

544,000 tons of carbon dioxide equivalent reduced per year

Thank you,

<https://unfccc.int/climate-action/momentum-for-change/activity-database/momentum-for-change-municipal-waste-to-energy-project>

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#37]
Date: Tuesday, December 13, 2022 4:32:29 PM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 4:02 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#37]

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Name	Michael Bradshaw
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
[Redacted]	[Redacted]
How close are the route options to your property?	Close by

Has converting the plant to natural gas been considered.
What are the pros and cons?
Thanks for your consideration.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#38]
Date: Wednesday, December 14, 2022 7:12:30 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 5:00 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#38]

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Name	Justin Quinn
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
[Redacted] are the route options to your property?	[Redacted]

I was reading the article and looking for feedback. I would love to help. We live in the new Harbor Pointe community right down the road and would like to understand the options being proposed and how I can help as a community member, understand how it could impact the area.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#39]
Date: Wednesday, December 14, 2022 7:14:17 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Tuesday, December 13, 2022 6:40 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#39]

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Name	Tim Barlow
Address	<input type="checkbox"/> [Redacted]
Phone Number	[Redacted]
Email	[Redacted]
How close are the route options to your property?	[Redacted]

December 13, 2022

Ms. Brittany Kunkle
Tennessee Valley Authority

400 West Summit Hill Drive, WT 11B
Knoxville, TN 37902

Dear Ms. Kunkle:

Thank you for the opportunity to comment on Bull Run Fossil Plant's upcoming permanent shutdown. First, let me share a little background. My Dad worked on the construction of the plant and became an hourly trades employee in 1967 working there for 20+ years until Mr. Marvin Runyon eliminated his craft. He and my Mom lived within two miles of the plant until his death in 1999.

I lived with them from 1967 until I went to college in the Fall of 1973. We were familiar with the "safe" fly ash that covered our cars and homes. Of course there were other airborne contaminants we were never told about.

Four Points Supporting Total Demolition as the Only Safe Option:

1. The ash storage in the Clinch River (Melton Hill Lake) must be dredged and totally removed.
2. The switch yard, plant, and coal piles must be removed and the grounds stripped of all contaminants.
3. To keep the land from commercial or residential use, the property should become a Tennessee Valley Authority solar farm.
4. And finally, the property on "the other side" of Henderson Road should be deeded to Anderson County or sold to private individuals. TVA took the property, but never used it. It should be put to use for community good or allowed to be put back on the tax rolls.

Thanks for allowing me the opportunity to share my thoughts on this very important issue for everyone interested in the Claxton community and the water quality for the Clinch River.

[REDACTED]

Tim Barlow, [REDACTED]

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#40]
Date: Wednesday, December 14, 2022 7:14:55 AM
Attachments: [image001.png](#)

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Sent: Tuesday, December 13, 2022 7:39 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#40]

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Name	Philip Nipper
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
[Redacted Field]	[Redacted Field]
How close are the route options to your property?	[Redacted Field]

I think a good use of the property, after deconstruction of the plant and associated buildings along with environmental clean-up, would be to work with DOE and ORNL and engineer/construct a solar power generating farm.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#41]
Date: Thursday, December 15, 2022 8:12:12 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 9:03 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#41]

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Name	Peter Jahn
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by

These smoke stacks that are able to be seen from my neighborhood has severely decreased our property value. Many people view the stacks as a negative. My vote would be to at least deconstruct the tall stacks, for this is an eye sore whether decommissioned or not decommissioned. The area around is so beautiful and removing these stacks would

help with the overall appeal. I truly think this is a fair compromise for the TVA to consider if they are looking for ways to save money.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#42]
Date: Thursday, December 15, 2022 8:12:53 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 12:01 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#42]

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Name	RON BELLAMY
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Close by

We drive by the plant 3-5 times a week. We have lived nearby for over 30 years. We believe it is time to dismantle the plant completely if it no longer serves it's intended function. After appropriate cleanup, the area could be turned into a public park with lake access. That would be very beneficial to area residents and visitors as well.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#43]
Date: Thursday, December 15, 2022 8:18:12 AM
Attachments: [image001.png](#)

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 2:05 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#43]

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Name	Josh Sharpe
------	-------------

Address	<div><input type="checkbox"/></div> <div>[REDACTED]</div>
---------	---

Email	[REDACTED]
-------	------------

How close are the route options to your property?	[REDACTED]
---	------------

This site should be developed much like the island in pigeon forge. Create jobs commerce for taxes for local govt and not having to drive to sevier like for something we could put in a beautiful spot. It has room for parking on water dining as well as other shops and activities and matches well with greenway already in place! Could accommodate overflow parking while boat races are going on and keep this businesses thriving feeding all those athletes and spectators

alike! If we're talking of putting red lights up in these area's
anyway let's do more than slow traffic

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#44]
Date: Thursday, December 15, 2022 8:18:46 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
1101 Market Street Chattanooga, TN 37402

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 4:27 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#44]

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Name	David Snavelly
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	Not near

Please remove the entire complex. Clean it up and allow it to be transformed for a more contemporary purpose.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#45]
Date: Thursday, December 15, 2022 8:20:51 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 4:43 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#45]

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Name	West Ma
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
	[Redacted]
How close are the route options to your property?	Not near

May I get in touch TVA management team to re-use this plant site for:

- 300MW crypto mining, a data center to balance the reliability of the TVA transmission line.
- Existing substation and transmission line be used for next large wind farm or solar farm ay size 500-2000 MW

--A energy storage battery bank to use power at valley rate.

--Above project gets preapproved as an EB5 immigration plan, particularly for jobs created for Indian native people and black people.

--Immigrant investment could do those projects at lower CAPEX with higher ROI. A large crypto mining site creates power demand for wind and solar farms; Its flexibility could help VVA stabilize power peak demand while not making nuclear power plants in intermittent operation.

I am a crypto adviser based in Vancouver, BC, Canada. I was in Chattanooga two weeks ago and shot a TVA picture from the public library near the square.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#46]
Date: Thursday, December 15, 2022 8:21:21 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Wednesday, December 14, 2022 5:55 PM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#46]

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Name	Tim Holt
Address	<input type="checkbox"/> [Redacted]
Phone Number	[Redacted]
[Redacted]	[Redacted]
How close are the route options to your property?	Not near

I highly recommended a full study into the practicality of converting the Bull Run Fossil Plant into a garbage incineration facility producing electricity as a beneficial byproduct. Many municipalities have developed these facilities. When you consider the cubic yards of landfill deposit daily, the average distance of haul, and the cost of eventual acquirement and environmental impact of a new landfill, there's more than the simple cost of operation we would have to take into consideration. The Bull

Run Site is more favorable for electric garbage collection vehicle access due to a shorter average haul time and distance and a less gradient course of travel. It is also already accessible via rail and could be made accessible to barge for efficient transport of wastes from other municipalities . Furthermore, it is already outfitted to distribute electricity to the network. The immediate costs of construction and operation may seem prohibitive but the final product is likely more environmentally beneficial than raw costs. I'm sure there's already much of this under consideration. Hopefully I've brought value to the exercise.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#47]
Date: Thursday, December 15, 2022 8:22:38 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Thursday, December 15, 2022 5:14 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#47]

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Name	Josh Cook
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

Please consider reaching out to Quaise Energy (info@quaise.energy) about repurposing the plant and equipment to take advantage of their novel geothermal energy strategy. They have the technology to quickly drill to the great depths suitable for geothermal power right next to existing power generation facilities. I believe this is a tremendous opportunity to efficiently and swiftly transform the facilities that are already here and functional into a zero waste/emission power generation

solution that can greatly benefit our local region and also provide a shining example to the rest of the world how to effectively transition to clean energy without overtly disrupting our existing infrastructure.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#48]
Date: Thursday, December 15, 2022 8:23:42 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Thursday, December 15, 2022 7:45 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#48]

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Name	Gary Lawson
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
[Redacted]	[Redacted]
How close are the route options to your property?	Not near

I would re open it and use all resources to power our country. It is a shame the demacrats and some Republicans are ruining our country , we use to be a super power but not any more. By stop using fossil fuel we hurt our self in the long run china pollutes more than any other country so what we do to save the world is useless I vote more coal ,no

ethanol gas and natural gas in our future. God knew we would use all this natural resources and he is not upset he is in control I guess he laughs at us alot.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#49]
Date: Friday, December 16, 2022 10:29:10 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
1101 Market Street Chattanooga, TN 37402

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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Thursday, December 15, 2022 10:13 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#49]

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Name	Tim Harty
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

Living close by, I would rather see the buildings etc. completely removed and the area returned to a natural environment with possible public access for walking trails, picnicking areas, etc.

From: [New Trans Line](#)
To: [Kunkle, Brittany Renee](#)
Subject: FW: Bull Run Fossil Decontamination and Deconstruction [#50]
Date: Friday, December 16, 2022 10:29:35 AM
Attachments: [image001.png](#)

John Roberts, RLS
Civil Design Tech, Transmission Siting
Transmission Technical Services



W. 423-751-3138 M. 423-582-7619 E. Jsrober2@tva.gov
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From: tva.com Transmission Project Comments <no-reply@wufoo.com>
Sent: Thursday, December 15, 2022 10:43 AM
To: New Trans Line <ntl@tva.gov>
Subject: Bull Run Fossil Decontamination and Deconstruction [#50]

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Name	Nicholas Beaty
Address	<input type="checkbox"/> [Redacted Address]
Phone Number	[Redacted Phone Number]
Email	[Redacted Email]
How close are the route options to your property?	[Redacted]

I wish it would stay open and run steam to get the water warmed up in the winter at the discharge for fantastic fishing opportunities.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#53]
Date: Thursday, December 15, 2022 2:29:39 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	David Cass
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

David Cass-retired engineer Norfolk Southern Railroad. The Train transportation and existing coal chute gathering Hopper System seems Ideal for processing all glass recycling processed and mixed with highway materials asphalt and concrete . Existing Coal residue ash could possibly be contained within concrete mixing agents to safely clean the site at low or no cost,,, possibly making a profit if Combined with recycled products of glass as well as Recycled chipped Plastic products. I have professional Engineering contacts That have designed and re-purposed :

Dalton carpet industry waste into electricity.

Georgia chicken farm waste into methane.

Mega-farm retrieval of waste to methane, fertilizer, Clear water and electricity. These things mentioned above, are in operation; not just a dream or thought!

TVA probably not interested in Developing and operating these other industries but other successful corporations may.

The very, very near horizon of lithium components/processing could possibly utilize existing BR facilities.

I have lived in Knoxville my entire life. I am thankful and proud of the heritage of Tennessee Valley Authority. Make us all proud by being frugal and re-purposeful *

From: [Charles and Virginia Jones](#)
To: [Kunkle, Brittany Renee](#)
Cc: info@macclerken.com
Subject: a possibility for Bull Run Steam Plant
Date: Thursday, December 15, 2022 6:01:18 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Dear Ms. Kunkle,

I would like to suggest that TVA consider whether the fuel used at Bull Run Stem Plant might not be wood pellets instead of coal. Both produce air pollution, but couldn't trees which absorb CO2 cover the area beside the Plant? As the lesser of two evils? There are serious reasons for not closing the Bull Run site according to the Mayor of Oak Ridge: <https://www.wbir.com/article/news/oak-ridge-mayor-expresses-concerns-about-potential-environmental-impacts-of-bull-run-closure/51-2fbbb9b7-b2c3-4cbc-beaf-9d89401a9d45>.

As a near by resident, about a mile from the river and two miles from the plant, I am not too keen on chemical discharges into the river.

I think this idea is worth looking into before TVA makes a decision to close Bull Run.

Sincerely yours,

Virginia M. Jones

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

From: [Holland Justin](#)
To: [Kunkle, Brittany Renee](#)
Subject: Bull Run Fossil EA
Date: Friday, December 16, 2022 3:20:38 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Ms. Kunkle,

I think it would be awesome to turn Bull Run into a museum. My father worked at the Johnsonville coal plant when I was a kid and I remember so vividly visiting there and seeing all of the equipment. I think Bull Run is the perfect size to become a museum and there would be great synergy with the AMSE that is already in Oak Ridge. Hopefully, this is something you can consider doing as it would add great value to the community and region, not to mention as a PR vehicle for TVA.

Thanks,
Justin

[Sent from Yahoo Mail on Android](#)

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#54]
Date: Friday, December 16, 2022 6:48:09 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Ron Greene
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
	[REDACTED]
How close are the route options to your property?	Not near
	Secure and maintain the plant for future power generation. Or convert to gas.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#55]
Date: Friday, December 16, 2022 8:41:08 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Wiley Peck
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

I was a part of the TVA/Local Community Group that met monthly regarding the future plans after shutdown. Covid restrictions shut down this group. It has always been a concern of mine for our local community near the Bull Run plant for the “aftermath” or “legacy” that TVA will chose to leave. It can be a great success story if greed and irresponsibility are not allowed to be that legacy. Profit was the driver for creating the BRSP and profit is the primary driver for the shut down. I challenge TVA and our Tennessee legislature to not allow greed and sloth to get in the way of completely dismantling the BRSP site and returning it to healthy public use within a reasonable time frame (3 years or less). It would be a travesty to allow for anything less.

From: [tva.com Transmission Project Comments](https://tva.com/Transmission/ProjectComments)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#62]
Date: Monday, December 26, 2022 6:35:25 PM

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Name	Michael Mcamis
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

with all the rolling blackouts seems to me we need bull run operating at full capacity instesd of shutting it down

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#56]
Date: Friday, December 23, 2022 4:40:15 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name James Romines

Address



Phone Number



 standing

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#57]
Date: Friday, December 23, 2022 3:42:40 PM

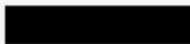
This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name Sharon Shelton

Address



Phone Number



How close are the route options to your property?



For robust growth in our region, we need cheap and abundant energy. Secondly , I thought Tn was well positioned for future power needs since the new nuclear plant went on line earlier this year, but apparently the 8 degree temperatures beginning on December 23,, 2020 proved otherwise. I understand the power deficit came from the Bull Run power plant and thus the need for rolling blackouts . This is not acceptable

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#58]
Date: Friday, December 23, 2022 8:46:02 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Janel Ellison
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

After reviewing the Environmental Assessment, I would support Alternative A – Full Demolition of All Structures to Three Feet Below Final Grade. However, caution should be taken with what toxic materials are buried as fill.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#59]
Date: Saturday, December 24, 2022 9:33:35 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Kenneth Weaver
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Do not shut down Bull Run Steam Plant!
A couple of cold days and TVA is doing rolling blackouts.
What happens if you shut down Bull Run; will you have to do rolling blackouts when it gets down to 30 degrees? TVA needs to leave Bull Run on line. TVA has spent Hundreds of millions on Bull Run over the years up dating it.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#60]
Date: Saturday, December 24, 2022 8:46:35 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Derek Henry
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Of the three options presented, I support: Demolish the whole plant.

The rolling blackouts of the last days show us that we cannot rely on fossil fuels for our energy needs, and the extreme weather we are experiencing shows us that we all share the externalized costs of polluting energy technologies. To this end, this plant should be destroyed in full so that remediation will also be complete.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#61]
Date: Sunday, December 25, 2022 3:03:23 PM

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Name	Mark Stevenson
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

Before the Christmas cold snap, I was concerned about the closure of a generating asset that has benefit of having fuel stored on-site. But now that EPB has resorted to rolling blackouts for the first time in it's history, I am horrified that this is even under consideration. All of which leads me to ask if the Bull Run facility was generating at the time of the outage? If not and we still had blackouts, what will life be like without Bull Run? As I recall, part of TVA's original charter involved providing electricity to the entire Tennessee River Valley. Are we now abandoning the benefit for which TVA is best known?

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#63]
Date: Friday, December 30, 2022 10:26:21 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Veta Hietanen
------	---------------

Address	<input type="checkbox"/> [REDACTED]
---------	-------------------------------------

Phone Number	[REDACTED]
--------------	------------

Email	[REDACTED]
-------	------------

How close are the route options to your property?	[REDACTED]
---	------------

Maintain in case of terrorism or other problems.

ALSO with Jerry Binkley

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#64]
Date: Saturday, December 31, 2022 9:50:20 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name Josh Walker

Address



Phone Number



How close are the route options to your property?

Know Bull Run is generally used as back up power. But considering what this cold blast just showed us, our system has some vulnerabilities. Especially way valley is growing. Think it would be wise to change it to natural gas plant

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#65]
Date: Sunday, January 1, 2023 7:26:22 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Bob Inklebarger
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

leaving Bull Run as is only providing upkeep on the site.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#66]
Date: Sunday, January 1, 2023 7:38:43 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.


Name Greg Mills

Address



How close are the route options to your property?



 to the rolling blackouts requested by TVA on December 23–24, 2022, Alternative C (No Action) needs to be the current choice for TVA.

The TVA service area is expected to continue to have population growth for the foreseeable future, yet TVA was unable to meet the electricity needs of the existing population.

TVA does not need to decommission and demolish existing generating assets until replacement generating assets are both constructed and operational.

Bull Run needs to remain as is until TVA develops and executes a more accurate generating plan for the Tennessee Valley's electrical needs. The December 2022 rolling blackouts occurred even though electric vehicles currently comprise only a small fraction of the vehicles on the road in this region.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#67]
Date: Tuesday, January 3, 2023 4:33:04 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Sharon Manning
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

We would be interested in qualifying to bid the environmental, abatement, decontamination and potential dismantlement services for this project once you determine the best course of action. I'd be happy to partner with you on the options for this property.

Thanks in advance for the opportunity!
Sherri Manning
smanning@goterra.com

From: [Dianne Lane](#)
To: [Kunkle, Brittany Renee](#)
Subject: Bull Run Fossil Plant
Date: Wednesday, January 4, 2023 2:01:43 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Suggestions for future of land,

Dear Ms Kunkle,

As citizens of Tn, my husband and I enjoy visiting Bull Run Park and use the ramp to access Melton Hill Lake for fishing and boating. We are in favor of the decommissioning activities, including draining, removal of ash, information, technology, and records. Retain the buildings as a museum for future generations. Restore the 250 acres back to the people as usable space of Bull Run Reservation, as part of Bull Run Park. Open for public use for recreation and fishing, like Kingston Plant. The area is being developed around it with many new homes. Foreseeing an increasing population, prepare a place for these families to go. This land is already set aside for protection. TVA has a history of considering the needs of communities, and this park project would reflect your consideration and forward thinking. Thank you for considering comments. Sincerely, Dianne and Lawrence Lane, [REDACTED]

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#68]
Date: Thursday, January 5, 2023 9:44:19 AM

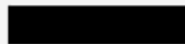
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Name Kim Day

Address




Phone Number



Email



 are the route options to your property?

Not near

Please reconsider any thoughts on demolition. We need all the TVA plants to stay up and running. After the Christmas weekend rolling blackouts, it should prove that we need fossil, gas, and nuclear power more than ever.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#69]
Date: Thursday, January 5, 2023 10:40:16 AM

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Name Jonathan Wellman

Address



Phone Number



How close are the route options to your property? Close by

I have concerns of a decommissioning or a partial one with talks of leaving the turbine bay and switch yard for a potential synchronous condenser. I do not know how the property would be able to be demolished if there will still be the turbine bay. I also have concerns that if they are to move forward with the synchronous condenser that by demolishing the boiler and boiler building, it would interfere with the structural integrity of the rest of the building. I wish that TVA would be clearer about this and give more information on if it will happen or not. This could potentially change the entire decommissioning process but not much has been said to the public.

Another concern is the loss of generation by closing down this plant. This plant's generation will be even more crucial in the coming summers and winters. By losing this asset, I feel that we are losing grid stability. This affects everyone in the Knoxville area when the region cannot get the voltage support. This winter storm has shown how vulnerable TVA's system is. I do not feel any more confident that brownouts will not continue in the coming years with the loss of megawatts this plant can provide. This doesn't just affect the Oak Ridge and Clinton communities but all who live in TVA's service area.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#70]
Date: Thursday, January 5, 2023 2:08:31 PM

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Name	Jason Colbert
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

To whom it concerns I believe closing any more power plants down in the state of Tennessee is a mistake. I was out of power Friday the 23rd of December 2022, because TVA already has a lack of power, for 4.5 hours on the coldest night in a very long time in the state of Tennessee. I know many people in my area that not only lost power, but their water froze and pipes busted in the freezing temperatures. Big government is pushing the electric vehicle agenda now and we for sure do not have the grid for that if TVA can not handle a cold snap and have to shut power off. So I believe in my summary we need every power producer we currently have and maybe we need some more back online

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#71]
Date: Friday, January 6, 2023 10:54:56 AM

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Name	Jeff Campbell
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Do you realize we recently had rolling blackouts and your wanting to take this away? Who is pushing this? I worked on the electrical equipment commissioning there when billions was spent on the scrubbers and now you want to shut it down? this is stupid!!!

From: Jeff Campbell
To: [Kunkle, Brittany Renee](#)
Subject: Bull Run Fossil Plant
Date: Friday, January 6, 2023 11:06:25 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Why is this plant being shut down? I worked there a few years back when the new scrubbers was being installed at several plants and billions spent on it and now you want to shut it down? Do you remember the rolling blackouts a week ago? In the 43 years of utility work I done I've never seen such ignorance from a government ran utility. You push more and more EV's yet take away the source to charge them? This has got to be Biden lobbyists putting money into your pockets!! You have a CEO which doesn't need to be making millions more than any other government person including the president , why? I bet he doesn't even understand the theory of electricity. You people are destroying our country!!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#72]
Date: Friday, January 6, 2023 11:52:14 AM

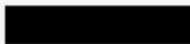
This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name Sarah Halcott

Address




Phone Number



Email



 are the route options to your property?



I routinely drive through Anderson County/ Oak Ridge for my work commute 2–3 times a week. We also kayak on the Clinch River during summers. We also are residents that rely on TVA utility sources to be consistent and reliable.

In regards to the environmental report, I offer the following comments:

(1) Based on the report, there is only 1 section that will result in moderate impact under Alternative C. This is the Hazardous Waste section. There are other minor impact sections; however the other Alternatives also hold minor impacts. With the knowledge of this report, Alternative C still seems the best option for continued reliability for Tennesseans in the service area.

(2) The report does not seem to take into account the fact that TVA does not currently produce enough power as it currently operates to account for the demand of basic power for its service area. Demolishing a plant because of minor impacts and 1 potential moderate impact long term does not excuse the complete demolishment of a power source BEFORE a safer alternative is built and in use.

(3) Based on the initial descriptions of the 3 Alternatives, it is obvious which method takes precedence. Being that Alternative A is given full description while Alternative C is barely given a few lines. The review is flawed when it skews towards one method over the other from the onset.

I do not support TVA’s decision to rid our area of an energy plant before it has replaced it with another functional energy source that can provide equal or more energy that consistently and reliably meets the basic utility demands of its customers. As of December, 2022, it is apparent TVA is not prepared to do this.

TVA was founded to produce energy for the Appalachian area and residents there. I am accepting of newer, cleaner energy for a better environment. Cutting off an energy source that has been utilized for decades without a working alternative in place to take over immediately is NOT acceptable.

Sincerely,

Sarah J. Halcott

[REDACTED]

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#73]
Date: Friday, January 6, 2023 1:24:52 PM

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Name	James Disney
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
	[REDACTED] [REDACTED]
How close are the route options to your property?	[REDACTED]

I would like to see the plant stay open.

We need the energy and we need the local jobs.

I am a 10 year TVA employee at Watts Bar Nuclear.

Invest and keep it running so we can have the electricity!!!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#74]
Date: Friday, January 6, 2023 8:31:39 PM

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Name	Michael Robinson
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

I think it's ridiculous to be closing this facility when you are obviously having problems supplying adequate supplies of power now. This shows an incredible lack of planning and foresight!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#75]
Date: Sunday, January 8, 2023 7:20:55 AM

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How close are the route options to
your property?



Keep the stream plant open. Literally no local is in favor of shutting this place down. We love having reliable strong power with our cold winters and hot summers.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#77]
Date: Sunday, January 8, 2023 9:53:21 PM

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Name	Dan Robbins
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your [REDACTED]	[REDACTED]

Pls completely remove all current Bull Run structures, decontaminate the area, and create a solar farm.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#76]
Date: Sunday, January 8, 2023 9:55:20 AM

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Name	Nancy West
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

I feel like this has been a poor decision from the beginning. Although it may be too late since the plant has not been maintained properly for the past 10 years and has safety concerns in addition to all the reliability issues due to poor previous decisions. It is real waste of TVA financial and Human Resources. With all the intelligent people TVA still retains there has to be a way to find a better option to benefit the people of the TVA Valley. This plant belongs to all the people of the Valley and not just the people now running TVA that are making a poor decision. Listen to the people who currently work there and the ones who are retired that have the knowledge to turn this situation around to benefit the people who actually own it.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#78]
Date: Monday, January 9, 2023 7:11:43 AM

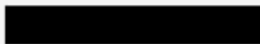
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Name S Harris

Address



Email



How close are the route options to your property?



The Bull Run plant is directly adjacent to many areas that are heavily used for recreation by the public (Melton Hill Greenway, Haw Ridge Park, Claxton Community Park, UT Rowing, etc.) As such, leaving the plant abandoned i.e. "No Action Alternative" is absolutely an unacceptable option. Leaving the site standing as-is will make it a public safety and environmental hazard, reduce surrounding property values, become a serious eyesore, and the conversation to demolish it will only be pushed for several years until the public demands it.

Full decontamination and demolition is the preferred option and the land could be made for public use, expanding the recreational theme of the area, if residual safety hazards can be mitigated. If full demolition is not possible, a partial demolition should include a plan to make the site a community asset via industrial tourism (see Sloss Furnaces in Birmingham, AL, etc). A partial demolition could open avenues for an educational/historic site on the modernization of fossil power technology, which matches the theme in the surrounding Oak Ridge area on science, energy, and history.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#79]
Date: Tuesday, January 10, 2023 10:43:51 AM

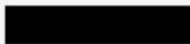
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Name Karen Moore

Address





Phone Number



Email



 are the route options to
your 



We have lived across the street from bull run for 24 yrs and until full reports after kingston spill did not realize what had been released in the air because you said it was safe. there is no telling what it may have done to our health. it is time for u to clean and what u have done to our community and leave the land as u found it like u. this community has endured enough and it's not fair to the future generations to be exposed or see this thing just sit there for yrs to come. it could become a nice property for us to enjoy if u just remove the waste i caused and help the water and animals dependent on it for the future. leaving it as is is not acceptable. Would you want this near your home or in your community ?! God is watching what you do to others and the land. Don't make us ashamed of TVA by leaving your mess. It's not fair that we have endured all the fallout and then get left with it when u shut down. i plan to join a lawsuit with my community if you resort to that outcome. do the right thing. CLEAN IT UP .

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#80]
Date: Wednesday, January 11, 2023 11:19:10 AM

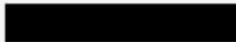
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Name Dennis Baxter

Address



Email



How close are the route options to your property?



The plant site should be reused as a power generating facility producing base load power to the TVA grid. The cost of construction would be a lot less since some of the infrastructure already exist, such as, the condenser cooling water system and skimmer wall. It makes sense to build a clean coal fired power plant or a small modular reactor to support the power grid that failed a few weeks ago. Power demand that occurred creating rolling blackouts was a risk that was ignored but now needs to be addressed. We need more reliable power, ie. coal, gas or nuclear, not unreliable power sources of wind turbines or solar panels that cost more than reliable power sources.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#81]
Date: Wednesday, January 11, 2023 8:12:34 PM

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Name Michael Cooper

Address



Email



How close are the route options to your property?



It is unfortunate that Bull Run is going to shut down. I feel that it should be left open and some money be put into the plant. We have lost enough coal burners valley wide already and with the rolling blackouts that we just had I don't think we need to lose another one.

From: Sarah Gunter
To: [Kunkle, Brittany Renee](#)
Subject: Public Comment for Bull Run Fossil Plant Decommission
Date: Thursday, January 12, 2023 12:23:13 PM

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Greetings Ms. Kunkle,

My name is Sarah Gunter. I reside in Clinton approximately 4.6 miles from Bull Run Fossil Plant along with my six children, husband, and two dogs. I am concerned that the plant will not be deconstructed because of costs and worry about the risks to the children and especially adolescents who would see this abandoned plant as an abandoned cool building to explore. The old science museum was empty for a while before tearing down and some local Oak Ridge teenagers got inside and did some vandalism but no children were injured. However, the steam plant is a colossal building with dangers around every corner for curious people. My other concern is with the cost and threat to the environment in the act of demolition. I know it will be a huge cost to the taxpayers and perhaps even a threat to our wonderful parks that exist along the Clinch river. I would like to see the building demolished with the lowest cost and least threat to the environment. Once the building and outbuildings are destroyed I think that TVA should consider donating the land either for housing or public use such as a park.

Thank you,
Sarah Gunter

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#82]
Date: Friday, January 13, 2023 11:31:52 AM

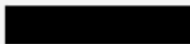
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Name Tyler Mayes

Address



Phone Number



How close are the route options to your property?



I am hopeful that TVA will choose a disposition for the plant that benefits the citizens of Anderson County. If TVA elects to demolish the site in its entirety, I request that TVA engages in discussions with TDEC sooner rather than later. As of 6:00 p.m. January 12, 2023, TDEC advised they have not had communications with TVA regarding the disposition of the plant. Please address that.

As for my opinion, I would like TVA to remove the site and create a green space that the constituency can enjoy for generations. As a County Commissioner in this area, I ultimately want to ensure the citizens are heard. With that being said, majority of the folks I have talked to want it gone and replaced with an area that offers green space, lake access for water recreation, and possible solar panel installation.

Thank you for allowing the citizens to comment publicly on this very important project.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#83]
Date: Friday, January 13, 2023 11:58:28 AM

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Name	Mike Plank
------	------------

Address	<input type="checkbox"/> [REDACTED]
---------	-------------------------------------

Phone Number	[REDACTED]
--------------	------------

How close are the route options to your property?	Not near
---	----------

	This area should be developed for public hunting. A marsh for waterfowl or dove field would make great use of this land.6
--	---

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#84]
Date: Friday, January 13, 2023 12:28:30 PM

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Name	Stephen Verran
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Close by

First, I'm concerned about pollution into the river. It's a high recreation area and water supply for Oak Ridge.

2nd After deconstruction of BRF, the area could be used as solar farm. Large area, and panels wouldn't interfere with testing after removing BRF.

Everyone is talking about TVA's lack of ability to produce enough electricity for electric vehicles and during high demand.

FYI: Though the statement issued during the rolling blackout stated that was to reduce demand on the grid, most misunderstood or didn't hear it.

I would like to know if TVA is planning on upgrading the grid to cover greater demands and possible costs involved.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#85]
Date: Friday, January 13, 2023 12:57:46 PM

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Name	Leo York
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

As the decision has been made to close the plant, I would like to see the entire plant deconstructed and the area cleared and prepared for other industrial use by the county. This site has river barge, railway and interstate access via the Pellissippi Parkway. All surplus land could be managed by either the county or state. The planned expansion of the coal ash disposal area is an excellent site for a new elementary and middle school, fire department, community center, library, a sports park and activity park with walking and biking trails. District 1 has no current county parks save the kids park at the community center and the Bull Run Boat Launch area. Currently not in favor of ash removal as it will require the same handling as was used at the Kingston cleanup. Disposal was not good for the poor community it was removed to. With the planned widening of SteRte 170 commercial development will follow.

From: Mary Ruth Childress
To: [Kunkle, Brittany Renee](#)
Subject: BULL RUN STEAM PLANT
Date: Friday, January 13, 2023 1:18:41 PM

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[REDACTED]. When the steam plant closes I would like to see it deconstructed and the whole area used for something environmentally safe that will benefit the Claxton Community!!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#86]
Date: Friday, January 13, 2023 2:15:20 PM

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Name	Roger Gregg
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

My power was already shut off at times this past summer by rolling black outs even with Bull Run up and running! How do you plan to make up for the loss? From what I understand, it was one of the "clean" coal plants. Don't let green bullies take away a viable resource and take my power away when you can't keep up even with Bull Run! Now with the big push for EVs, even more blackouts will be in our future!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#87]
Date: Friday, January 13, 2023 2:30:11 PM

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Name Michael Reedy

Address

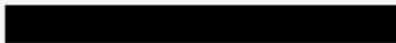


Phone Number



 are the route options to your property?

Close by

 since it was built. TVA, if it is dead serious about closing the plant after the black outs a few weeks ago should clean it up. After making it safe for habitation, should make it into an industrial park to bring JOBS into Claxton. Michael Reedy

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#88]
Date: Friday, January 13, 2023 6:53:12 PM

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Name	David Douglas
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Leave it OPEN.
Update what needs and start generating power.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#89]
Date: Friday, January 13, 2023 8:33:57 PM

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Name	Tammy Moore
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

deconstruct and demolish the plant

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#90]
Date: Saturday, January 14, 2023 9:55:24 AM

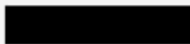
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Name Monique creekmore

Address



Phone Number



How close are the route options to your property?



I firmly believe the Bull Run Power Complex, including all buildings and support structures, should be completely demolished and undergo 100% clean-up and abatement. It is in the best interest of the community to remove all fly ash and all asbestos containing materials and to return the land to a natural state. Recently my family and I were looking to buy a home and I would not consider anything close to the Bull Run facility. Even though I knew it was scheduled for decommissioning, I am not comfortable exposing my family and children to the toxic substances present in the immediate area due to the operation of the coal plant.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#91]
Date: Saturday, January 14, 2023 11:47:03 AM

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Name	Jeff Coppala
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

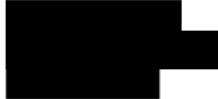
Do not touch this plant. Coal is an essential component of our energy portfolio. Green energy is a part time and extremely expensive. We need economical and plenteous energy. Christmas 2022 demonstrated the failure of TVAs strategy of moving away from coal.

From: [tva.com Transmission Project Comments](https://tva.com/Transmission/Project/Comments)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#92]
Date: Saturday, January 14, 2023 1:00:41 PM

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Name Taylor Fife

Address



Phone Number



How close are the route options to



I have seen. I public information campaign for how TVA plans to increase power levels reliably to match and then keep up with power requirements in the area with population growth. I can not be in favor of decommissioning current power supply options while blackouts have been so recent. The power from Bull Run is not being replaced. Keep it running until TVA has the capability to increase power input well past even current levels with Bull Run

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#93]
Date: Saturday, January 14, 2023 8:36:50 PM

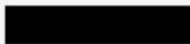
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Name Charles Ridge

Address



Phone Number



Email



How close are the route options to your property?



I'm against right out against yhe closing of the Bull Run Steam Plant. We already have enough problems with power outages, how will it help by closing down another source of power. Energy generated by wind or solar is not a reliable source and will not support the community...

From: George Smith
To: [Kunkle, Brittany Renee](#)
Subject: Keep Bull Run Open!
Date: Saturday, January 14, 2023 11:10:30 PM

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We need the power! Tired of the blackouts and closing will make worse!

George Smith



From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#94]
Date: Monday, January 16, 2023 8:52:08 PM

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Name	Erich Jacobs
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

We live here in claxton and we believe the plant should be deconstructed and hopefully expand the park next to it with fields for our children to play.. as long as it was safe and clean..we only have the one park and it would be nice if there were more options.. for sports maybe baseball hockey soccer football... Anything would be wonderful.. thank you for listening

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#95]
Date: Tuesday, January 17, 2023 12:14:18 PM

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Name	Crystal Brown
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
	[REDACTED]
How close are the route options to your property?	[REDACTED]

Our family is in favor of FULL and complete demolition of the Bull Run facility.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#97]
Date: Tuesday, January 17, 2023 1:11:35 PM

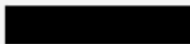
This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Name Daniel Wellhung

Address



Phone Number



Email



How close are the route options to your property? Close by

Honestly, without any hint or proof that TVA is implementing a new, cleaner form of energy (nuclear, TRISO/FCM FUEL), to replace bull run coal plant, I think TVA is making a HUGE IGNORANT mistake. This past 5 day cold winter event we had in dec 2022, which caused TVA to implement rolling blackouts WHILE NOT STARTING UP BULLRUN PLANT 1 TIME, is more than enough proof so that a deaf, dumb and blind man could see this. But, TVA is about maximizing shareholders value for its board of directors and could care less about the paying consumer!!

You boneheads are shutting down a coal burning power plant without any source of electricity generation to replace it. This alone is more than enough proof to me that TVA could care less about the paying consumer.

If you do vacate the bull run power plant, just make certain you take your mountainous coalash pile with you.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#98]
Date: Tuesday, January 17, 2023 8:08:11 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Justin Gillespie
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

I think moving away from coal power is a mistake. For many years (almost 100 years) the Tennessee valley area has benefitted from cheap and reliable power generation. This past December, for the first time ever, my community experienced rolling blackouts due to the cold. Rolling blackouts are more and more common in “green” states that no longer base energy production on reliable sources like coal and oil,

. I fear Tennessee is heading down that path, of lessening reliability while adding cost which puts further strain on senior citizens and lower wage citizens. Please confine to diversity our energy production but stop the rush to remove coal and gas as consequential sources.

From: tva.com/Transmission/Project/Comments
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#99]
Date: Wednesday, January 18, 2023 8:54:39 AM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	Kimberly Dodson
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Personally I'm thankful they have stopped production as it was operating. If nothing else to stop the sickness in our valley. I've lived on Bull Run Road my whole life, got married to a Navy man and moved away for a few years and back to our home on Bull Run. There are so many people around me who have died with cancer!!! My Mamaw and Papaw who live within eye shot of our house. My Cousin who lived next door and my great Uncle. We lost our oldest son to cancer when he was 10 years old and his twin sister before they were born. If I am not mistaken there was a young boy that had cancer around the same time our son did. When I was little I can remember getting up in the morning and everything would be covered my black soot. I have had Chronic bronchitis that started when I was a baby. So, there has to be a connection to all of that horrible stuff that we all had to breathe all of our lives. The cancer and sickness on Bull Run Road alone should say something. As for what to do with the property I would like to see something go in there for the community, a business that would bring in jobs.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#100]
Date: Wednesday, January 18, 2023 10:52:43 AM

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Name	Susan Feliciano
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to [REDACTED]	[REDACTED]

Where is our area going to get its electricity once this plant is shut down? Are we going to try to buy it from Kingston, or even from some over-strapped area farther away in the US? After spending so much on the scrubber project, why not keep it going, producing affordable power in a clean manner? I feel like getting rid of Bull Run will create an energy crisis in this area and just add to the crises in the rest of the country.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#101]
Date: Wednesday, January 18, 2023 2:11:23 PM

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Name	William Dean
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
[REDACTED] are the route options to your property?	Not near

With regards to TVA's EA on the Bull Run Fossil plant I am shocked and saddened that "Alternative A – Full Demolition" excludes key components of the TVA foot print and activity. Namely, these are ash ponds and pits that border the Clinch River and Bull Run Creek and contain various ash and CCR components.

These areas are clearly depicted in Fig.1–1; Fig 1–2 (From Draft EA) as part of the BRF property, yet curiously, these are left out of decontamination plans.

Please be a good corporate neighbor and remove ALL the hazardous products from this property, particularly those lying in and along our waterways. Do consider that addressing the waste pits now as part of the initial clean up will be the most effective and efficient time for this endeavor. While TVA may consider ash pits to be non-toxic, there remains much debate about that notion and even a likelihood of re-classification. Therefore it behooves both the Corporation and the public to remedy the matter now versus waiting for calamity to happen or consensus to force change.

Therefore I support a TOTAL Decontamination and removal of contaminants from ALL facilities and waste pits contained with the BRF property boundary as opposed to the narrowly defined clean-up zone depicted in Fig 1–1 of the Draft EA released Dec 2022

From: tva.com/Transmission/Project/Comments
To: nepa
Subject: Bull Run Fossil Decontamination and Deconstruction [#102]
Date: Wednesday, January 18, 2023 2:16:06 PM

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Name	Vickie Gray
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

We have lived on [REDACTED] all my life. Our property is down from [REDACTED]. Each year we have ash on our homes that have to be pressure washed. Imagine what we are breathing! TVA has annexed our families properties for years for development, they should have to clean up their mess and take it all away!! We are tired of failed promises and that they have our best interests in mind! The whole complex should be taken down and removed so that this land can be used for our future generations!!! We are a small town and cannot afford to clean-up their mess for them!!

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#103]
Date: Wednesday, January 18, 2023 7:44:10 PM

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Name	melanie mayes
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Of the three alternatives presented, I support Alternative A -- full demolition of all structures to 3 feet below grade. Given the age and lack of efficiency of the plant, it is unlikely to ever be resurrected for power production, consequently the obvious choice is full demolition. This would allow the property to potentially be reused in some other fashion, and would release TVA from most maintenance issues.

HOWEVER, I am shocked that the coal combustion residues (CCR) are going to be left in place under this plan. These materials present hazards to the local community, in terms of their potential for collapse (a la Kingston plant), the potential for dust-borne contaminants being spread into the immediate community, and in terms of their hazardous constituents (a variety of heavy metals present in CCR). It is well-known (although doesn't appear to be mentioned in the EA) that there is a long history of finding concentrations of heavy metals and contaminants in groundwater wells around the CCR. Rainwater infiltration into the CCR will continue to leach metals and contaminants from the CCR into the groundwater and likely also the nearby surface waters....since the CCR appear to be built right up to the edge of the Clinch River. Higher groundwater can also "bathtub" into the CCR and thereby leach contaminated materials into groundwater. Groundwater and surface water are likely to be intimately connected in this location due to proximity of the Clinch and other minor tributaries.

This is a problem that will only get worse over time, and as TVA is not around to do continued monitoring and testing of the groundwater. I attended the Jan 2023 TDEC meeting in which the NPDES permit renewal was discussed -- and even though TDEC wouldn't provide many details, they again mentioned that there are leachable metals coming from the CCR at Bull Run. Please, I urge you, to clean up the CCR thoroughly. The costs of such an activity are only going to escalate over time. Please clean it up now so that our community can truly reclaim the land and use it for other purposes. Don't walk away and saddle our community with a long-term contamination problem in our ground and surface waters. The surface waters supply two districts in Knoxville as well as Oak Ridge's water district -- the intakes are just downstream of this plant. Our community has supported TVA -- please don't walk away from this mess.

I am speaking as a private citizen, but one who obtained her MS and PhD degrees by studying the transport of heavy metals and radionuclides in geologic materials. I recognize the hazards here. It appears you are hoping for "dilution is the solution to pollution", but it is not acceptable to walk away and leave all this material in place.

Consequently, I find this EA to be an inadequate assessment of the hazards present at the site. It is not a full evaluation of the alternatives that should be considered.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#104]
Date: Thursday, January 19, 2023 8:09:43 AM

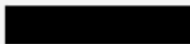
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Name Robert Hertwig

Address




Phone Number



How close are the route options to your property?



As a homeowner  I urge TVA to completely dismantle the plant and leave the property safe for future development by the the community and local government.

Of major concern beyond the above is the safety of the water that will leach into the Clinch River and Bull Run Creek affecting the drinking and recreational use of the water. Some landowners even have their water wells that may be affected by contamination.

My final concern is the concentration of PCBs on the land and in the water bottoms. This will need to be addressed as part of the plan and TVA's continued responsibility for all related environmental issues at the site.

From: tva.com/Transmission/Project/Comments
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#105]
Date: Thursday, January 19, 2023 8:22:27 AM

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Name	Daniel Fowler
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
[REDACTED] are the route options to your property?	Not near

Don't take this facility off-line. We need the power it provides, and renewable is far from ready.

From: tva.com/Transmission/Project/Comments
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#106]
Date: Thursday, January 19, 2023 9:21:47 AM

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Name	Olaf Storaasli
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to	[REDACTED]

TN legislators voted NOT to close Bull Run (I watched proceedings) but to keep it open, on standby for blackouts, & help with our influx of new families moving to our area. Despite the title, nuclear's not ready politically, but this talk's a great background: <https://www.youtube.com/watch?v=YgKKuBLGIAE> I agree with our TN legislators NOT to close Bull Run as electricity demand increases. OlafTN.com

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#107]
Date: Thursday, January 19, 2023 9:36:47 AM

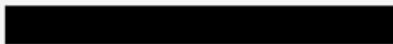
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Name Stephen Todd

Address



Email



How close are the route options to your property?



TVA, Please make you decisions regarding Bull Run based on data regarding environmental concerns growth projections and economic benefit to consumers. Please consider the future benefits of the entire population. Please ignore opinions based on politics and blind bias. Thank you.
Stephen Todd

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#108]
Date: Thursday, January 19, 2023 3:38:52 PM

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Name	Ira Kaplan
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

I pass the Bull Run fossil fuel plant about once a week. Recently, my wife who follows how the Climate is Collapsing, asked me: what's all that black stuff. "Coal" I replied. I've followed the Bull Run coal ash problem for two years. Fukushima's waste water of millions of gallons of radioactive waste is about to be 'dumped' into the Pacific Ocean. Many other scenarios between the importance of not dumping the Bull Run coal ash fines into the Clinch River to the Fukushima controversy exist. Now we are told not to eat any freshwater fish as they are contaminated. A whole town near Scottsdale lost it's water supply. What are we thinking? I am 70 without any children. I hope to live through the beginning of Climate Collapse. Please, do not bow to the wealthy. Don't place others in harms way.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#109]
Date: Thursday, January 19, 2023 9:59:34 PM

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Name Ted F.

Address



Email



 are the route options to your property?



Hello,

I would like to encourage you to select 'Alternative A - Full Demolition of All Structures to Three Feet Below Final Grade'. This would have the greatest short and long term positive impact on the site, community, and TVA's reputation for responsibly closing and completing demolition of their facilities.

Long term I hope that this site can become an asset for the local community by providing public green space, bike and hiking trails, wildlife habitat, and general public recreation.

The Draft Environmental Assessment was unclear on what would happen with the fly ash piles located adjacent to the Clinch River (short or long term). This should be addressed with demolition.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#110]
Date: Friday, January 20, 2023 7:53:28 PM

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Name	Richard Hamby
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

The Bull Run facility, like all TVA installations, are an integral part of our regional history. And inspired 1000s of people, like myself, to consider the monumental impact of the TVA in culture, engineering, even architecture & art. And – to pursue dreams, education, and pride in those facilities.

Understanding the desire to be more eco-conscious there is no doubt that on-demand sources of power are still essential. I propose keeping BRF in working condition in case of supply chain or other issues requiring coal. Or, using the facility as an other form of power generation as the land and much of the infrastructure can be modified for use with LNG or as a possible pathfinder location for other technologies. Especially given its proximity to the University of Tennessee, and Oak Ridge. The land is effectively unusable for other purposes without exhaustive expense – which would ultimately be imposed on citizens via tax or rate support.

Whatever decision is made, I oppose any that ultimately makes the site unused by TVA for the purposes of power generation, research, or ecology.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#111]
Date: Sunday, January 22, 2023 12:55:36 PM

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Name	Ben Taylor
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

My recommendation is to keep the plant open and operational. With the recent rolling blackouts TVA can use any energy sources they can possibly keep operational. I work for a major air compressor company in the Knoxville area and we are seeing problems still arising from the blackout periods. I also know lots of other contractors HVAC, Plumbing, and Electrical and they have commented to me that they are seeing issues from it as well.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#112]
Date: Monday, January 23, 2023 1:03:19 PM

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Name	Clifford Boyle
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

I am in favor of keeping power generation at this location. Either coal or natural gas. Solar and wind generation has not been adequate to meet the needs of East Tennessee. We need to keep electric generation in place that can be brought on line as demands increase. Rolling blackouts shouldn't be an option.

From: William Gwin
To: [Kunkle, Brittany Renee](#)
Subject: Draft Environmental Assessment on the Deconstruction and Decontamination of the Bull Run Fossil Plant
Date: Monday, January 23, 2023 2:19:08 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the "Report Phishing" button located on the Outlook Toolbar at the top of your screen.

Dear Ms. Kunkle,

I support Tennessee Citizens for Wildlife Planning's position: ". . . full demolition of all structures to three feet below the final grade."

TCWP adds an additional addendum: "railroad tracks should be left in place to transport coal ash. Rail transport is economical and appears to be the optimal way to remove coal ash."

I concur that this is the most responsible approach both for our citizens' health, the future usability of the area, and for averting leakage of coal ash into the Clinch River, a vital source of water for the area.

Best Regards,

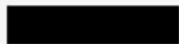
William H. Gwin

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#113]
Date: Tuesday, January 24, 2023 10:08:32 PM

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Name Wolf Naegeli

Address



Email



 are the route options to your property?

Not near

Removal of all the coal ash is at least as important as removal of the structures. Recent horrendous flooding disasters in many parts of the country, including Appalachia, have been noted of drastically exceeding what was previously considered a 100-year flood! That is a serious warning for TVA not to be complacent in assuming that the coal ash can be safely kept on site.

It would be a criminal mistake for TVA to dismantle the rail infrastructure before the coal ash has been removed because that would make it more costly, difficult and time-consuming to properly eliminate the hazard let alone remedy the consequences if a reasonably foreseeable disaster should strike before complete cleanup has been achieved!

From: [Nancy Munro](#)
To: [Kunkle, Brittany Renee](#)
Subject: Comments on Bull Run Fossil Plant Deconstruction Environmental Assessment
Date: Thursday, January 26, 2023 4:39:35 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Dear Brittany Kunkle,

My husband and I are long-time residents of Oak Ridge, Tennessee and have a comment with regard to the Draft EA on the Deconstruction and Decontamination of the Bull Run Fossil plant.

Of the three alternatives, we urge you to select Alternative 1, full demolition of all structures to three feet below the final grade, except that we urge its modification to include leaving railroad tracks in place to allow for transporting coal ash. The removal of coal ash would be most safely and economically accomplished via rail transport.

Thank you for your consideration of our comments.

Sincerely,

Nancy and John Munro



From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#114]
Date: Tuesday, January 31, 2023 1:35:20 PM

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Name	Melissa Capps
Address	<input type="checkbox"/> [REDACTED]
Phone	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	Not near

TVA talks about making the land suitable for economic development, but there is not as much emphasis on social development and community desires. The future of the land should be based on the desires of residents of Claxton and Anderson County and should be made in consultation with the Anderson County government. It should not only take economic factors into account.

Community members have spoken out against leaving plant structures in place, as it would keep the land from reuse and impair long-term property values. TVA should rule out Alternative C as an option, and any structures left in place under Alternative B should be acceptable to the residents of Claxton and the Anderson County government.

Alternative A includes dismantling the railroad tracks and rail bed. This would keep the railroad from being used to move coal ash off-site. TVA needs to make a decision on the future of the coal ash along with the decision on the plant structures to keep from tying their hands on coal ash removal options.

TVA has identified 4 osprey nests within 660 feet of the structures. Ospreys are listed as a vulnerable species, but the EA makes no mention of any mitigating actions TVA would take to protect this species.

The northern long-eared bat has recently been reclassified as endangered. The environmental assessment must take the bat population into account.

TVA should commit to continuing Payment in Lieu of Tax (PILOT) payments through the plant's decommissioning and deconstruction to support Claxton through economic transition.

13 water wells are within a 1-mile radius of the project area, and it is unknown if these are being used for domestic purposes. TVA should commit to supporting the owners of these wells in continued water testing through the course of the deconstruction and beyond.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#115]
Date: Tuesday, January 31, 2023 6:01:05 PM

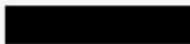
This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name Joy Ruble

Address



Phone Number



Email



How close are the route options to your property?

Not near

I would like to see the plant left as is for the time being. It is irresponsible to close plants before we have replacements for the loss of energy production. I understand the desire for cleaner energy, but I would like to see TVA make the transition in a responsible and intelligent way. We do not need to be dependent on other states for energy nor do we need to have more rolling blackouts in our area.

Thanks for your consideration,
Joy Ruble

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#116]
Date: Wednesday, February 1, 2023 1:42:03 AM

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Name James Owens

Address



Phone Number



How close are the route options to your property?



Please consider repurposing this site for energy storage, as I believe this will significantly improve the stability of the power grid without the need for additional generation assets. Since all the grid connections already exist at this site, I think it would be ideal. In addition to the commercial scale storage, smaller scale storage demonstration units could also be sited here, and in conjunction with nearby Oak Ridge National Labs could provide a stepping stone for commercialization of new storage concepts that have evolved beyond the lab.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#117]
Date: Wednesday, February 1, 2023 9:51:49 AM

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Name	Mark Watson
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED] v
How close are the route options to	[REDACTED]

Formal comments are being sent via email and postal mail.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#118]
Date: Wednesday, February 1, 2023 3:00:38 PM

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Name Sheila Atkins

Address



Phone Number



How close are the route options to your property?



The coal plant should not be closed down. We need the electricity it provides. We didn't even have enough power for everyone in December when the temperatures got so cold. We should leave the plant open.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#119]
Date: Wednesday, February 1, 2023 3:03:32 PM

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Name	Barsha Ruble
------	--------------

Address	<input type="checkbox"/> [REDACTED]
---------	-------------------------------------

Phone Number	[REDACTED]
--------------	------------

How close are the route options to your property?	[REDACTED]
---	------------

Bull Run should be left as it is. It should not be closed at all.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#120]
Date: Thursday, February 2, 2023 12:58:06 PM

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Name	Ellery Meyers
------	---------------

Address	<input type="checkbox"/> [REDACTED]
---------	-------------------------------------

Email	[REDACTED]
-------	------------

How close are the route options to your property?	[REDACTED]
---	------------

Why are you shutting down power plant? is it only because of cries of Global Warming? We need more power not less. Especially if insane people insist on more electric vehicles.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#121]
Date: Thursday, February 2, 2023 3:27:26 PM

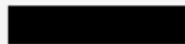
This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name Sharon Todd

Address



Phone Number



Email



How close are the route options to your



I have been a resident of the [REDACTED] for more than 60 years. This community has been subjected to toxic emissions from Bull Run Steam Plant from 1967 until scrubbers were installed on the plant in 2008. TVA installed a free car wash so residents could get the toxic dust off their vehicles lest it corrode the paint; houses across from Bull Run were painted due to corrosion from the fumes. My uncle asked the question that if the fumes would do that to vehicles and houses, what were they doing to our lungs?

The installation of the scrubbers did not eliminate the toxins, but redirected them into the coal ash and ultimately into the water supply accessed by two utility districts, West Knox Utility District and Hallsdale–Powell Utility District. These two utility district serve not only the Claxton Community, but other areas in Powell and Knoxville.

The alternatives listed in the Environmental Assessment do not address the removal of the coal ash, resulting in a legacy of water pollution for many generations.

Alternative A includes dismantling the railroad tracks and rail bed, thus eliminating an option for coal ash removal. The stacks must be removed if the site is to be repurposed for future development.

The residents of Claxton and East Tennessee deserve to have a repurposed site that does not continue the legacy of air and water pollution.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#122]
Date: Thursday, February 2, 2023 4:15:48 PM

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Name	David Campbell
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
	[REDACTED]
How close are the route options to your property?	Not near

As an Anderson County, Tennessee citizen, a fisherman, a lifelong environmental voter, and a ardent outdoorsman, I'd like to comment on the decommissioning of the Bull Run Steam Plant. Of course, the toxic coal ash must be removed, so the rails should remain until that task is accomplished. In the whole process, TVA must be observant of the requirement of the resident Osprey and Long Eared bats that have made the plant area home.

Whenever there is a disappearance of an economic bastion in any community, that community will feel the economic repercussions for a long time. It is thus important that TVA should commit to continuing Payment in Lieu of Tax (PILOT) payments through the plant's decommissioning and deconstruction to support the Claxton community through this economic transition.

Finally, TVA should ALWAYS follow the motto to "Do No Harm!" and enter into regular and continuing monitoring of the water wells that local people are dependent upon for their domestic water uses. It is entirely likely that to ignore the importance of keeping community water clean and clear would result in toxic seepage into these water sources.

I hope TVA will take their duty to the community that has supported them for many years seriously and provide whatever protections, at whatever cost, to guard against the pollution of their land and to promote the Bull Run Steam Plant property as a clean and useful area for the Claxton community and for Anderson County.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#124]
Date: Thursday, February 2, 2023 4:49:45 PM

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Name	Bonnie Shoemaker
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to	[REDACTED]

As a lifelong resident of Anderson county with many years of experience working with environmental compliance actions, in particular Clean Water Act compliance, at the Department of Energy facilities in Oak Ridge, and a love of the beautiful East Tennessee natural resources, I submit the following comments:

TVA should remove all structures from the Bull Run site and return it to restorative status that would be acceptable for economic or community use, as specified in Alternative A. However, exception should be made for removal of the railroad system to allow its use for future clean up and removal of coal ash in the impoundment areas outside of the site covered by this Environmental Assessment.

Any determination of the demolition and deconstruction activities should be done with involvement of Claxton area residents and the Anderson county government.

Extreme consideration should be given to wildlife habitat disturbance in the area, in particular osprey nests and endangered species in the area, with direct involvement and coordination with local and state wildlife resources agencies.

Extreme consideration should also be given to determination of the uses of the 13 water wells in the immediate project area to ensure any domestic water uses are not impacted.

Payment in lieu of taxes should be continued by TVA through completion of the project in economic support of the residents of Claxton.

From: [tva.com Transmission Project Comments](#)
To: [nepa](#)
Subject: Bull Run Fossil Decontamination and Deconstruction [#126]
Date: Thursday, February 2, 2023 5:53:44 PM

This is an EXTERNAL EMAIL from outside TVA. THINK BEFORE you CLICK links or OPEN attachments. If suspicious, please click the “Report Phishing” button located on the Outlook Toolbar at the top of your screen.

Name	John Todd Waterman
Address	<input type="checkbox"/> [REDACTED]
Phone Number	[REDACTED]
Email	[REDACTED]
How close are the route options to your property?	[REDACTED]

Dear Ms. Kunkle,

Thank you for the opportunity to comment on my community’s future! I live about four miles from the Bull Run Fossil Plant. Like many of my fellow Anderson Countians and our officials, I’m deeply concerned and invested in our future. Now that the need for Bull Run’s power is ending, I fondly hope TVA will repay us all for the long years we have tolerated BRF’s harmful impacts on our health and our property values.

Given the unreliability and cost of operating BRF, and that soon neither its power nor its switching station will be needed, only the decontamination and deconstruction option makes sense. The site should be restored not just to its relatively pristine pre-BRF state, but to one appropriately compatible with the beautiful, protected Oak Ridge parks opposite it, Haw Ridge Park and Melton Lake Park, a national rowing venue. Further, NEPA requires BRF’s surrounding EJ community – whose property values have long been suppressed by BRF’s smoke, and thousands of whom we know from the statistics were sickened or killed by BRF’s smoke (though we could not see their and their loved ones’ agonized faces through the statistics) – be spared any further health or other harmful impacts from the decontamination and deconstruction. Coal smoke’s health effects have long been known. My father, Knoxville’s first thoracic surgeon, told me as a child that living in Knoxville during the winter was equivalent to being a heavy smoker because of all the coal smoke.

Though TVA does not address Bull Run’s already-leaking coal ash impoundments because TDEC will decide how TVA must address them, the likely excavation and removal of those millions of tons of toxic material must be addressed in the Environmental Assessment. In Tennessee and elsewhere, coal ash is being excavated and removed to sites where it can be stored high, dry, lined, and away from potentially contaminated waterways. EJ requires also that it not be trucked through or to minority communities as was done with Kingston coal ash and is now being done with the Allen Plant’s dangerously contaminating ash. Dump trucks are poorly-suited to coal ash removal because of the huge number of loadings and trips and dumpings required, dangerously exposing workers and rivers, and because dump trucks cannot be tightly sealed to ensure toxic, respirable coal ash

does not become respirably airborne along populated roadways enroute, unjustly exposing other motorists and their passengers and local community residents. Proper bagging and removal could be more safely more economically accomplished on such an industrial scale by sealed barges or trains. Thus BRF's rail lines should remain in place until TDEC and/or the outspoken, insistent Bull Run community demand BRF's coal ash be safely excavated and removed.

We understand there is also much asbestos buried on the BRF site. Asbestos removal requires even more stringent protections to ensure neither workers nor community members nor motorists are harmed. Plans for safely accomplishing that should be included in the EA.

Thank You!

Todd Waterman



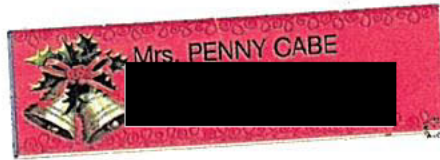
TVA

TVA Bull

The Tennessee
community to p
Environmental
and demolition
Anderson Cour
Draft EA will be

TVA is evaluati
Run Fossil Plan
maintaining plant structures, maintaining portions
of the plant/structures, deconstructing and
demolishing the plant or taking no action.

You can review TVA's Bull Run Draft
Environmental Assessment at
www.tva.com/NEPA.



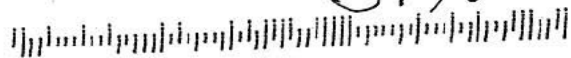
KNOXVILLE TN 377

08 FEB 2023 PM 4 L



ATTN: Brittany Kunkle
400 West Summit Hill
Drive, WT 11B
Knoxville, Tennessee
37902

37902-140100



How to provide your input:

fix it if it's broken!

- Review the Draft Environmental Assessment online.
- Submit online comments by clicking the link on the Bull Run Draft EA webpage at www.tva.com/NEPA.
- Mail comments to Brittany Kunkle, TVA WT 11B, 400 West Summit Hill Drive, Knoxville, TN 37902

To be considered, comments must be received no later than January 19, 2023. Please note that any comments received, including names and addresses, will become part of the project administrative record and will be available for public inspection.

More information on this environmental review can be obtained from:

Brittany Kunkle
NEPA Specialist
brkunkle@tva.gov
865-632-6470
400 West Summit Hill Drive, WT 11B
Knoxville, TN 37902

over
Found 1/19/23 @
Senior Center
over

Is it broken? I can fix
it! It cost more to tear down
and replace than to fix.

Climate Change is a HOAX!
Follow the money. The surrounding
'community' KNEW it was there
before they bought. Don't like it
the pompous and pretentious can
move. We need fossil fuel
energy. We need all forms.
The "Green" can not sustain
current needs nor will it in
the near future. If it needs
more catalytic filters do it.

Stupid people do stupid
things and Al Gore has made
300 million scoring stupid and
you can't fix stupid.

2/7/12 - *[Signature]*

Appendix B – Bat Strategy Project Review Form

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Project Review Form - TVA Bat Strategy (06/2019)

This form should **only** be completed if project includes activities in Tables 2 or 3 (STEP 2 below). This form is not required if project activities are limited to Table 1 (STEP 2) or otherwise determined to have no effect on federally listed bats. If so, include the following statement in your environmental compliance document (e.g., add as a comment in the project CEC): "Project activities limited to Bat Strategy Table 1 or otherwise determined to have no effect on federally listed bats. Bat Strategy Project Review Form NOT required." This form is to assist in determining required conservation measures per TVA's ESA Section 7 programmatic consultation for routine actions and federally listed bats.¹

Project Name: Bull Run Fossil Plant Decontamination and Deconstruction EA **Date:** Sep 29, 2022
Contact(s): Brittany Kunkle **CEC#:** **Project ID:** 40530
Project Location (City, County, State): Anderson County, Tennessee
Project Description:

Decontamination and deconstruction of the Bull Run Fossil Plant. No tree removal proposed at this time.

SECTION 1: PROJECT INFORMATION - ACTION AND ACTIVITIES

STEP 1) Select TVA Action. If none are applicable, contact environmental support staff, Environmental Project Lead, or Terrestrial Zoologist to discuss whether form (i.e., application of Bat Programmatic Consultation) is appropriate for project:

- | | |
|---|--|
| <input type="checkbox"/> 1 Manage Biological Resources for Biodiversity and Public Use on TVA Reservoir Lands | <input type="checkbox"/> 6 Maintain Existing Electric Transmission Assets |
| <input type="checkbox"/> 2 Protect Cultural Resources on TVA-Retained Land | <input type="checkbox"/> 7 Convey Property associated with Electric Transmission |
| <input type="checkbox"/> 3 Manage Land Use and Disposal of TVA-Retained Land | <input type="checkbox"/> 8 Expand or Construct New Electric Transmission Assets |
| <input type="checkbox"/> 4 Manage Permitting under Section 26a of the TVA Act | <input type="checkbox"/> 9 Promote Economic Development |
| <input checked="" type="checkbox"/> 5 Operate, Maintain, Retire, Expand, Construct Power Plants | <input type="checkbox"/> 10 Promote Mid-Scale Solar Generation |

STEP 2) Select all activities from Tables 1, 2, and 3 below that are included in the proposed project.

TABLE 1. Activities with no effect to bats. Conservation measures & completion of bat strategy project review form NOT required.

<input type="checkbox"/> 1. Loans and/or grant awards	<input type="checkbox"/> 8. Sale of TVA property	<input type="checkbox"/> 19. Site-specific enhancements in streams and reservoirs for aquatic animals
<input type="checkbox"/> 2. Purchase of property	<input type="checkbox"/> 9. Lease of TVA property	<input type="checkbox"/> 20. Nesting platforms
<input type="checkbox"/> 3. Purchase of equipment for industrial facilities	<input type="checkbox"/> 10. Deed modification associated with TVA rights or TVA property	<input type="checkbox"/> 41. Minor water-based structures (this does not include boat docks, boat slips or piers)
<input type="checkbox"/> 4. Environmental education	<input type="checkbox"/> 11. Abandonment of TVA retained rights	<input type="checkbox"/> 42. Internal renovation or internal expansion of an existing facility
<input type="checkbox"/> 5. Transfer of ROW easement and/or ROW equipment	<input type="checkbox"/> 12. Sufferance agreement	<input type="checkbox"/> 43. Replacement or removal of TL poles
<input type="checkbox"/> 6. Property and/or equipment transfer	<input type="checkbox"/> 13. Engineering or environmental planning or studies	<input type="checkbox"/> 44. Conductor and overhead ground wire installation and replacement
<input type="checkbox"/> 7. Easement on TVA property	<input type="checkbox"/> 14. Harbor limits delineation	<input type="checkbox"/> 49. Non-navigable houseboats

TABLE 2. Activities not likely to adversely affect bats with implementation of conservation measures. Conservation measures and completion of bat strategy project review form REQUIRED; review of bat records in proximity to project NOT required.

<input checked="" type="checkbox"/> 18. Erosion control, minor	<input type="checkbox"/> 57. Water intake - non-industrial	<input type="checkbox"/> 79. Swimming pools/associated equipment
<input type="checkbox"/> 24. Tree planting	<input checked="" type="checkbox"/> 58. Wastewater outfalls	<input type="checkbox"/> 81. Water intakes – industrial
<input type="checkbox"/> 30. Dredging and excavation; recessed harbor areas	<input type="checkbox"/> 59. Marine fueling facilities	<input checked="" type="checkbox"/> 84. On-site/off-site public utility relocation or construction or extension
<input checked="" type="checkbox"/> 39. Berm development	<input type="checkbox"/> 60. Commercial water-use facilities (e.g., marinas)	<input type="checkbox"/> 85. Playground equipment - land-based
<input type="checkbox"/> 40. Closed loop heat exchangers (heat pumps)	<input type="checkbox"/> 61. Septic fields	<input checked="" type="checkbox"/> 87. Aboveground storage tanks
<input type="checkbox"/> 45. Stream monitoring equipment - placement and use	<input type="checkbox"/> 66. Private, residential docks, piers, boathouses	<input type="checkbox"/> 88. Underground storage tanks
<input type="checkbox"/> 46. Floating boat slips within approved harbor limits	<input checked="" type="checkbox"/> 67. Siting of temporary office trailers	<input type="checkbox"/> 90. Pond closure
<input checked="" type="checkbox"/> 48. Laydown areas	<input type="checkbox"/> 68. Financing for speculative building construction	<input type="checkbox"/> 93. Standard License
<input type="checkbox"/> 50. Minor land based structures	<input type="checkbox"/> 72. Ferry landings/service operations	<input type="checkbox"/> 94. Special Use License
<input checked="" type="checkbox"/> 51. Signage installation	<input type="checkbox"/> 74. Recreational vehicle campsites	<input type="checkbox"/> 95. Recreation License
<input type="checkbox"/> 53. Mooring buoys or posts	<input type="checkbox"/> 75. Utility lines/light poles	<input type="checkbox"/> 96. Land Use Permit
<input checked="" type="checkbox"/> 56. Culverts	<input type="checkbox"/> 76. Concrete sidewalks	

Table 3: Activities that may adversely affect federally listed bats. Conservation measures AND completion of bat strategy project review form REQUIRED; review of bat records in proximity of project REQUIRED by OSAR/Heritage eMap reviewer or Terrestrial Zoologist.

<input type="checkbox"/> 15. Windshield and ground surveys for archaeological resources	<input type="checkbox"/> 34. Mechanical vegetation removal, includes trees or tree branches > 3 inches in diameter	<input checked="" type="checkbox"/> 69. Renovation of existing structures
<input checked="" type="checkbox"/> 16. Drilling	<input checked="" type="checkbox"/> 35. Stabilization (major erosion control)	<input type="checkbox"/> 70. Lock maintenance/ construction
<input type="checkbox"/> 17. Mechanical vegetation removal, does not include trees or branches > 3" in diameter (in Table 3 due to potential for woody burn piles)	<input checked="" type="checkbox"/> 36. Grading	<input type="checkbox"/> 71. Concrete dam modification
<input type="checkbox"/> 21. Herbicide use	<input checked="" type="checkbox"/> 37. Installation of soil improvements	<input type="checkbox"/> 73. Boat launching ramps
<input checked="" type="checkbox"/> 22. Grubbing	<input type="checkbox"/> 38. Drain installations for ponds	<input type="checkbox"/> 77. Construction or expansion of land-based buildings
<input type="checkbox"/> 23. Prescribed burns	<input type="checkbox"/> 47. Conduit installation	<input type="checkbox"/> 78. Wastewater treatment plants
<input type="checkbox"/> 25. Maintenance, improvement or construction of pedestrian or vehicular access corridors	<input type="checkbox"/> 52. Floating buildings	<input type="checkbox"/> 80. Barge fleeting areas
<input checked="" type="checkbox"/> 26. Maintenance/construction of access control measures	<input type="checkbox"/> 54. Maintenance of water control structures (dewatering units, spillways, levees)	<input type="checkbox"/> 82. Construction of dam/weirs/ levees
<input type="checkbox"/> 27. Restoration of sites following human use and abuse	<input type="checkbox"/> 55. Solar panels	<input type="checkbox"/> 83. Submarine pipeline, directional boring operations
<input checked="" type="checkbox"/> 28. Removal of debris (e.g., dump sites, hazardous material, unauthorized structures)	<input checked="" type="checkbox"/> 62. Blasting	<input type="checkbox"/> 86. Landfill construction
<input checked="" type="checkbox"/> 29. Acquisition and use of fill/borrow material	<input type="checkbox"/> 63. Foundation installation for transmission support	<input checked="" type="checkbox"/> 89. Structure demolition
<input type="checkbox"/> 31. Stream/wetland crossings	<input type="checkbox"/> 64. Installation of steel structure, overhead bus, equipment, etc.	<input type="checkbox"/> 91. Bridge replacement
<input type="checkbox"/> 32. Clean-up following storm damage	<input type="checkbox"/> 65. Pole and/or tower installation and/or extension	<input type="checkbox"/> 92. Return of archaeological remains to former burial sites
<input type="checkbox"/> 33. Removal of hazardous trees/tree branches		

STEP 3) Project includes one or more activities in Table 3?☒ **YES (Go to Step 4)**☐ **NO (Go to Step 13)**

STEP 4) Answer questions a through e below (applies to projects with activities from Table 3 ONLY)

- a) Will project involve continuous noise (i.e., ≥ 24 hrs) that is greater than 75 decibels measured on the A scale (e.g., loud machinery)? ☒ **NO** (NV2 does not apply) ☐ **YES** (NV2 applies, subject to records review)
- b) Will project involve entry into/survey of cave? ☒ **NO** (HP1/HP2 do not apply) ☐ **YES** (HP1/HP2 applies, subject to review of bat records)
- c) If conducting **prescribed burning (activity 23)**, estimated acreage: and timeframe(s) below: ☒ **N/A**

STATE	SWARMING	WINTER	NON-WINTER	PUP
GA, KY, TN	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 31	<input type="checkbox"/> Apr 1 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
VA	<input type="checkbox"/> Sep 16 - Nov 15	<input type="checkbox"/> Nov 16 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 15	<input type="checkbox"/> Jun 1 - Jul 31
AL	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 15	<input type="checkbox"/> Mar 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
NC	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 15	<input type="checkbox"/> Apr 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
MS	<input type="checkbox"/> Oct 1 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 30	<input type="checkbox"/> Jun 1 - Jul 31

- d) Will the project involve vegetation piling/burning? ☒ **NO** (SSPC4/SHF7/SHF8 do not apply) ☐ **YES** (SSPC4/SHF7/SHF8 applies, subject to review of bat records)

- e) If **tree removal (activity 33 or 34)**, estimated amount: ☐ **ac** ☐ **trees** ☒ **N/A**

STATE	SWARMING	WINTER	NON-WINTER	PUP
GA, KY, TN	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 31	<input type="checkbox"/> Apr 1 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
VA	<input type="checkbox"/> Sep 16 - Nov 15	<input type="checkbox"/> Nov 16 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 15	<input type="checkbox"/> Jun 1 - Jul 31
AL	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Mar 15	<input type="checkbox"/> Mar 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
NC	<input type="checkbox"/> Oct 15 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 15	<input type="checkbox"/> Apr 16 - May 31, Aug 1 - Oct 14	<input type="checkbox"/> Jun 1 - Jul 31
MS	<input type="checkbox"/> Oct 1 - Nov 14	<input type="checkbox"/> Nov 15 - Apr 14	<input type="checkbox"/> Apr 15 - May 31, Aug 1 - Sept 30	<input type="checkbox"/> Jun 1 - Jul 31

If warranted, does project have flexibility for bat surveys (May 15-Aug 15): ☐ **MAYBE** ☐ **YES** ☒ **NO**

*** For **PROJECT LEADS** whose projects will be reviewed by a Heritage Reviewer (Natural Resources Organization only), **STOP HERE**. Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date", and submit with project information. Otherwise continue to Step 5. ***

SECTION 2: REVIEW OF BAT RECORDS (applies to projects with activities from Table 3 ONLY)**STEP 5) Review of bat/cave records conducted by Heritage/OSAR reviewer?**

- ☒ **YES** ☐ **NO** (Go to Step 13)

Info below completed by: ☐ **Heritage Reviewer** (name) Date
☐ **OSAR Reviewer** (name) Date
☒ **Terrestrial Zoologist** (name) Elizabeth Hamrick Date Oct 18, 2022

Gray bat records: ☐ None ☐ Within 3 miles* ☒ Within a cave* ☒ Within the County

Indiana bat records: ☐ None ☒ Within 10 miles* ☐ Within a cave* ☒ Capture/roost tree* ☒ Within the County

Northern long-eared bat records: ☐ None ☐ Within 5 miles* ☐ Within a cave* ☒ Capture/roost tree* ☒ Within the County

Virginia big-eared bat records: ☒ None ☐ Within 6 miles* ☐ Within the County

Caves: ☐ None within 3 mi ☒ Within 3 miles but > 0.5 mi ☐ Within 0.5 mi but > 0.25 mi* ☐ Within 0.25 mi but > 200 feet*
☐ Within 200 feet*

Bat Habitat Inspection Sheet completed? ☒ **NO** ☐ **YES**

Amount of **SUITABLE** habitat to be removed/burned (may differ from STEP 4e): (☐ **ac** ☐ **trees**)* ☒ **N/A**

STEP 6) Provide any additional notes resulting from Heritage Reviewer records review in Notes box below then
Go to Step 13

Notes from Bat Records Review (e.g., historic record; bats not on landscape during action; DOT bridge survey with negative results):

No known roosts of MYGR, MYSE, MYSO within 3 miles. No trees to be removed.

STEPS 7-12 To be Completed by Terrestrial Zoologist (if warranted):

STEP 7) Project will involve:

- ☐ Removal of suitable trees within 0.5 mile of P1-P2 Indiana bat hibernacula or 0.25 mile of P3-P4 Indiana bat hibernacula or any NLEB hibernacula.
- ☐ Removal of suitable trees within 10 miles of documented Indiana bat (or within 5 miles of NLEB) hibernacula.
- ☐ Removal of suitable trees > 10 miles from documented Indiana bat (> 5 miles from NLEB) hibernacula.
- ☐ Removal of trees within 150 feet of a documented Indiana bat or northern long-eared bat maternity roost tree.
- ☐ Removal of suitable trees within 2.5 miles of Indiana bat roost trees or within 5 miles of Indiana bat capture sites.
- ☐ Removal of suitable trees > 2.5 miles from Indiana bat roost trees or > 5 miles from Indiana bat capture sites.
- ☐ Removal of documented Indiana bat or NLEB roost tree, if still suitable.
- ☒ N/A

STEP 8) Presence/absence surveys were/will be conducted: ☐ YES ☒ NO ☐ TBD

STEP 9) Presence/absence survey results, on ☐ NEGATIVE ☐ POSITIVE ☒ N/A

STEP 10) Project ☐ WILL ☒ WILL NOT require use of Incidental Take in the amount of ☐ acres or ☐ trees
 proposed to be used during the ☐ WINTER ☐ VOLANT SEASON ☐ NON-VOLANT SEASON ☒ N/A

STEP 11) Available Incidental Take (prior to accounting for this project) as of

TVA Action	Total 20-year	Winter	Volant Season	Non-Volant Season
5 Operate, Maintain, Retire, Expand, Construct Power Plants				

STEP 12) Amount contributed to TVA's Bat Conservation Fund upon activity completion: \$ OR ☒ N/A

TERRESTRIAL ZOOLOGISTS, after completing SECTION 2, review Table 4, modify as needed, and then complete section for Terrestrial Zoologists at end of form.

SECTION 3: REQUIRED CONSERVATION MEASURES

STEP 13) Review Conservation Measures in Table 4 and ensure those selected are relevant to the project. If not, manually override and uncheck irrelevant measures, and explain why in ADDITIONAL NOTES below Table 4.

Did review of Table 4 result in ANY remaining Conservation Measures in **RED**?

- ☐ **NO** (Go to Step 14)
- ☒ **YES** (STOP HERE; Submit for Terrestrial Zoology Review. Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date", and submit with project information).

Table 4. TVA's ESA Section 7 Programmatic Bat Consultation Required Conservation Measures

The Conservation Measures in Table 4 are automatically selected based on your choices in Tables 2 and 3 but can be manually overridden, if necessary. To Manually override, press the button and enter your name.

Manual Override

Name: Elizabeth Hamrick

Check if Applies to Project	Activities Subject To Conservation Measure	Conservation Measure Description
<input checked="" type="checkbox"/>	15, 16, 17, 18, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 45, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96	NV1 - Noise will be short-term, transient, and not significantly different from urban interface or natural events (i.e., thunderstorms) that bats are frequently exposed to when present on the landscape.
<input type="checkbox"/>	16, 25, 26, 37, 47, 52, 62, 63, 64, 65, 70, 71, 73, 78, 80, 82, 83, 86, 91	NV2 - Drilling, blasting, or any other activity that involves continuous noise (i.e., longer than 24 hours) disturbances greater than 75 decibels measured on the A scale (e.g., loud machinery) within a 0.5 mile radius of documented winter and/or summer roosts (caves, trees, unconventional roosts) will be conducted when bats are absent from roost sites.
<input type="checkbox"/>	16, 26, 62	NV3 - Drilling or blasting within a 0.5 mile radius of documented cave (or unconventional) roosts will be conducted in a manner that will not compromise the structural integrity or alter the karst hydrology of the roost site.
<input type="checkbox"/>	16, 26, 62	NV4 - Drilling or blasting within 0.5 miles of a documented roost site (cave, tree, unconventional roost) that needs to occur when bats are present will first involve development of project-specific avoidance or minimization measures in coordination with the USFWS.
<input type="checkbox"/>	15, 26, 92	HP1 - Site-specific cases in which potential impact of human presence is heightened (e.g., conducting environmental or cultural surveys within a roost) will be closely coordinated with staff bat biologists to avoid/minimize impacts below any potential adverse effect. Any take from these activities would be covered by TVA's Section 10 permit.
<input type="checkbox"/>	15, 26, 92	HP2 - Entry into roosts known to be occupied by federally listed bats will be communicated to the USFWS when impacts to bats may occur if not otherwise communicated (i.e., via annual monitoring reports per TVA's Section 10 permit). Any take from these activities would be covered by TVA's section 10 permit.
<input type="checkbox"/>	23	SHF1 - Fire breaks will be used to define and limit burn scope.
<input type="checkbox"/>	17, 23, 34	SHF2 - Site-specific conditions (e.g., acres burned, transport wind speed, mixing heights) will be considered to ensure smoke is limited and adequately dispersed away from caves so that smoke does not enter cave or cave-like structures.
<input type="checkbox"/>	23	SHF3 - Acreage will be divided into smaller units to keep amount of smoke at any one time or location to a minimum and reduce risk for smoke to enter caves.
<input type="checkbox"/>	17, 23, 34	SHF4 - If burns need to be conducted during April and May, when there is some potential for bats to present on the landscape and more likely to enter torpor due to colder temperatures, burns will only be conducted if the air temperature is 55° or greater, and preferably 60° or greater.
<input type="checkbox"/>	23	SHF5 - Fire breaks will be plowed immediately prior to burning, will be plowed as shallow as possible, and will be kept to minimum to minimize sediment.
<input type="checkbox"/>	23	SHF6 - Tractor-constructed fire lines will be established greater than 200 feet from cave entrances . Existing logging roads and skid trails will be used where feasible to minimize ground disturbance and generation of loose sediment.
<input type="checkbox"/>	17, 22, 23, 32, 33, 34, 35, 36	SHF7 - Burning will only occur if site specific conditions (e.g. acres burned, transport wind speed, mixing heights) can be modified to ensure that smoke is adequately dispersed away from caves or cave-like structures. This applies to prescribed burns and burn piles of woody vegetation.

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<input type="checkbox"/>	17, 22, 23, 32, 33, 34, 35, 36	SHF8 - Brush piles will be burned a minimum of 0.25 mile from documented, known, or obvious caves or cave entrances and otherwise in the center of newly established ROW when proximity to caves on private land is unknown.
<input type="checkbox"/>	17, 23, 34	SHF9 - A 0.25 mile buffer of undisturbed forest will be maintained around documented or known gray bat maternity and hibernation colony sites, documented or known Virginia big-eared bat maternity, bachelor, or winter colony sites, Indiana bat hibernation sites, and northern long-eared bat hibernation sites. Prohibited activities within this buffer include cutting of overstory vegetation, construction of roads, trails or wildlife openings, and prescribed burning. Exceptions may be made for maintenance of existing roads and existing ROW, or where it is determined that the activity is compatible with species conservation and recovery (e.g., removal of invasive species).
<input type="checkbox"/>	33, 34	TR1* - Removal of potentially suitable summer roosting habitat during time of potential occupancy has been quantified and minimized programmatically. TVA will track and document alignment of activities that include tree removal (i.e., hazard trees, mechanical vegetation removal) with the programmatic quantitative cumulative estimate of seasonal removal of potential summer roost trees for Indiana bat and northern long-eared bat. Project will therefore communicate completion of tree removal to appropriate TVA staff.
<input type="checkbox"/>	33, 34	TR2 - Removal of suitable summer roosting habitat within 0.5 mile of Priority 1/Priority 2 Indiana bat hibernacula, or 0.25 mile of Priority 3/Priority 4 Indiana bat hibernacula or any northern long-eared bat hibernacula will be prohibited, regardless of season, with very few exceptions (e.g., vegetation maintenance of TL ROW immediately adjacent to a known cave).
<input type="checkbox"/>	33, 34	TR3* - Removal of suitable summer roosting habitat within documented bat habitat (i.e., within 10 miles of documented Indiana bat hibernacula, within 5 miles of documented northern long-eared bat hibernacula, within 2.5 miles of documented Indiana bat summer roost trees, within 5 miles of Indiana bat capture sites, within 1 mile of documented northern long-eared bat summer roost trees, within 3 miles of northern long-eared bat capture sites) will be tracked, documented, and included in annual reporting. Project will therefore communicate completion of tree removal to appropriate TVA staff.
<input type="checkbox"/>	33, 34	TR4* - Removal of suitable summer roosting habitat within potential habitat for Indiana bat or northern long-eared bat will be tracked, documented, and included in annual reporting. Project will therefore communicate completion of tree removal to appropriate TVA staff.
<input type="checkbox"/>	33, 34	TR5 - Removal of any trees within 150 feet of a documented Indiana bat or northern long-eared bat maternity summer roost tree during non-winter season, range- wide pup season or swarming season (if site is within known swarming habitat), will first require a site-specific review and assessment. If pups are present in trees to be removed (determined either by mist netting and assessment of adult females, or by visual assessment of trees following evening emergence counts), TVA will coordinate with the USFWS to determine how to minimize impacts to pups to the extent possible. May include establishment of artificial roosts before removal of roost tree(s).
<input type="checkbox"/>	33, 34	TR6 - Removal of a documented Indiana bat or northern long-eared bat roost tree that is still suitable and that needs to occur during non-winter season, range-wide pup season, or swarming season (if site is within known swarming habitat) will first require a site-specific review and assessment. If pups are present in trees to be removed (determined either by mist netting and assessment of adult females, or by visual assessment of trees following evening emergence counts), TVA will coordinate with USFWS to determine how to minimize impacts to pups to the extent possible. This may include establishment of artificial roosts before removal of roost tree(s).
<input type="checkbox"/>	33, 34	TR7 (Existing Transmission ROW only) - Tree removal within 100 feet of existing transmission ROWs will be limited to hazard trees. On or adjacent to TLs, a hazard tree is a tree that is tall enough to fall within an unsafe distance of TLs under maximum sag and blowout conditions and/or are also dead, diseased, dying, and/or leaning. Hazard tree removal includes removal of trees that 1) currently are tall enough to threaten the integrity of operation and maintenance of a TL or 2) have the ability in the future to threaten the integrity of operation and maintenance of a TL.
<input type="checkbox"/>	33, 34	TR8 (TVA Reservoir Land only) - Requests for removal of hazard trees on or adjacent to TVA reservoir land will be inspected by staff knowledgeable in identifying hazard trees per International Society of Arboriculture and TVA's checklist for hazard trees. Approval will be limited to trees with a defined target.
<input type="checkbox"/>	33, 34	TR9 - If removal of suitable summer roosting habitat occurs when bats are present on the landscape, a funding contribution (based on amount of habitat removed) towards future conservation and recovery efforts for federally listed bats would be carried out. Project can consider seasonal bat presence/absence surveys (mist netting or emergence counts) that allow for positive detections without resulting in increased constraints in cost and project schedule. This will enable TVA to contribute to increased knowledge of bat presence on the landscape while carrying out TVA's broad mission and responsibilities.

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<input checked="" type="checkbox"/>	69, 77, 89, 91	<p>AR1 - Projects that involve structural modification or demolition of buildings, bridges, and potentially suitable box culverts, will require assessment to determine if structure has characteristics that make it a potentially suitable unconventional bat roost. If so a survey to determine if bats may be present will be conducted. Structural assessment will include:</p> <ul style="list-style-type: none"> ○ Visual check that includes an exhaustive internal/external inspection of building to look for evidence of bats (e.g., bat droppings, roost entrance/exit holes); this can be done at any time of year, preferably when bats are active. ○ Where accessible and health and safety considerations allow, a survey of roof space for evidence of bats (e.g., droppings, scratch marks, staining, sightings), noting relevant characteristics of internal features that provide potential access points and roosting opportunities. Suitable characteristic may include: gaps between tiles and roof lining, access points via eaves, gaps between timbers or around mortise joints, gaps around top and gable end walls, gaps within roof walling or around tops of chimney breasts, and clean ridge beams. ○ Features with high-medium likelihood of harboring bats but cannot be checked visually include soffits, cavity walls, space between roof covering and roof lining. ○ Applies to box culverts that are at least 5 feet (1.5 meters) tall and with one or more of the following characteristics. Suitable culverts for bat day roosts have the following characteristics: <ul style="list-style-type: none"> ● Location in relatively warm areas ● Between 5-10 feet (1.5-3 meters) tall and 300 ft (100 m) or more long ● Openings protected from high winds ● Not susceptible to flooding ● Inner areas relatively dark with roughened walls or ceilings ● Crevices, imperfections, or swallow nests ○ Bridge survey protocols will be adapted from the Programmatic Biological Opinion for the Federal Highway Administration (Appendix D of USFWS 2016c, which includes a Bridge Structure Assessment Guidance and a Bridge Structure Assessment Form). ○ Bat surveys usually are NOT needed in the following circumstances: <ul style="list-style-type: none"> ● Domestic garages /sheds with no enclosed roof space (with no ceiling) ● Modern flat-roofed buildings ● Metal framed and roofed buildings ● Buildings where roof space is regularly used (e.g., attic space converted to living space, living space open to rafters) or where all roof space is lit from skylights or windows. Large/tall roof spaces may be dark enough at apex to provide roost space
<input checked="" type="checkbox"/>	69, 77, 89, 91	<p>AR2 - Additional bat P/A surveys (e.g., emergence counts) conducted if warranted (i.e., when AR1 indicates that bats may be present).</p>
<input type="checkbox"/>	91	<p>AR3 - Bridge survey protocols will be implemented, either by permittee (e.g., state DOT biologists) or qualified personnel. If a bridge is determined to be in use as an unconventional roost, subsequent protocols will be implemented.</p>
<input type="checkbox"/>	69, 89	<p>AR4 - Removal of buildings with suitable roost characteristics within six miles of known or presumed occupied roosts for Virginia big-eared bat would occur between Nov 16 and Mar 31. Buildings may be removed other times of the year once a bat biologist evaluates a buildings' potential to serve as roosting habitat and determines that this species is not present and/or is not using structure(s).</p>

<div></div>	<p>16, 17, 18, 21, 22, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 48, 50, 51, 56, 61, 62, 63, 64, 65, 67, 69, 84, 89</p>	<p>SSPC1 (Transmission only) - Transmission actions and activities will continue to Implement A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority Construction and Maintenance Activities. This focuses on control of sediment and pollutants, including herbicides. Following are key measures:</p> <ul style="list-style-type: none"> ○ BMPs minimize erosion and prevent/control water pollution in accordance with state-specific construction storm water permits. BMPs are designed to keep soil in place and aid in reducing risk of other pollutants reaching surface waters, wetlands and ground water. BMPs will undertake the following principles: <ul style="list-style-type: none"> ● Plan clearing, grading, and construction to minimize area and duration of soil exposure. ● Maintain existing vegetation wherever and whenever possible. ● Minimize disturbance of natural contours and drains. ● As much as practicable, operate on dry soils when they are least susceptible to structural damage and erosion. ● Limit vehicular and equipment traffic in disturbed areas. Keep equipment paths dispersed or designate single traffic flow paths with appropriate road BMPs to manage runoff. ● Divert runoff away from disturbed areas. ● Provide for dispersal of surface flow that carries sediment into undisturbed surface zones with high infiltration capacity and ground cover conditions. ● Prepare drainage ways and outlets to handle concentrated/increased runoff. ● Minimize length and steepness of slopes. Interrupt long slopes frequently. ● Keep runoff velocities low and/or check flows. ● Trap sediment on-site. ● Inspect/maintain control measures regularly & after significant rain. ● Re-vegetate and mulch disturbed areas as soon as practical. ○ Specific guidelines regarding sensitive resources and buffer zones: <ul style="list-style-type: none"> ● Extra precaution (wider buffers) within SMZs is taken to protect stream banks and water quality for streams, springs, sinkholes, and surrounding habitat. ● BMPs are implemented to protect and enhance wetlands. Select use of equipment and seasonal clearing is conducted when needed for rare plants; construction activities are restricted in areas with identified rare plants. ● Standard requirements exist to avoid adverse impacts to caves, protected animals, unique/ important habitat (e.g., cave buffers, restricted herbicide use, seasonal clearing of suitable habitat).
<div></div>	<p>16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 48, 50, 51, 52, 53, 54, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 70, 71, 73, 76, 77, 78, 80, 81, 82, 83, 86, 87, 88, 89, 90</p>	<p>SSPC2 - Operations involving chemical/fuel storage or resupply and vehicle servicing will be handled outside of riparian zones (streamside management zones) in a manner to prevent these items from reaching a watercourse. Earthen berms or other effective means are installed to protect stream channel from direct surface runoff. Servicing will be done with care to avoid leakage, spillage, and subsequent stream, wetland, or ground water contamination. Oil waste, filters, other litter will be collected and disposed of properly. Equipment servicing and chemical/fuel storage will be limited to locations greater than 300-ft from sinkholes, fissures, or areas draining into known sinkholes, fissures, or other karst features.</p>

<div></div>	<p>16, 17, 18, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 61, 62, 63, 64, 65, 66, 67, 69, 70, 71, 73, 76, 77, 80, 81, 82, 83, 84, 86, 87, 88, 89, 90, 91</p>	<p>SSPC3 (Power Plants only) - Power Plant actions and activities will continue to implement standard environmental practices. These include:</p> <ul style="list-style-type: none"> ○ Best Management Practices (BMPs) in accordance with regulations: <ul style="list-style-type: none"> • Ensure proper disposal of waste, ex: used rags, used oil, empty containers, general trash, dependent on plant policy • Maintain every site with well-equipped spill response kits, included in some heavy equipment • Conduct Quarterly Internal Environmental Field Assessments at each sight • Every project must have an approved work package that contains an environmental checklist that is approved by sight Environmental Health & Safety consultant. • When refueling, vehicle is positioned as close to pump as possible to prevent drips, and overfilling of tank. Hose and nozzle are held in a vertical position to prevent spillage ○ Construction Site Protection Methods <ul style="list-style-type: none"> • Sediment basin for runoff - used to trap sediments and temporarily detain runoff on larger construction sites • Storm drain protection device • Check dam to help slow down silt flow • Silt fencing to reduce sediment movement ○ Storm Water Pollution Prevention (SWPP) Pollution Control Strategies <ul style="list-style-type: none"> • Minimize storm water contact with disturbed soils at construction site • Protect disturbed soil areas from erosion • Minimize sediment in storm water before discharge • Prevent storm water contact with other pollutants • Construction sites also may be required to have a storm water permit, depending on size of land disturbance (>1ac) ○ Every site has a Spill Prevention and Control Countermeasures (SPCC) Plan and requires training. Several hundred pieces of equipment often managed at the same time on power generation properties. Goal is to <ul style="list-style-type: none"> • Minimize fuel and chemical use • Ensure proper disposal of waste, ex: used rags, used oil, empty containers, general trash, dependent on plant policy • Maintain every site with well-equipped spill response kits, included in some heavy equipment • Conduct Quarterly Internal Environmental Field Assessments at each sight • Every project must have an approved work package that contains an environmental checklist that is approved by sight Environmental Health & Safety consultant. • When refueling, vehicle is positioned as close to pump as possible to prevent drips, and overfilling of tank. Hose and nozzle are held in a vertical position to prevent spillage ○ Construction Site Protection Methods <ul style="list-style-type: none"> • Sediment basin for runoff - used to trap sediments and temporarily detain runoff on larger construction sites • Storm drain protection device • Check dam to help slow down silt flow • Silt fencing to reduce sediment movement ○ Storm Water Pollution Prevention (SWPP) Pollution Control Strategies <ul style="list-style-type: none"> • Minimize storm water contact with disturbed soils at construction site • Protect disturbed soil areas from erosion • Minimize sediment in storm water before discharge • Prevent storm water contact with other pollutants • Construction sites also may be required to have a storm water permit, depending on size of land disturbance (>1ac) ○ Every site has a Spill Prevention and Control Countermeasures (SPCC) Plan and requires training. Several hundred pieces of equipment often managed at the same time on power generation properties. Goal is to minimize fuel and chemical use
<div></div>	<p>17, 22, 32, 33, 34, 35, 36</p>	<p>SSPC4 (Transmission only) - Woody vegetation burn piles associated with transmission construction will be placed in the center of newly established ROWs to minimize wash into any nearby undocumented caves that might be on adjacent private property and thus outside the scope of field survey for confirmation. Brush piles will be burned a minimum of 0.25 miles from documented caves and otherwise in the center of newly established ROW when proximity to caves on private land is unknown.</p>

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<input type="checkbox"/>	17, 18, 21, 22, 24, 25, 26, 30, 31, 33, 34, 35, 36, 40, 46, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 66, 67, 68, 69, 70, 72, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 87, 88, 91, 93, 95, 96	SSPC5 (26a, Solar, Economic Development only) - Section 26a permits and contracts associated with solar projects, economic development projects or land use projects include standards and conditions that include standard BMPs for sediment and contaminants as well as measures to avoid or minimize impacts to sensitive species or other resources consistent with applicable laws and Executive Orders.
<input type="checkbox"/>	21, 54	SSPC6 - Herbicide use will be avoided within 200 ft of portals associated with caves, cave collapse areas, mines and sinkholes are capable of supporting cave-associated species. Herbicides are not applied to surface water or wetlands unless specifically labeled for aquatic use. Filter and buffer strips will conform at least to federal and state regulations and label requirements.
<input type="checkbox"/>	17, 21, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 54, 55	SSPC7 - Clearing of vegetation within a 200-ft radius of documented caves will be limited to hand or small machinery clearing only (e.g., chainsaws, bush-hog, mowers). This will protect potential recharge areas of cave streams and other karst features that are connected hydrologically to caves.
<input checked="" type="checkbox"/>	16, 26, 36, 37, 38, 39, 48, 50, 52, 59, 60, 62, 66, 67, 69, 72, 75, 77, 78, 79, 86	L1 - Direct temporary lighting away from suitable habitat during the active season.
<input checked="" type="checkbox"/>	16, 26, 36, 37, 38, 39, 48, 50, 52, 59, 60, 62, 66, 67, 69, 72, 75, 77, 78, 79, 86	L2 - Evaluate the use of outdoor lighting during the active season and seek to minimize light pollution when installing new or replacing existing permanent lights by angling lights downward or via other light minimization measures (e.g., dimming, directed lighting, motion-sensitive lighting).

¹Bats addressed in consultation (02/2018), which includes gray bat (listed in 1976), Indiana bat (listed in 1967), northern long-eared bat (listed in 2015), and Virginia big-eared bat (listed in 1979).

Hide All Unchecked Conservation Measures

- ☐ HIDE
- ☒ UNHIDE

Hide Table 4 Columns 1 and 2 to Facilitate Clean Copy and Paste

- ☐ HIDE
- ☒ UNHIDE

NOTES (additional info from field review, explanation of no impact or removal of conservation measures).

STEP 14) Save completed form (Click File/Save As, name form as "ProjectLead_BatForm_CEC-or-ProjectIDNo_Date") in project environmental documentation (e.g. CEC, Appendix to EA) AND send a copy of form to batstrategy@tva.gov
Submission of this form indicates that Project Lead/Applicant:

(name) is (or will be made) aware of the requirements below.

- Implementation of conservation measures identified in Table 4 is required to comply with TVA's Endangered Species Act programmatic bat consultation.
- TVA may conduct post-project monitoring to determine if conservation measures were effective in minimizing or avoiding impacts to federally listed bats.

For Use by Terrestrial Zoologist Only

☒ Terrestrial Zoologist acknowledges that Project Lead/Contact (name) has been informed of any relevant conservation measures and/or provided a copy of this form.

☐ For projects that require use of Take and/or contribution to TVA's Bat Conservation Fund, Terrestrial Zoologist acknowledges that Project Lead/Contact has been informed that project will result in use of Incidental Take ☐ ac ☐ trees and that use of Take will require \$ contribution to TVA's Conservation Fund upon completion of activity (amount entered should be \$0 if cleared in winter).

For Terrestrial Zoology Use Only. Finalize and Print to Noneditable PDF.

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**Appendix C – Animal and Plant Species with the Potential to Occur in
the Bull Run Fossil Plant Decontamination and Deconstruction
Project Area**

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Appendix C – Animal and Plant Species with the Potential to Occur in the Bull Run Fossil Plant Decontamination and Deconstruction Project Area

This appendix provides supporting information to the Bull Run Fossil Plant (BRF) decontamination and deconstruction environmental assessment (EA) regarding animal and plant species that may be affected by proposed activities within the project area and vicinity. Information is presented that provides a listing of relevant common terrestrial wildlife species, as well as listings of terrestrial and aquatic animals and plant species of concern within the potentially affected area, the potential availability of habitats within the project area that may be used by each species, and their potential occurrence on or near the BRF site.

C.1 Common Terrestrial Wildlife

Common species of birds that have been observed nesting or roosting in TVA fossil plant buildings and structures include American robin, barn swallow, barn owl, Carolina wren, mourning dove, northern mockingbird, osprey, and rock dove. Mammals and reptiles that may opportunistically utilize human structures and have been observed in TVA buildings include Norway rat, eastern woodrat, black rat snake, eastern gray squirrel, house mouse, northern raccoon, and Virginia possum.

The forested areas within the BRF decontamination and deconstruction project area include small forest stands in the northwestern portion of the reservation, the narrow forest fragment that bisects the powerhouse buildings and the coal yard, and other forested strips along the rail line and on either side of the coal yard. These areas are mature forest, but they are very dense with Chinese privet and Japanese honeysuckle in the understory. Birds typically found in forest edges and fragments in this region include American robin, barred owl, blue jay, brown thrasher, common yellowthroat, downy woodpecker, hairy woodpecker, eastern phoebe, eastern kingbird, eastern towhee, eastern wood-pewee, gray catbird, hooded warbler, indigo bunting, mourning dove, pileated woodpecker, prairie warbler, red-eyed vireo, red-tailed hawk, tufted titmouse, white-breasted nuthatch, white-eyed vireo, yellow-billed cuckoo, and yellow-rumped warbler (National Geographic 2002, Stokes 1996).

Where there are snags and pockets of less dense understory, there may be moderate quality foraging and roosting habitat for several species of bat. Some examples of common bat species likely found within this habitat include big brown, eastern red, and hoary bat. Eastern chipmunk, eastern woodrat, white-footed mouse, and woodland vole are other mammals that may be present within this habitat (Kays and Wilson 2002, Whittaker 1996). Eastern box turtle, eastern fence lizard, eastern garter snake, northern black racer, rat snake, and ring-necked snake are common reptiles of these forests in the project region (Gibbons and Dorcas 2005, Powell et al. 2016).

Fields within the project area are almost entirely comprised of mowed grass or otherwise heavily disturbed mowed herbaceous habitat. These areas do not offer suitable habitat for rare wildlife species, but they can be used by common species. Birds that utilize these disturbed herbaceous areas include black vulture, Canada goose, common grackle, field sparrow, grasshopper sparrow, red-tailed hawk, red-winged blackbird, and white-throated sparrow (National Geographic 2002). Mammals that can be found in these areas are common mole, coyote, ground hog, least shrew, white-footed mouse, and white-tailed deer (Whittaker 1996). Reptiles that may use these habitats in this region include black racer,

black rat snake, corn snake, eastern kingsnake, and eastern milksnake (Gibbons and Dorcas 2005, Powell et al. 2016).

Emergent and palustrine wetlands and saturated wet weather conveyances within field settings provide habitat for common amphibians and reptiles. Amphibians likely present include American bullfrog, American toad, eastern newt, southern leopard frog, spring peeper, and upland chorus frog (Powell et al. 2016). Reptiles with the potential to occur in the project area include common snapping turtle, kingsnake, five-lined skink, rat snake, and watersnake (Gibbons and Dorcas 2005, Powell et al. 2016).

C.2 Threatened and Endangered Species

The Endangered Species Act (ESA) (16 USC §§ 1531-1543) was passed to conserve the ecosystems upon which endangered and threatened species depend, and to conserve and recover those species. An endangered species is defined by the ESA as any species in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant part of its range. Critical habitats, essential to the conservation of listed species, also can be designated under the ESA. The ESA establishes programs to conserve and recover endangered and threatened species and makes their conservation a priority for Federal agencies. Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) when their proposed actions may affect endangered or threatened species or their critical habitats.

The State of Tennessee provides protection for species considered threatened, endangered, or deemed in need of management within the state other than those federally listed under the ESA. The listings are handled by the Tennessee Department of Environment and Conservation (TDEC); additionally, the Tennessee Natural Heritage Program and the Tennessee Valley Authority (TVA) both maintain databases of species that are considered threatened, endangered, special concern, or tracked in Tennessee.

C.2.1 Terrestrial Animals

A review of the TVA Natural Heritage Project Database in May 2022 indicated that there are records of three Tennessee state-listed terrestrial animal species (hellbender [*Cryptobranchus alleganiensis*], osprey [*Pandion haliaetus*], and little brown bat [*Myotis lucifugus*]), one federally proposed endangered species (tricolored bat [*perimyotis subflavus*]) and one federally protected species (bald eagle [*Haliaeetus leucocephalus*]) within 3 miles of the project area (TVA 2022b). Three federally listed terrestrial animal species (gray bat [*Myotis grisescens*], Indiana bat [*Myotis sodalis*], and northern long-eared bat [*Myotis septentrionalis*]) have been reported from Anderson County, Tennessee. Review of the USFWS IPaC online database identified one additional candidate species (monarch butterfly [*Danaus plexippus*]) that has the potential to occur in the project area (USFWS 2022). Thus, impacts to this species have also been evaluated. No designated critical habitats have been documented within a 3-mile radius of BRF. A list of the terrestrial threatened and endangered species that are reported from Anderson County and other species of conservation concern documented within a 3-mile radius of BRF can be found in Table C-1.

A field survey by TVA terrestrial zoologists in May 2022 determined that of the several buildings within the project area, particularly warehouses and utility buildings, may provide potential roosting habitat for bats or migratory birds after buildings are left vacant.

Bald eagles are protected under the Bald and Golden Eagle Protection Act (USFWS 2013). This species is associated with larger mature trees capable of supporting its massive nests. These trees are usually found near larger waterways where the eagles forage (USFWS 2007). Records document the occurrence of two bald eagle nests in Anderson County, Tennessee. The closest of these is approximately 2.4 miles away. Bald eagles are routinely spotted foraging over the Clinch River/Melton Hill Reservoir adjacent to BRF. However, no bald eagle nests were observed during the field survey on the project area in May 2022.

Ospreys occupy riparian habitats alongside bodies of water such as rivers, lakes, and reservoirs. They build nests of sticks on a variety of man-made structures (e.g., transmission line structures, lighting towers) near water (NatureServe 2022). Four active osprey nests were documented within the project area during the May 2022 field survey. Three active nests were located on transmission structures to the west and south of the switchyard, and the remaining nest was on a lighting tower south of the coal yard. An inactive osprey nest was also observed on a transmission structure across the Clinch River/Melton Hill Reservoir at the shoreline within Haw Ridge Park. Foraging habitat for osprey is present in the Clinch River/Melton Hill Reservoir.

Table C-1. Federally Listed Terrestrial Species Reported from Anderson County, Tennessee and Other Species of Conservation Concern Documented Within 3 Miles of the Project Area

Common Name	Scientific Name	Status ¹		Suitable Habitat Present ³
		Federal	State (Rank ²)	
Birds				
Bald eagle	<i>Haliaeetus leucocephalus</i>	DM	D (S3)	P (foraging only)
Osprey	<i>Pandion haliaetus</i>	--	-- (S3)	Y
Mammals				
Gray bat ⁴	<i>Myotis grisescens</i>	E	E (S2)	P
Indiana bat ⁴	<i>Myotis sodalis</i>	E	E (S1)	P
Little brown bat	<i>Myotis lucifugus</i>	--	T (S3)	P
Northern long-eared bat ⁴	<i>Myotis septentrionalis</i>	E	T (S1S2)	P
Tricolored bat	<i>Perimyotis subflavus</i>	PE	T (S2S3)	P
Amphibians				
Hellbender ⁵	<i>Cryptobranchus alleganiensis</i>	PS	E (S3)	N
Insects				
Monarch butterfly	<i>Danaus plexippus</i>	C	-- (S4)	P

Source: TVA Regional Natural Heritage Database (TVA 2022b) and USFWS Information for Planning and Consultation (USFWS 2022) (<https://ecos.fws.gov/ipac/>), extracted May 5, 2022.

¹ Status Codes: DM = Delisted, recovered, and still being monitored; D = Deemed in Need of Management; E = Endangered; T = Threatened; PE = Proposed Endangered; PS = Partial Status.

² State Ranks: S1 = Critically Imperiled; S2 = Imperiled; S3 = Vulnerable; S4 = Apparently Secure.

³ Habitat Codes:

Y = Yes, species has been documented in existing habitats within proposed decontamination and deconstruction project area boundary, laydown areas, and/or the light use area, and suitable habitat is present

N = No, no records of species within proposed project areas and no suitable habitat is present

P = Potentially suitable habitat is present, but no records of species in proposed project areas

⁴ Federally listed species known from Anderson County, Tennessee, but not within three miles of the project footprint.

⁵ A subpopulation of hellbender found in the Ozarks of Missouri and Arkansas is federally listed. Species of hellbender found in Anderson County, Tennessee are not federally listed.

Gray bats roost in caves year-round and migrate between summer and winter roosts during spring and fall (Brady et al. 1982, Tuttle 1976a). Bats disperse over bodies of water at dusk where they forage for insects emerging from the surface of the water (Tuttle 1976b).

Although they prefer caves, gray bats have been documented roosting in large numbers inside buildings (Günier and Elder 1971), and they have been observed in buildings and captured during mist net surveys at the Oak Ridge National Laboratory that is within Anderson County. The closest of these records is approximately 5.2 miles from the project area. In addition, there are two caves known within 3 miles of the project area, the closest of which is approximately 2.2 miles away. Suitable roosting habitat for this species may exist in buildings left open and abandoned during the decommissioning process, as it can take several years before demolition occurs. Foraging habitat for this species exists in the project area over wet low-lying areas south of the switchyard and over the Clinch River/Melton Hill Reservoir.

Indiana bats hibernate in caves during winter months and use areas around them for swarming (mating) in the fall and for staging in the spring, prior to migration back to summer habitat. During the summer, Indiana bats roost under the exfoliating bark of dead snags and living trees in mature forests with an open understory and a nearby source of water (Pruitt and TeWinkel 2007, Kurta et al. 2002). Although less common, Indiana bats have also been documented roosting in buildings (Butchkoski and Hassinger 2002). Indiana bats are known to change roost trees frequently throughout the season, while still maintaining site fidelity, returning to the same summer roosting areas in subsequent years (Pruitt and TeWinkel 2007). The closest known record of this species was captured during a 2013 mist net survey approximately 6.3 miles from the project area. As discussed above for the gray bat, there are two caves known within 3 miles of the project area. Foraging and moderate summer roosting habitat for this species exists in the project area in and around trees, the Clinch River/Melton Hill Reservoir, and in wet low-lying areas south of the switchyard. Similar to the gray bat, suitable habitat for this species also may exist in buildings left open and abandoned during the decommissioning process.

Little brown bats hibernate primarily in caves and mines. During summer, this species can be found in hot buildings where females form nursing colonies, as well as in trees with suitable cracks and crevices. Colonies are usually close to water bodies where these bats prefer to forage. Foraging also occurs among trees in open areas (Harvey et al. 2011). The nearest known little brown bat record and nearest known cave are both approximately 2.2 miles from the project area. One additional cave is known within three miles of the project. Similar to the Indiana bat discussed above, habitat for this species exists in the project area in and around trees, the Clinch River/Melton Hill Reservoir, wet low-lying areas, and in buildings left open and abandoned during the decommissioning process.

The northern long-eared bat predominantly overwinters in large hibernacula such as caves, abandoned mines, and cave-like structures. During the fall and spring, they utilize entrances of caves and the surrounding forested areas for swarming and staging. In the summer, northern long-eared bats roost individually or in colonies beneath exfoliating bark or in crevices of both live and dead trees (typically greater than 3 inches in diameter). Roost selection by northern long-eared bats is similar to that of Indiana bats; however, northern long-eared bats are thought to be more opportunistic in roost site selection. This species also roosts in abandoned buildings and under bridges. Northern long-eared bats emerge at dusk to forage below the canopy of mature forests on hillsides and roads, and occasionally over forest clearings and along riparian areas (USFWS 2014). The closest known record of this species was captured during a 2013 mist net survey approximately 6.3 miles from the project area. As discussed above, there are two caves known within 3 miles of the project area. In addition, habitat for this species exists in the project area in and around trees, the Clinch River/Melton Hill Reservoir, wet low-lying areas, and in buildings left open and abandoned during the decommissioning process.

Tricolored bats hibernate in caves, mines, and rock crevices. In summer they roost in dead or live vegetation in live trees. They are associated with forested landscapes where they forage near trees and along waterways, especially in riparian areas (Harvey 1992). In middle Tennessee, tricolored bats have been documented using clumps of dead foliage hanging from branches of live trees during summer. The dead foliage was typically comprised of hickory or oak leaves (Thames 2020). The nearest known tricolored bat record and cave are approximately 2.2 miles from the project. One additional cave is known within 3 miles of the project area. Foraging and moderate summer roosting habitat for this species exists in the project area in and around trees, the Clinch River/Melton Hill

Reservoir, and wet low-lying areas. As discussed in Subsection 3.8 of the environmental assessment, the culvert in which one bat was observed in 2016 (species unknown) may also provide temporary transitional roosting habitat for tricolored bats.

Hellbenders are state-listed as in need of management and are aquatic salamanders found in larger, fast-flowing streams and rivers with large shelter rocks. Eggs are laid in depressions created beneath large rocks or submerged logs (Petranka 1998). One record of this species has been reported within 3 miles of the project area. A specimen was caught in 1976 in Melton Hill Reservoir approximately 1.1 mile away. Suitable nesting habitat is no longer thought to occur in the reach of the Clinch River/Melton Hill Reservoir that is adjacent to BRF or in any of the mainstems of rivers with TVA impoundments. No suitable habitat for hellbenders occurs in the project area.

The monarch butterfly is a highly migratory species, with eastern U.S. populations overwintering in Mexico. Monarch populations typically return to the eastern U.S. in April (Davis and Howard 2005). Summer breeding habitat requires milkweed plant species, on which adults exclusively lay eggs for larvae to develop and feed on. Adults will drink nectar from other blooming wildflowers when milkweeds are not in bloom (NatureServe 2022). Herbaceous areas in the project area are routinely mowed grassy areas that do not provide host plant or foraging habitat for monarch butterfly. Occasional flowering plants may still occur in low areas alongside roads or railroad tracks, or around wet areas southwest of the switchyard. However, these areas do not comprise a substantial amount of available habitat. Though this species has not been historically tracked by state or federal heritage programs, the USFWS IPaC database website determined that this species has the potential to occur within the project area. This species was not observed on BRF during the May 2022 field survey.

C.2.2 Aquatic Animals

A review of the TVA Natural Heritage Database indicated records of 16 federally and/or state-listed aquatic species (six fish and 10 mollusks) within 10 miles of BRF (TVA 2022b). Review of the USFWS IPaC website identified seven additional federally listed aquatic species potentially in the vicinity of BRF (USFWS 2022). These species included six mollusk species and one aquatic snail. A list of the aquatic threatened and endangered species that are found or may potentially occur within a 10-mile radius of BRF can be found in Table C-2.

A total of ten listed mollusk species have been recorded with a 10-mile vicinity of BRF. None of the listed mollusk species were observed during the 2016 biological characterization survey (TVA 2017), and no individuals or populations of these species are considered present in the Clinch River/Melton Hill Reservoir near BRF (TVA 2022a). A 2010 mussel survey of the riverfront adjacent to BRF did not find evidence of presence of any state-listed or federally listed threatened or endangered mussel species (Third Rock Consultants 2010).

Four federally and/or state-listed fish species have been recorded within a 5-mile radius of BRF (TVA 2019). The spotfin chub (*Erimonax monachus*) has been verified within a 5-mile radius of BRF. Habitat for the spotfin chub typically includes large, clear creeks or medium-sized rivers with moderate to swift currents over gravel and bedrock (Lee et al. 1980; Burkhead and Jenkins 1991). The blue sucker (*Cycleptus elongatus*), a state threatened species, has been classified as possibly historical in the vicinity of BRF. Habitat for blue sucker is primarily channels and flowing pools with moderate current in large rivers and

lower tributaries; however, they may occur in some impoundments (NatureServe 2022). One species, the yellowfin madtom (*Noturus flavipinnis*) has been extirpated. This species is found primarily in slow pools and small backwaters of medium-sized to large creeks and small rivers that are unpolluted, warm to cool, and unsilted (Burkhead and Jenkins 1991).

Table C-2. Federally and State Listed Aquatic Species Within 10 Miles of BRF and/or with Potential to Occur Near BRF

Common Name	Scientific Name	Status ¹		Documented in 10-mi radius
		Federal	State (Rank ²)	
Mollusks				
Alabama Lampmussel	<i>Lampsilis virescens</i>	E	E (S1)	No
Birdwing Pearlymussel	<i>Lemiox rimosus</i>	E	E (S1)	Extirpated
Cracking Pearlymussel	<i>Hemistena lata</i>	E	E (S1)	Extirpated
Dromedary Pearlymussel	<i>Dromus dromas</i>	E	E (S1)	Extirpated
Fanshell	<i>Cyprogenia stegaria</i>	E	E (S1)	No
Finerayed Pigtoe	<i>Fusconaia cuneolus</i>	E	E (S1)	Historical ³
Orange-foot Pimpleback	<i>Plethobasus cooperianus</i>	E	E (S1)	Historical
Pink Mucket	<i>Lampsilis abrupta</i>	E	E (S2)	Extirpated
Ring Pink	<i>Obovaria retusa</i>	E	E (S1)	No
Rough Pigtoe	<i>Pleurobema plenum</i>	E	E (S1)	No
	<i>Quadrula cylindrica</i>			
Rough Rabbitsfoot	<i>strigillata</i>	E	E (S2)	No
Sheepnose Mussel	<i>Plethobasus cyphus</i>	E	-- (S2)	No
Shiny Pigtoe Pearlymussel	<i>Fusconaia cor</i>	E	E (S1)	Historical
Slabside Pearlymussel	<i>Pleurobema dolabellodes</i>	E	E (S2)	Historical
			E	
Spectaclecase	<i>Cumberlandia monodonta</i>	E	(S2S3)	Historical
White Wartyback	<i>Plethobasus cicatricosus</i>	E	E (S1)	Historical
Fish				
Yellowfin Madtom	<i>Noturus flavipinnis</i>	T	T (S1)	Extirpated
Slender Chub	<i>Erimystix chani</i>	T	T (S1)	No
Spotfin Chub	<i>Erimonax monachus</i>	T	T (S2)	Yes
			D	
Highfin Carpsucker	<i>Carpionodes velifer</i>	--	(S2S3)	Historical
Tennessee Dace	<i>Chrosomus tennesseensis</i>	--	D (S3)	Yes
Flame Chub	<i>Hemitremia flammea</i>	--	D (S3)	Yes
Blue Sucker	<i>Cycleptus elongatus</i>	--	T (S2)	Historical
Aquatic Snail				
Anthony's Riversnail	<i>Athearnia anthonyi</i>	E	E (S1)	No

Sources: TVA 2022b, USFWS 2022, NatureServe 2022, TDEC 2016

¹ Status Codes: E = Listed endangered; T = Listed threatened; -- = Not listed; D = Deemed in need of management

² Rank Codes: S1 = Extremely rare and critically endangered; S2 = Very rare and imperiled; S3 = Vulnerable

³ Historical records are those observations that are greater than 25 years old.

Suitable habitat for the Tennessee dace (*Chrosomus tennesseensis*), a state-listed species in need of management, does not exist in the Clinch River/Melton Hill Reservoir in the vicinity of BRF (TVA 2022a). Habitat for this species consists of sluggish pool areas of fine gravel, sand, and silt within spring-fed headwaters and clear and cold small creeks that are well shaded by riparian vegetation (Starnes and Jenkins 1988; Page and Burr 2011).

Flame chub (*Hemitremia flammea*), a state listed species in need of management, primarily occupies spring-fed tributaries (NatureServe 2022), and, therefore, is unlikely to be found in the Clinch River/Melton Hill Reservoir in the vicinity of BRF, but it does have the potential to occupy the nearby Bullrun Creek.

C.2.3 Plants

A review of the TVA Regional Natural Heritage database indicated that no federally listed vascular plant species, or associated designated critical habitat, are known to occur on or within a 5-mile radius of BRF (TVA 2022b). A total of 16 species of plants listed by the TDEC as threatened, endangered, or species in need of management in Tennessee are known to occur within Anderson County (TDEC 2022). Of those, 11 species plus American ginseng (*Panax quinquefolius*) are known to occur within 5 miles of BRF (TVA 2022b).

Preferred habitat for each species and the possibility of habitat within the project area is addressed in Table C-3. Lands associated with the BRF project area have been extensively disturbed by current and/or previous land use. These areas are currently used for industrial purposes and do not contain intact, high-quality native plant communities (TVA 2016; Wood 2022). No sensitive species or associated habitat are expected to be present within the BRF project area.

Table C-3. Habitat Requirements for State-Listed Plant Species' Records within Anderson County

Common Name	Scientific Name	Habitat Requirements	Status*	Present in 5-mile Vicinity of Project Area ¹	Habitat within Project Area**
American ginseng	<i>Panax quinquefolius</i>	Slopes of shaded, rich woodlands ²	S-CE	Y	N
Branching whitlow-wort	<i>Draba ramosissima</i>	Bluffs, rocky woods ⁴	S	Possibly Historical	N
Butternut	<i>Juglans cinerea</i>	Rich mesic woods and streambanks ⁴	T	Y	N
Copper iris	<i>Iris fulva</i>	Swamps, marshes, wet woods ⁴	T	Y	N
Hairy willow-herb	<i>Epilobium ciliatum</i>	Moist to wet meadows, springs and bogs ⁴	T	Historical	N
Heartleaf meehania	<i>Meehania cordata</i>	Wooded mountain slopes ²	T	N	N
Large-leaved grass-of-parnassus	<i>Parnassia grandifolia</i>	Wet woods and fens ⁴	S	N	N
Mountain witch-alder	<i>Fothergilla major</i>	Dry woods, thickets, riverscour cobble bars ⁴	T	Y	N
Naked-stem sunflower	<i>Helianthus occidentalis</i>	Barrens, prairies ⁴	S	Possibly Historical	N
Northern bush-honeysuckle	<i>Diervilla lonicera</i>	Dry woods and thickets, streambanks, rocky slopes ⁴	T	Y	N
Nuttall's Waterweed	<i>Elodea nuttallii</i>	Lakes, streams, small rivers ⁴	S	Y	N
Prairie goldenrod	<i>Solidago ptarmicoides</i>	Cedar glades and barrens ⁴	E	Possibly Historical	N
Spreading false-foxglove	<i>Aureolaria patula</i>	Calcareous ledges and bluffs ⁴	S	Y	N
Sullivantia	<i>Sullivantia sullivantii</i>	Moist shaded cliffs ³	E	N	N
Tall larkspur	<i>Delphinium exaltatum</i>	Open woodlands, rich woods, rocky slopes, glades, prairies ²	E	Y	N
Torrey's mountain mint	<i>Pycnanthemum torreyi</i>	Barrens ³	E	Y	N
Tuberclad rein-orchid	<i>Platanthera flava</i> var. <i>herbiola</i>	Swamps and floodplains ³	T	N	N

Source:

¹ TVA 2022² NatureServe 2022³ TDEC 2022⁴ Chester 2015

*Status:

S = State Special Concern Species

S-CE = State Special Concern Species – Commercially exploited

E = State Endangered Species

T = State Threatened Species

**Habitat Codes:

Y = Yes, species has been documented in existing habitats in proposed project areas, and suitable habitat is present

N = No, no records of species within proposed project areas, and no suitable habitat is present

Literature Cited

- Brady, J., T.H. Kunz, M.D. Tuttle and D. Wilson. 1982. Gray bat recovery plan. U.S. Fish and Wildlife Service, Denver, Colorado. 143 pp.
- Burkhead, N.M., and R.E. Jenkins. 1991. Fishes. Pages 321-409 in K. Terwilliger (coordinator). Virginia's Endangered Species: Proceedings of a Symposium. McDonald and Woodward Publishing Company, Blacksburg, Virginia.
- Butchkoski, C.M., and J.D. Hassinger. 2002. Ecology of a maternity colony roosting in a building. In Kurta, A. and J. Kennedy, eds. The Indiana Bat: Biology and Management of an Endangered Species. Bat Conservation International, Austin, Texas.
- Chester, E.W. 2015. Guide to the Vascular Plants of Tennessee. Knoxville, TN: The University of Tennessee Press, p. 260.
- Davis, A.K., and E. Howard. 2005. Spring recolonization rate of monarch butterflies in eastern North America: New estimates from citizen-science data. *Journal of the Lepidopterists' Society*. 59(1): 1-5.
- Gibbons, W. and M. Dorcas. 2005. Snakes of the Southeast. University of Georgia Press, Athens, Georgia, 253 pp.
- Gunier, W.J., and W.H. Elder. 1971. Experimental homing of gray bats to a maternity colony in a Missouri barn. *American Midland Naturalist* 86(2): 502-506.
- Harvey, M. J. 1992. Bats of the Eastern United States. Arkansas Game and Fish Commission, Little Rock, Arkansas. 46 pp.
- Harvey, M. J., Altenback, J. S., and Best, T. L. 2011. Bats of the eastern United States. John Hopkins University Press. Baltimore, MD. 202 pp.
- Kays, R.W. and D.E. Wilson. 2002. Mammals of North America. Princeton University Press, Princeton, New Jersey, and Woodstock, Oxfordshire, United Kingdom, 240 pp.
- Kurta, A, S. W. Murray, and D. H. Miller. 2002. Roost selection and movements across the summer landscape. In Kurta, A. and J. Kennedy, eds. The Indiana Bat: Biology and Management of an Endangered Species. Bat Conservation International, Austin, Texas.
- Lee, D. S., Gilbert, C.R., Hocutt, C.H., Jenkins, R.E., McAllister, D.E., and Stauffer, J.R. 1980. Atlas of North American freshwater fishes. North Carolina State Museum of Natural History, Raleigh, North Carolina. i-x + 854 pp.
- NatureServe. 2022. "NatureServe Explorer: An Online Encyclopedia of Life [Web Application]." Arlington, VA: NatureServe. Retrieved from <http://explorer.natureserve.org/> (accessed September 7, 2022).
- National Geographic. 2002. Field Guide to the Birds of North America (Fourth Edition). National Geographic Society, Washington D.C. 480 pp.

- Page, L.M., and B.M. Burr. 2011. Peterson field guide to freshwater fishes of North America north of Mexico. Second edition. Houghton Mifflin Harcourt, Boston. xix + 663 pp.
- Petranka, J.W. 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington D.C. 587pp.
- Powell, R., R. Conant, and J. T. Collins. 2016. Field Guide to Reptiles and Amphibians of Eastern and Central North America (Fourth Edition). Peterson Field Guide, Houghton Mifflin Harcourt, Boston, Massachusetts. 494 pp.
- Pruitt, L., and L. TeWinkel. 2007. Indiana Bat (*Myotis sodalis*) Draft Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp.
- Starnes, W. C., and Jenkins, R.E. 1988. A new cyprinid fish of the genus PHOXINUS (Pisces: Cypriniformes) from the Tennessee River drainage with comments on relationships and biogeography. Proceedings of the Biological Society of Washington 101:517-29.
- Stokes, D.W. 1996. Stokes Field Guide to Birds (First Edition). Little, Brown. Boston, MA, 471 pp.
- Tennessee Department of Environment and Conservation (TDEC). 2016. A Guide to the Rare Animals of Tennessee. Tennessee Natural Heritage Program. Nashville, Tennessee. September 2016. Retrieved from <https://www.nrc.gov/docs/ML1802/ML18026A609.pdf> (accessed August 4, 2022).
- _____. 2022. "Rare Species by County." Tennessee Department of Environment and Conservation, Natural Heritage Program. <https://dataviewers.tdec.tn.gov/dataviewers/f?p=9014:3:3031824848602>: (accessed September 8, 2022).
- Tennessee Valley Authority (TVA). 2016. Final Ash Impoundment Closure Programmatic EIS Part II – Site Specific NEPA Review: Bull Run Fossil Plant, June 2016.
- _____. 2017. Biological Monitoring of the Clinch River Near Bull Run Fossil Plant Discharge. Autumn 2016.
- _____. 2019. Potential Bull Run Fossil Plant Retirement Final Environmental Assessment, Anderson County, Tennessee. Retrieved from <https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews/Potential-Retirement-of-Bull-Run-Fossil-Plant>.
- _____. 2022a. Melton Hill Reservoir. Retrieved from <https://www.tva.com/environment/environmental-stewardship/water-quality/reservoir-health-ratings/melton-hill-reservoir>. (accessed July 1, 2022).
- _____. 2022b. Natural Heritage Database for BRF. Provided 18 July 2022.
- Thames, D. B. 2020. Summer foraging range and diurnal roost selection of tri-colored bats, *Perimyotis subflavus*. Master's Thesis. University of Tennessee.

- Tuttle, M. D. 1976a. Population ecology of the gray bat (*Myotis grisescens*): philopatry, timing, and patterns of movement, weight loss during migration, and seasonal adaptive strategies. Occasional Papers of the Museum of Natural History, University of Kansas, 54:1-38.
- _____. 1976b. Population ecology of the gray bat (*Myotis grisescens*): factors influencing growth and survival of newly volant young. Ecology 57: 587-595.
- U.S. Fish and Wildlife Service (USFWS). 2007. National Bald Eagle Management Guidelines. Retrieved from https://www.aphis.usda.gov/plant_health/plant_pest_info/emt/downloads/EaglePrctnGuidance.pdf (accessed June 27, 2022).
- _____. 2013. Bald and Golden Eagle Protection Act. Retrieved from <https://www.fws.gov/law/bald-and-golden-eagle-protection-act> (accessed June 27, 2022).
- _____. 2014. Northern Long-eared Bat Interim Conference and Planning. Retrieved from <https://www.fws.gov/sites/default/files/documents/Northern%20Long%20Eared%20Bat%20Interim%20Conference%20and%20Planning%20Guidance.pdf> (accessed June 27, 2022).
- _____. 2022. IPaC Resource List for Anderson County, Tennessee. Retrieved from <https://ecos.fws.gov/ipac/> (accessed May 2022).
- Whitaker, J.O. 1996. Field guide to North American Mammals. National Audubon Society. Alfred A. Knopf, New York, 937pp.
- Wood. 2022. Waters of the U.S. Delineation Report. Tennessee Valley Authority. Bull Run Fossil Plant. Wood Environment and Infrastructure Solutions, Inc.

Appendix D – Coordination

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September 1, 2022

Mr. E. Patrick McIntyre, Jr.
Executive Director
and State Historic Preservation Officer
Tennessee Historical Commission
State Historic Preservation Office
2941 Lebanon Pike
Nashville, Tennessee 37214

Dear Mr. McIntyre:

DECOMMISSION, DEACTIVATION, DECONTAMINATION, AND DEMOLITION (D4) OF
TENNESSEE VALLEY AUTHORITY (TVA) BULL RUN FOSSIL PLANT (BRF), ANDERSON
COUNTY, TENNESSEE (36.02023, -84.15616) (TVA TRACKING NUMBER – CID 82364)

TVA proposes to undertake D4 of TVA's BRF in Anderson County, Tennessee. BRF is a coal-fired generating facility located on a 750-acre reservation on the east side of Melton Hill Reservoir at Clinch River Mile 48 (Figure 1).

Decommissioning activities would begin upon unit shutdown in preparation for deactivation and demolition. Decommissioning includes removal of components that may be used in other TVA sites, draining of oil/fluids from equipment, removal of ash from the boilers, removal of information technology assets, removal of plant records, etc. Following decommissioning and deactivation, decontamination would be completed, followed by demolition. The site would be returned to a brownfield for possible future development. The 500 kilovolt (kV) and 161kV switchyards adjacent to the plant would remain in service. Buildings and structures proposed for demolition include all that are located within the boundary shown in Figure 1, except for the following: Claxton Community Park, Claxton Community Center, CCR Impoundments, Bull Run Entry Monument/Visitor's Overlook, the Intake, and Switchyards (Figure 2).

TVA proposes decontamination and demolition of the powerhouse and buildings and structures within the proposed demolition boundary to three feet below final grade. Demolition would be conducted via mechanical deconstruction and/or explosives. All buildings and structures with below grade features would be backfilled, using concrete and masonry from the demolished facilities in addition to fill from an existing, permitted, off-site borrow source. All buried utilities would be cut and capped within the project boundary and abandoned in place if they do not interfere with other ongoing projects that overlap the project footprint. All hollow pipe utilities would be decommissioned and sealed with a mechanical cap or plug. The site would be restored to grade to provide proper drainage. TVA is also considering a second alternative for demolition, in which TVA would retain the Turbine Bay of the Powerhouse and the Intake Structure; all other structures would be demolished.

TVA finds that the proposed project constitutes an undertaking (as defined at 36 CFR § 800.16 (y)) that has the potential to cause effects to historic properties. TVA recommends that the area of potential effects (APE) be considered as the area of proposed ground-disturbance, where physical effects could occur, as well as areas within BRF that could be affected by the demolition of above-ground resources (see Figure 1). As the project would not include any new construction, TVA does not consider the BRF D4 project to have potential for indirect effects on any above-ground historic structures that may be present in the viewshed.

Historic Architectural Resources

TVA constructed BRF between 1962 and 1967. The site architecturally expresses Modernism but is mostly utilitarian and industrial. During the late 1950s and early 1960s, TVA began to push the limits of design and engineering for its steam plants as the greater Knoxville area expressed crucial power needs as the city proper and others around continued to sprawl. BRF's steam generator, designed by General Electric, was the largest unit for supercritical pressure in the world in 1963 until a year later when that title was given to another steam plant in New York with a generator that was designed by the Consolidated Edison Company. BRF was TVA's first supercritical system yielding maximum energy efficiency at its time of construction.

Through previous consultation in 2018 with the Tennessee Department of Transportation (TDOT), BRF has been determined eligible for listing in the National Register of Historic Places (NRHP). However, a formal NRHP boundary has not been previously determined and no listing exists of contributing and non-contributing resources within the property. In 2019, without prior knowledge of TDOT's assessment, TVA contracted with Tennessee Valley Archaeological Research (TVAR) to complete a baseline NRHP inventory. At the time the survey was completed, TVA anticipated the possible future closure of BRF, but plans for the D4 project were not complete. Therefore, the assessment of BRF was completed pursuant to Section 110 of the National Historic Preservation Act. For the documentation and NRHP evaluation, TVA required an intensive-level architectural survey/documentation of the entire BRF property and NRHP evaluation of all resources located at BRF. The results of the survey are attached to this submittal in a report titled, *A Historic Architectural Resource Intensive Survey and National Register Assessment of the Bull Run Fossil Plant (BRF), Anderson County, Tennessee*.

The survey documented a total of 35 architectural resources within the BRF property boundary. Of those recorded, 19 are historic and 16 are non-historic. Two of the historic architectural resources—Claxton Community Center/Edgemoor Baptist Church (AN-IP-18) and Arnold-Hall Cemetery (AN-IP-19)—are not directly associated with the history of BRF, as they pre-date the construction of the plant. TVAR recommends that none of the historic architectural resources surveyed are individually eligible for listing in the NRHP.

TVAR also evaluated BRF to determine if all or a portion of the facility was eligible for NRHP listing as a historic district. TVAR recommends BRF is an NRHP-eligible historic district for its local significance under Criterion A in the areas of engineering and industry with a period of significance as 1962-1968. BRF was TVA's first supercritical system, which produced high yields of energy with maximum efficiency. The facility featured multiple new and innovative designs that contributed to the field of engineering within the energy industry, as the success of its new systems brought supercritical capabilities to an additional TVA coal-fired generating plant, Cumberland. Moreover, the power produced at BRF fed the regional economic hub of Knoxville, creating lasting economic impact to the area.

The proposed BRF historic district boundary contains 393 acres with a total of 29 resources (see Figure 2 and Figures 4.6-4.8 of the report). Of these, TVAR recommends 17 as contributing resources—including the Powerhouse, which anchors the historic district—and support buildings and structures that facilitate the various functions required for power production or share an aesthetic and historic relationship with BRF. The remaining 12 resources are recommended by TVAR as non-contributing to the proposed historic district, as the majority are not original to the complex and none are related to the history, aesthetic, or function of the facility. The proposed historic district retains sufficient levels of all seven aspects of integrity for listing in the NRHP, despite some alterations within the historic district.

TVA has read the attached report and agrees with TVAR's recommendations. Therefore, TVA finds that BRF is eligible for listing in the NRHP under Criterion A for its association with engineering and industry.

Archaeological Resources

TVA has previously completed archaeological surveys meeting TVA and Tennessee Division of Archaeology guidelines in all areas within the BRF reservation (including the current project footprint), excluding areas that are clearly disturbed by development (plant facilities, parking lots, coal ash storage areas, etc.). The most recent survey, in 2019, focused on areas not included in several prior surveys. This survey identified two archaeological sites, both of which our offices agreed are ineligible for inclusion in the NRHP. Our offices agreed in consultation that there are no NRHP-listed or -eligible archaeological sites in the BRF reservation (please see our letter of December 6, 2019 "*re: Inventory of Archaeological Sites Within the Bull Run Fossil Plant, Anderson County, Tennessee*", and your response dated December 12, 2019). Based on the prior surveys and consultation TVA finds that the proposed BRF D4 project would not affect any archaeological sites listed in or eligible for listing in the NRHP.

Mr. E. Patrick McIntyre, Jr.
Page 4
September 1, 2022

Assessment of Effects

Given that this proposed project would involve the demolition of the BRF historic district, TVA finds that this project would result in an adverse effect. Pursuant to 36 CFR Part 800.6(a) we are seeking your agreement with TVA's eligibility determinations and finding that the undertaking as currently planned will result in adverse effects on historic properties.

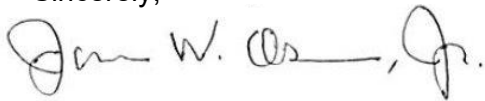
TVA is currently considering options for mitigation, including but not limited to state-level Historic American Engineering Record documentation of the 17 contributing resources of the BRF historic district and development of an interpretive kiosk at the BRF Visitor's Overlook/Entry Monument.

TVA is seeking your concurrence on the following:

- BRF is eligible for listing in the NRHP under Criterion A for its association with engineering and industry;
- the proposed undertaking would have an adverse effect to the BRF regardless of the demolition alternative chosen; and
- a combination of documentation and on-site interpretation would be appropriate mitigation measures for this adverse effect finding.

Please contact Hallie A. Hearnese by email, hahearnese@tva.gov with your comments.

Sincerely,



James W. Osborne, Jr.
Manager
Cultural Compliance

HAH:ERB

Enclosures

cc (Enclosures):

Ms. Jennifer Barnett
Tennessee Division of Archaeology
1216 Foster Avenue, Cole Bldg. #3
Nashville, Tennessee 37210

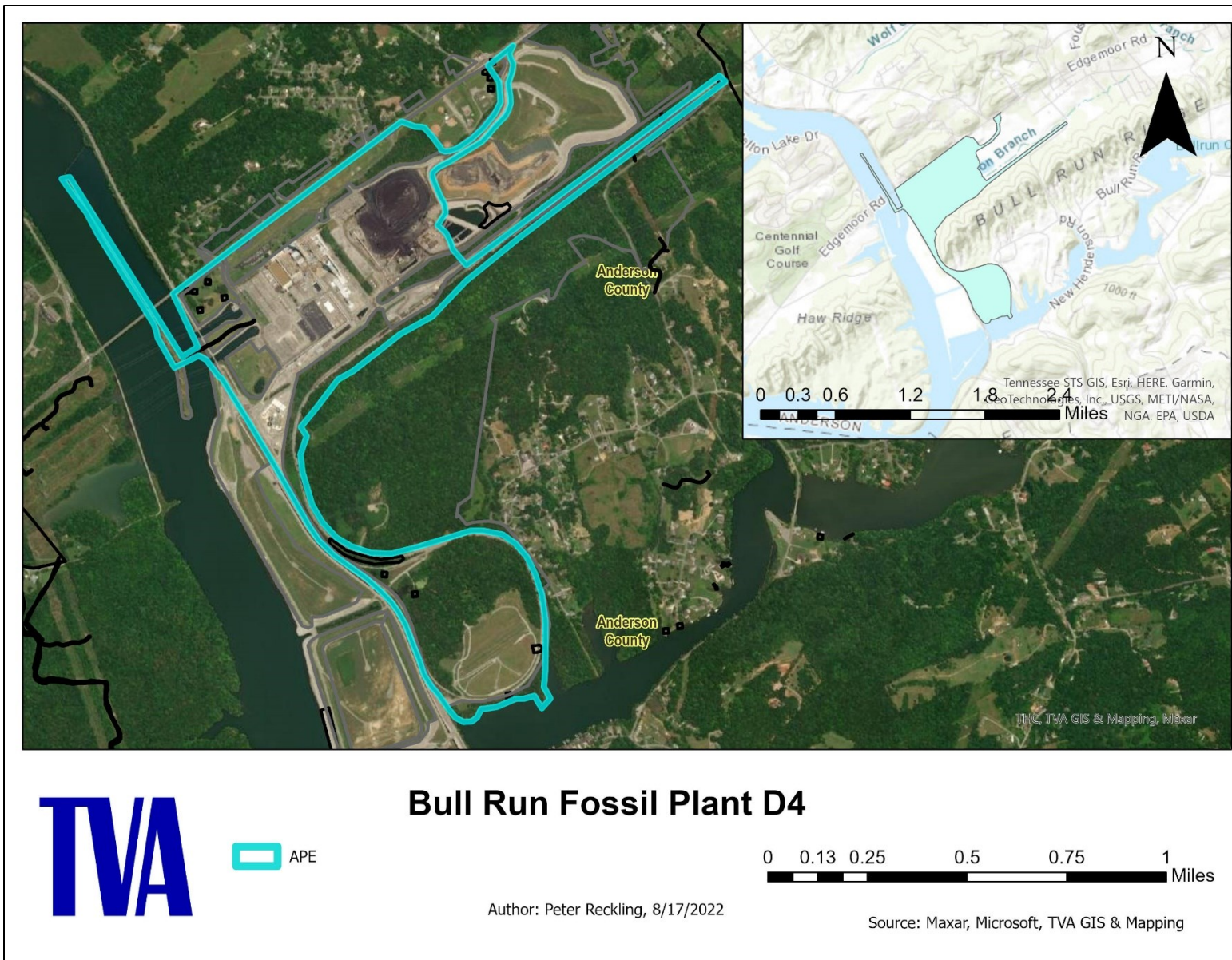


Figure 1. BRF D4 project area, with the APE depicted in teal.

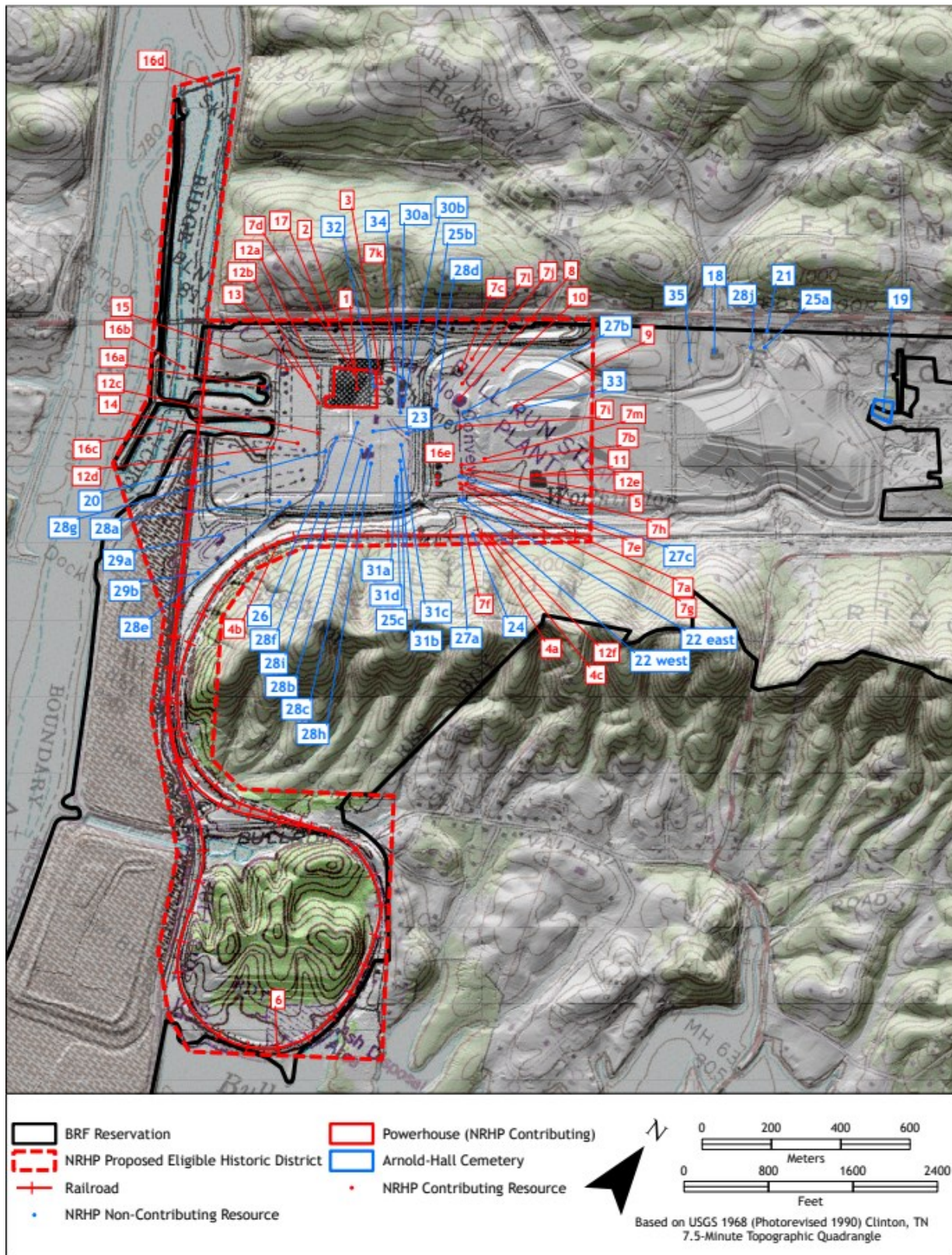


Figure 2. Overview of the proposed BRF historic district with identified resources (listed in Tables 4.1 and 4.2 and clearly depicted in Figures 4.3 and 4.6–4.8 of the report); red indicates contributing resources, blue indicates non-contributing resources.

**Appendix E – Memorandum of Agreement between TVA and the
Tennessee SHPO**

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**MEMORANDUM OF AGREEMENT
BETWEEN THE TENNESSEE VALLEY AUTHORITY
AND THE
TENNESSEE STATE HISTORIC PRESERVATION OFFICER
REGARDING THE RETIREMENT AND DEMOLITION OF BULL RUN FOSSIL PLANT
IN ANDERSON COUNTY, TENNESSEE**

WHEREAS, the Tennessee Valley Authority (TVA) plans to retire Bull Run Fossil Plant (BRF) by December 2023 because it does not fit current and likely future portfolio needs, being an inflexible coal unit with a high forced outage rate that no longer provides baseload power generation; and

WHEREAS, after retiring BRF, TVA would decommission, deactivate, and decontaminate BRF and demolish the powerhouse, other buildings, and structures within the proposed demolition boundary to three feet below final grade (“Undertaking”), although TVA may leave some structures in place if a need is determined for future projects at this location; and

WHEREAS, pursuant to 36 CFR § 800.4(a)(1), TVA has, in consultation with the Tennessee State Historic Preservation Officer (SHPO), determined that the area of potential effects (APE) for this Undertaking consists of all areas where BRF buildings or structures would be demolished or removed and where ground disturbance could occur as a result (Appendix A); and

WHEREAS, pursuant to 36 CFR § 800.4(a)(1), TVA has found, in consultation with SHPO, that the Undertaking will not affect any archaeological sites that are listed in or eligible for listing in the National Register of Historic Places (NRHP) based on prior archaeological surveys indicating a lack of such resources in the APE; and

WHEREAS, TVA completed a historic architectural investigation within the APE to identify above-ground historic properties and has determined, in consultation with SHPO, that BRF should be considered eligible for inclusion in the NRHP, consistent with an earlier finding made by the Tennessee Department of Transportation in consultation with the SHPO, and that BRF constitutes a historic district with a period of significance of 1962-1968; and

WHEREAS, TVA has also found, in consultation with SHPO, that the Undertaking will have an adverse effect on BRF; and

WHEREAS, leaving the retired facility in place is undesirable because it could result in degradation over time, leading to the potential for release of contaminated materials to the environment, and the presence of the powerhouse would restrict possible future reuse of the site; and

WHEREAS, pursuant to 36 CFR § 800.6(a)(1), TVA has notified the Advisory Council on Historic Preservation (“Advisory Council”) of the adverse effect finding by providing

documentation specified in 36 CFR § 800.11(e) and the Advisory Council declined to participate in the consultation, and TVA will provide the Advisory Council with a copy of the final Memorandum of Agreement (MOA) once the MOA has been executed; and

WHEREAS, pursuant to 36 CFR § 800.3(f)(2), TVA has consulted on a government-to-government basis with the Absentee Shawnee Tribe of Oklahoma, Alabama-Coushatta Tribe of Texas, Cherokee Nation, Coushatta Tribe of Louisiana, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe of Oklahoma, Kialiegee Tribal Town, The Muscogee (Creek) Nation, Shawnee Tribe, and the United Keetoowah Band of Cherokee Indians in Oklahoma regarding the Undertaking's potential to affect historic properties that are of religious and cultural significance to federally-recognized Indian tribes, and none of the consulted tribes identified such properties or objected to the Undertaking;

NOW, THEREFORE, TVA and SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations to satisfy TVA's responsibility under section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800.6(c) to mitigate adverse effects on historic properties that result from the Undertaking.

STIPULATIONS

TVA shall ensure that the following stipulations are implemented:

I. MITIGATION OF ADVERSE EFFECTS ON BRF

A. Historic American Engineering Record (HAER)-equivalent documentation

1. TVA shall prepare HAER-equivalent documentation of BRF including historic and current photographs, engineering drawings, and the results of background research. TVA will submit the documentation to SHPO for review.
2. The HAER-equivalent documentation shall adhere to the following guidelines, prepared by the Cultural Resources Division, National Park Service, Southeast Region, Atlanta, Georgia:
 - a. "Photographic Specifications: Historic American Buildings Survey, Historic American Engineering Record,"
 - b. "Historic American Buildings Survey, Guidelines for Historical Reports," and
 - c. "Preparing HABS/HAER/HALS Documentation For Submittal (Updated November 2021)."
3. TVA shall consider any comments and recommendation provided by SHPO concerning the adequacy of the documentation, and make any revisions TVA determines to be appropriate, prior to submitting a final copy to SHPO.

B. Interpretative Signage

1. TVA shall install one or more interpretative panels on TVA property at a location near or on the BRF Reservation (land associated with the generating facility at the time this MOA was executed) that is accessible to the public.

The panels shall present summary information about the history, architecture, and engineering design of BRF and its significance to local, state, and regional history.

2. The interpretive panel(s) will be professionally designed and installed and will present information developed through background research carried out by a person meeting the Secretary of the Interior's Professional Qualification Standards for history, architectural history, or historic architecture at 48 FR 44716 (as amended and published online on the U.S. National Park Service web site).
3. TVA shall consider any comments and recommendation provided by SHPO concerning the signage, and make any revisions TVA determines to be appropriate, prior to installing the signage.

II. SCHEDULE

- A. TVA shall submit a draft of the HAER-equivalent documentation to SHPO within 12 months of TVA's decision to approve the Undertaking ("TVA's decision")¹, which is anticipated in the fall of 2023. If TVA makes revisions to the draft documentation after receiving SHPO comments, TVA shall submit final HAER-equivalent documentation to SHPO within ninety (90) days of receiving the comments.
- B. TVA shall provide a draft design for the interpretive signage to SHPO for review within nine months of TVA's decision, and shall endeavor to incorporate any suggested revisions that SHPO submits to TVA within 30 days of SHPO's receipt of the draft design.
- C. TVA shall take all steps in its power to install the interpretive signage within 12 months following completion of the demolition of BRF.

III. AUTHORITY

The TVA Federal Preservation Officer, or the designee thereof, shall act for TVA in all matters concerning the administration of this agreement.

IV. DURATION

This MOA will be in effect for five (5) years from the date of its execution unless all Signatories mutually agree to extend the duration of the MOA.

V. REPORTING OF UNANTICIPATED EFFECTS

If unanticipated adverse effects on historic properties occur during the Undertaking, TVA shall implement the Plan for Reporting Unanticipated Effects included as Appendix B of this MOA

¹ "TVA decision" means a formal decision made by TVA's Board of Directors or designee.

VI. DISPUTE RESOLUTION

Should either Signatory to this MOA object at any time to any actions proposed or to the manner in which the terms of this MOA are implemented, the parties shall consult to resolve the objection. If TVA determines that such objection cannot be resolved, TVA will:

- A. Forward all documentation relevant to the dispute, including TVA's proposed resolution, to the Advisory Council. The Advisory Council shall provide TVA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, TVA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the Advisory Council and Signatories, and provide a copy of this written response to them. TVA will then proceed according to its final decision.
- B. If the Advisory Council does not provide its advice regarding the dispute within the thirty (30) day time period, TVA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, TVA shall prepare a written response that takes into account any timely comments regarding the dispute from the Signatories to the MOA, and provide the Signatories and the Advisory Council with a copy of such written response.
- C. TVA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

VII. AMENDMENTS

The Signatories to this agreement may agree to amend the terms of this agreement. Any such amendment shall become effective upon its signing by both Signatories, and the final amendment shall thereafter be appended to this agreement.

VIII. TERMINATION

If either Signatory to this MOA determines that the terms cannot be or are not being carried out, that party shall immediately consult with the other party to attempt to develop an amendment in accordance with Stipulation VII of this agreement. If the agreement is not amended within thirty (30) days of the initiation of such consultation (or another time period agreed to by all Signatories), any Signatory may terminate the MOA upon written notification to the other Signatories.

Once the MOA is terminated, and prior to work continuing on the Undertaking, TVA must either (a) execute a different MOA, or (b) request, take into account, and respond to the comments of the Advisory Council under 36 CFR § 800.7. TVA shall notify SHPO as to the course of action it will pursue.

If Stipulations I and II have not been implemented within 5 years from the date of execution, this MOA will be terminated unless all signing parties mutually agree to extend the duration of the MOA.

EXECUTION of this MOA by TVA and the SHPO, the submission of documentation and filing of this MOA with the Advisory Council, and implementation of its terms evidence that TVA has, in accordance with section 106 of the National Historic Preservation Act, taken into account the effects of this Undertaking on Historic Properties and afforded the Advisory Council an opportunity to comment. TVA will submit a copy of the executed MOA, along with the documentation that is specified in 36 CFR § 800.11(f), to the Advisory Council.

SIGNATORIES:

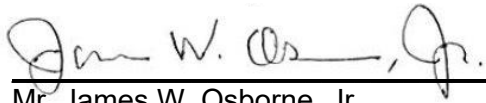
Tennessee Historical Commission



Mr. E. Patrick McIntyre, Jr.,
Executive Director and State Historic Preservation Officer

Date April 5, 2023

Tennessee Valley Authority

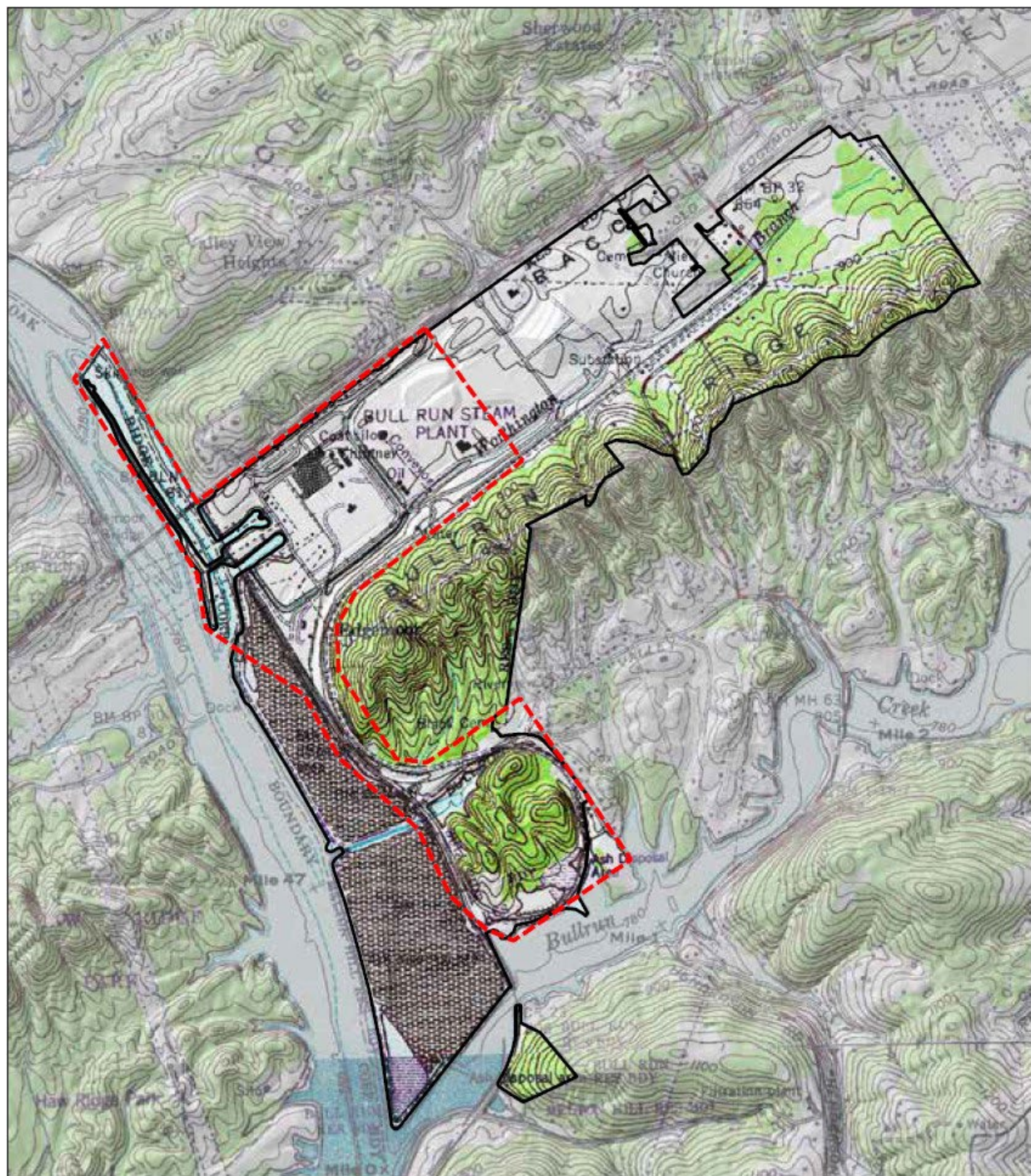
A handwritten signature in dark ink, appearing to read "James W. Osborne, Jr.", is written over a horizontal line.



Date 03/24/2023

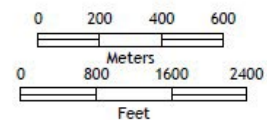
Mr. James W. Osborne, Jr.
Deputy Federal Preservation Officer

Appendix A

Bull Run Fossil Plant Location and NRHP Boundary



 BRF Reservation
 NRHP Proposed Eligible Historic District



Based on USGS 1968 (Photorevised 1990) Clinton, TN
7.5-Minute Topographic Quadrangle

Appendix B

Plan for Reporting Unanticipated Effects

If an unanticipated (unforeseen and unexpected) effect occurs to an archaeological resource during the Undertaking, TVA will follow this Plan.

TVA will ensure that on-site supervisory personnel are aware of their responsibility to report any unanticipated effect, and to do so in a timely manner.

In the event of an unanticipated effect, the on-site supervisor, Decommissioning Project Manager, or the Environmental Scientist will contact TVA Cultural Compliance immediately. Contact information is provided below.

TVA Cultural Compliance will evaluate whether the unanticipated effect constitutes an adverse effect to a historic property. Cultural Compliance staff will utilize whatever methods and means necessary to make this evaluation, and will make the evaluation as expeditiously as possible.

If Cultural Compliance determines that the unanticipated effect constitutes an adverse effect to a historic property (pursuant to 36 CFR § 800.5(a)(1)), then TVA will follow the procedures under 36 CFR § 800.13(b)(3) (for resolution of adverse effects that occur after the agency official has completed the section 106 process without establishing a process to plan for subsequent discoveries):

1. TVA shall notify the SHPO and the Advisory Council within 48 hours of discovering the unanticipated effect. The notification will summarize TVA's determination on the eligibility of the affected resource for inclusion for the National Register of Historic Places (NRHP) and will include one or more proposed actions to resolve the adverse effect.
2. TVA will allow 48 hours for SHPO and the Advisory Council to respond.
3. TVA shall take into consideration the recommendations of SHPO and the Advisory Council regarding the eligibility of the affected resource and the proposed actions, and shall then carry out appropriate actions.

Contact information:

TVA Business Unit	Name, title	Phone number	Email
Cultural Compliance	Steve Cole, Archaeologist	(865) 824-8450	Sccole0@tva.gov
Cultural Compliance	Jim Osborne, Manager	(423) 432-1092	jwosborn@tva.gov
Decommissioning Program	Sheila Baker, Project Manager	(423) 802-2454	sdbaker@tva.gov
Environmental Operations	Steed Stagnolia, Environmental Scientist	(865) 575-4204	skstagnolia@tva.gov