ENVIRONMENTAL ASSESSMENT

For

AR Solar – Clark County – VNA, LLC

Today's Power
Your Energy Partner

Dated: January 2024

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TODAY'S POWER, INC.

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1.0 PROJECT PURPOSE AND NEED

1.1 MISSION STATEMENT

Per RD Instruction 1970-C Exhibit B Section 2.3.1: "USDA, Rural Development is a mission area that includes three federal agencies – Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service. The agencies have in excess of 50 programs that provide financial assistance and a variety of technical and educational assistance to eligible rural and tribal populations, eligible communities, individuals, cooperatives, and other entities with a goal of improving the quality of life, sustainability, infrastructure, economic opportunity, development, and security in rural America. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives."

Today's Power, Inc. (TPI) plans to seek financial assistance from the USDA Rural Development (RD), Rural Utilities Service (RUS) under its Electric Program for the AR Solar – Clark County – VNA, LLC Solar Facility (Project).

The purpose of this Project is to provide a clean and renewable energy source to the existing electrical grid in the area. TPI is partnering with Veolia North America (VNA) to construct this Project and improve the reliability and capacity of the power system in the area by providing clean, renewable energy.

1.2 PURPOSE AND NEED

Today's Power, Inc. (TPI) is a wholly-owned subsidiary of Arkansas Electric Cooperatives, Inc. a Little Rock-based utility service cooperative owned by 17 Arkansas electric distribution cooperatives. TPI partners with electric utilities across the Midwest to serve their members clean, renewable energy. TPI, in partnership with Veolia North America, LLC (VNA), proposes to install a new, 36.8-acre solar facility, known as the AR Solar – Clark County – VNA, LLC near the city of Gum Springs, Arkansas in Clark County at the intersection of Highway 26 and Highway 17, as shown on the enclosed map, which can be found in Appendix A.

This proposed 6.49 MWDC solar facility will be located on the 36.8-acre rural, agricultural tracts of land that have been recently cleared and are currently owned by Veolia North America. The current site location is an open field that would avoid any known floodplains, wetlands, or streams, and will require minimal grading. The disturbance of land will be limited to the approximately 36.8-acre privately owned land during construction.

The construction phase of the Project, which includes grading, will be planned, and designed to minimize the use of mechanized grading and fill materials procured off-site. Controls, such as silt fences and stabilization, will be used during and after construction as needed to minimize indirect adverse environmental effects.

After construction, the proposed Project would be in operation seven days per week during conditions of adequate sunlight. Anticipated activities to support and maintain operations would consist of visits to inspect, monitor, and report the system operations and site conditions, as well as to repair or replace any equipment as necessary. These visits would total less than one average daily trip over the life of the Project. The Project will be fenced to prevent unauthorized access to protect both the Project and public safety. Any necessary fencing, connections, and access drives for the Project will take place within the APE for the Project. An exhibit showing the proposed solar facility's location is provided in Appendix A.

2.0 ALTERNATIVES EVALUATED INCLUDING THE PROPOSED ACTION

2.1 PROPOSED ACTION

The Project proposes to construct a 36.8-acre, 6.49-megawatt solar electric array located on land previously cleared. The Project will interconnect to the VEC electric distribution system which will require no upgrades. The solar array is located near the city of Gum Springs, Arkansas in Clark County at the intersection of Highway 26 and Highway 17, as shown on the enclosed map, which can be found in Appendix A.

The Project has been sited on private property currently owned by VNA to avoid floodplains, wetlands, and streams, and to minimize the need for grading. The site is also located adjacent to existing power lines to provide ease of connection to the electric grid.

The Project's construction phase, including grading, will be planned to minimize the use of mechanized grading and off-site fill materials. Appropriate measures such as silt fences, will be implemented during and after construction as necessary to diminish any indirect adverse environmental effects.

2.2 OTHER ALTERNATIVES EVALUATED

TPI considered the potential sites in the area in terms of those that they own or could lease, those that would avoid floodplains, wetlands, and streams, and those that would require a minimal need for clearing and grading. The site was chosen as it minimizes all potential negative social and environmental impacts and is currently owned by VNA.

2.3 NO ACTION ALTERNATIVE

The purpose of this Project is to provide a clean and renewable energy source to the existing electrical grid in the area, the 'no action alternative' would not provide additional power to the area, nor provide the environmental benefits of clean, renewable energy. The proposed Project impacts are expected to have no effect on the environment.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 LAND USE

3.1.1 LAND OWNERSHIP AND USE

Current land use for the Project consists of undeveloped rural areas on privately owned land. No known development plans are known to exist for the area and VNA currently owns the property upon which the array is to be constructed.

3.1.2 IMPORTANT FARMLAND

AFFECTED ENVIRONMENT

The site is located on land previously cleared prior to the consideration of this project. The proposed Project will be located on rural tracts of land near the city of Gum Springs, Arkansas in Clark County at the corner of Highway 26 and Highway 17. According to the attached map using data from the Natural Resources Conservation Service (NRCS), the site is not located within farmland of local, statewide, or unique importance.

ENVIRONMENTAL CONSEQUENCES

Proposed Project location and description as well as applicable AD-1006 forms were forwarded to the U.S. Department of Agriculture – Natural Resources Conservation Service (NRCS) on November 6, 2023 regarding the impact on important farmland for the Project. The completed form resulted in a score of 0 and was not precluded from the conversion of important farmland for non-agricultural uses. As the score for the proposed site was less than 160, according to the completed AD-1006 form no alternative actions needed to be considered to reduce potential adverse impacts to the environment per NRCS. Copies of NRCS correspondence and completed forms can be found in Appendix B.

3.1.3 FORMALLY CLASSIFIED LANDS

AFFECTED ENVIRONMENT

The National Map provided by the USGS as well as the EPA-provided NEPAssist tool were referenced for any known Formally Classified Lands. The maps may be found in Appendix C. There are no known: National Parks and Monuments; National Forests and Grasslands; National Historic Landmarks; National Battlefield and Military Parks; National Historic Sites and Historical Parks; National Natural Landmarks; National Wildlife Refuges; National seashores, lake shores, and trails; Wilderness areas; Wild, scenic, and recreational rivers; State parks; State fish and wildlife management areas; Bureau of Land Management (BLM) administered lands; or Areas of State and Local Interest located in the Project Area.

ENVIRONMENTAL CONSEQUENCES

The site and APE are located on land that is owned by VNA. According to the National Map and NEPAssist tool, there are no known Formally Classified Lands as defined above located in the Project APE. Therefore, no impact on any Formally Classified Lands is anticipated as a result of the Project.

3.2 FLOODPLAINS

AFFECTED ENVIRONMENT

The site is located on land outside of existing floodplains. The avoidance of floodplains was one of the initial criteria for site selection.

A project area map adapted from the Federal Emergency Management Agency's (FEMA) website (msc.fema.gov) is attached in Appendix D.

Per FEMA NFIP FIRM 05019C0350E, effective date 2/2/2012, the proposed project is not within a FEMA-delineated floodplain.

ENVIRONMENTAL CONSEQUENCES

Based upon all available data for this Project, no floodplain is located in the area, and no environmental impact is anticipated to any floodplain as a result of this Project.

3.3 WETLANDS

AFFECTED ENVIRONMENT

The site is located on land outside of existing wetlands. The avoidance of wetlands was one of the initial criteria for site selection. The proposed Project is not in a known wetland per the USFWS National Wetlands Inventory. USFWS and NWI wetlands for the surrounding area are indicated on the attached maps, which can be found in Appendix E.

ENVIRONMENTAL CONSEQUENCES

As there are no wetlands in the APE for the Project, and the construction of the project will involve controls and best management practices to control any discharge from the site, there is no anticipated impact to any wetlands because of this Project.

3.4 WATER RESOURCES

AFFECTED ENVIRONMENT

According to the attached map, located in Appendix F, using data from the EPA's Sole Source Aquifer online data-viewer, the proposed Project is not located within the limits of a Sole Source Aquifer. The proposed Project is not within a known well-head or watershed protection area. The nearest body of water to the proposed Project is Deceiper Creek, located 0.65 miles to the northeast of the Project APE.

ENVIRONMENTAL CONSEQUENCES

All necessary permits will be in place prior to construction. Controls, such as silt fences, stabilization, and other Best Management Practices (BMPs) will be used as a requirement of the Land Disturbance Permit and Stormwater Pollution Prevention Plan during and after construction as needed to minimize any potential indirect adverse environmental effects to water quality. During construction activities, routine inspections will also take place to ensure that these controls are implemented correctly.

As the solar panels will discharge directly to a pervious surface and the Project will not result in any new effluent discharge, stormwater quality is not anticipated to be affected by the Project. Furthermore, the proposed Project is not within the limits of a known well-head or watershed protection area.

The project is not within the limits of a Sole Source Aquifer. As mentioned above, the Project will also not result in any new effluent discharge, BMPs will be used during construction, and stormwater quality is not anticipated to be affected by the Project.

No effects or impacts to water resources are anticipated as a result of the proposed Project.

3.5 COASTAL RESOURCES

AFFECTED ENVIRONMENT

There are no coastal areas or protected aquatic habitats in the region.

ENVIRONMENTAL CONSEQUENCES

As there are no coastal areas or protected aquatic habitats in the region, no impact to those areas is anticipated by the Project.

3.6 BIOLOGICAL RESOURCES

3.6.1 FISH, WILDLIFE, AND VEGETATION

AFFECTED ENVIRONMENT

The site is located on land previously cleared. The proposed Project will be located on rural, agricultural tracts of land in Arkansas near the city of Gum Springs in Clark County, at the intersection of Highway 26 and Highway 17. The construction phase of the Project, which includes grading, will be planned and designed to minimize the potential need of mechanized grading and fill materials procured off-site. At present, the proposed Project site contains minimal wildlife or vegetative life.

ENVIRONMENTAL CONSEQUENCES

There are no surface waters within the Project limits providing no suitable habitat for fish, and BMPs and controls will be used to prevent any offsite impacts to the environment. The previously cleared land that will be converted to a solar facility also currently provides little suitable habitat in general for native vegetation or wildlife on the Project site. No effects on fish, wildlife, or vegetation are anticipated as a result of this Project.

3.6.2 THREATENED AND ENDANGERED SPECIES

AFFECTED ENVIRONMENT

TPI accessed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) website on November 17th, 2023 and updated on January 3rd, 2024 and January 11th, 2024. According to the website, there are fifteen endangered species that may be present in the APE of the proposed Project: the Indiana Bat, the Northern Long-eared Bat, the Tricolored Bat, the Eastern Black Rail, Piping Plover, the Red-cockaded Woodpecker, the Rufa Red Knot, the Alligator Snapping Turtle, the Ouachita Fanshell, the Ouachita Rock Pocketbook, the Pink Mucket, the Rabbitsfoot, the Spectaclecase, the Winged Mapleleaf, and the Monarch Butterfly. The official IPaC species list is provided in Appendix G.

ENVIRONMENTAL CONSEQUENCES

The Indiana Bat can typically be found in semi-open to closed forested habitats with open understory, forest edges, riparian areas, and taigas. The proposed project is being planned in an area that is not currently forested. With the site having been cleared of all trees prior to consideration of this project, therefore there is no suitable habitat for the Indiana Bat to occupy.

The project will not take place near or alter any mine entrances, there are no trees in the extent of the project. As such, we conclude that the project takes place in an area with no suitable habitat for the Northern Long-Eared Bat.

The Tricolored Bat's preferred habitat consists of landscapes that are partly open, with large trees and plentiful woodland edges. They can also be found in grasslands, old fields, suburban areas, orchards, urban areas, and woodlands. With the tract being completely cleared, there is no suitable habitat for the Tricolored Bat within the extents of the project. The tract would not have been suitable for the Tricolored Bat prior to the clearing of trees that occurred before the consideration of this project.

The Eastern Black Rail's preferred habitat consists of salt and brackish marshes with dense cover but also be found in upland areas of these marshes. The extent of the project for this project is not within any wetland areas and no suitable habitat for the Eastern Black Rail can be found.

The Piping Plover's preferred habitat consists of spits, small islands, tidal flats, shoals, and sandbars with inlets. Wintering piping plovers use a variety of habitats and move among these patches in response to local weather and tidal conditions. The extent of the project for this project is not near nor does it contain any suitable habitat for the Piping Plover.

The Red-cockaded Woodpecker's preferred habitat is most commonly longleaf pines or other species of southern pines that have been standing for 80 years or longer. There are no trees in the extent of the project area therefore there is no suitable habitat for the Red-cockaded Woodpecker.

The Rufa Red Knot's preferred wintering and migration habitats consist of muddy or sandy coastal areas, specifically, bays and estuaries, tidal flats, and unimproved tidal inlets. The extent of the project for this project is not near nor does it contain any suitable habitat for the Red Knot.

The Alligator Snapping Turtle's preferred habitat consists of rivers and streams that feed into the Gulf of Mexico. There is no suitable habitat within the project's extent for the Alligator Snapping Turtle.

The Ouachita Fanshell is commonly found in the Lower Red-Ouachita basin in large creeks and rivers with good water quality, moderate to swift currents, and gravel-sand substrates. There are no rivers or creeks within the project's extent for the Ouachita Fanshell.

The Ouachita Rock Pocketbook is commonly found in the Kiamichi and Little Rivers in the southeast portion of Arkansas. No rivers are running through the project's extent for the Ouachita Rock Pocketbook.

The Pink Mucket prefers to live in large streams with riverbeds composed of cobble, gravel, and sand. They can typically be found in rivers ranging from one to five feet deep. There is no suitable habitat for the Pink Mucket in the project's extent.

The Rabbitsfoot can be found in medium to large freshwater rivers. The substrates of these rivers should consist of sand and gravel. There is no suitable habitat for the Rabbitsfoot in the project's extent.

The Spectaclecase prefers to live in large rivers under rocks or tree roots sheltered from the main force of the river current. There is no suitable habitat for the Spectaclecase in the project's extent.

The Winged Mapleleaf is often found in clear, high-quality water which has gravel, sand, or rubble riverbeds. There is no suitable habitat for the Winged Mapleleaf in the project's extent.

The Monarch Butterfly's preferred habitat consists of open fields and meadows with milkweed and flowering plants. The proposed project is being planned in a rural, agricultural area with no milkweed, flowering plants, or tall grasses present in the project's extent.

Based on this, Toth & Associates determined that financial assistance for this project will have no effect upon any listed or proposed species nor result in the adverse modification of any designated or proposed suitable habitat. No environmental impact is anticipated to any threatened or endangered species as a result of this Project.

3.6.3 MIGRATORY BIRD TREATY ACT

AFFECTED ENVIRONMENT

TPI accessed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) website on November 17th, 2023 and updated on January 3rd, 2024 and January 11th, 2024. According to the website, there is one bird of concern with a potential range that overlaps the Project location, the American Kestrel. This bird will live anywhere from forest clearings to farmland and desert. As long as the American Kestrel can find prey it will live in any location. The official IPaC species list is provided in Appendix G.

ENVIRONMENTAL CONSEQUENCES

The proposed Project will consist of the construction of ground-mounted solar arrays, which will pose no risk to migratory birds in flight and will take place upon formerly wooded land, which provides little suitable wildlife habitat for the listed migrating bird species and no reason to cause an impact upon its existing flight patterns. Solar panels at the site will be photovoltaic, which shall absorb sunlight, and which are the only solar panel type approved for use by the Audubon Society due to their relatively low impact upon birds (https://www.audubon.org/news/solar-power-and-birds). No impact or take of any listed species is anticipated by the Project.

3.6.4 BALD AND GOLDEN EAGLE PROTECTION ACT

AFFECTED ENVIRONMENT

TPI accessed the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) website on November 17th, 2023 and updated on January 3rd, 2024 and January 11th, 2024. According to the website, the Bald Eagle is not a bird of concern in the Project area. The official IPaC species list is provided in Appendix G.

ENVIRONMENTAL CONSEQUENCES

The proposed Project will consist of the construction of ground-mounted solar arrays, which will pose no risk to migratory birds in flight and will take place upon land which provides little suitable wildlife habitat for the Bald Eagle and would not cause an impact upon their existing flight patterns. Solar panels at the site will be photovoltaic, which shall absorb sunlight, and which are the only solar panel type approved for use by the Audubon Society due to their relatively low impact upon birds (https://www.audubon.org/news/solar-power-and-birds). Furthermore, the Bald Eagle is not a bird of concern in the Project Area. No disturbance, impact or take of the Bald Eagle is anticipated by the Project.

3.6.5 INVASIVE SPECIES

AFFECTED ENVIRONMENT

Many invasive species have potential to be found throughout Arkansas (https://www.invasivespeciesinfo.gov/us/arkansas). As such, some invasive species may be present in the APE. However, in general, the proposed Project site has no known invasive species present, only native growth from former trees.

ENVIRONMENTAL CONSEQUENCES

Due to the minimized need for earthwork and thus fill material necessary from offsite, as well as the absence of surface water near the Project location, and the maintenance of any such vegetation at the site during operation, the Project will not promote the introduction or growth of invasive species and is anticipated to have no effect upon native species in the APE.

3.7 CULTURAL RESOURCES AND HISTORIC PROPERTIES

AFFECTED ENVIRONMENT

The site is located on land previously cleared prior to the consideration of this project. The proposed Project will be located on rural tracts of land near the city of Gum Springs, Arkansas in Clark County at the corner of Highway 26 and Highway 17.

ENVIRONMENTAL CONSEQUENCES

The Arkansas Historic Preservation Program (AHPP) was contacted for their review and comment on the proposed Project on December 15th, 2023. In accordance with the online Tribal Directory Assessment Tool (TDAT), the following Indian tribes were provided a finding of "no historic properties affected" on December 15th, 2023 regarding the proposed Project: Apache Tribe of Oklahoma, Caddo Nation of Oklahoma, Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Osage Nation, Quapaw Nation, and Santee Sioux Nation.

In order to determine the potential impact of the proposed projects on the cultural resources, TPI commissioned a cultural resource survey of the APE for the AR Solar – Clark County – VNA, LLC. solar facility. Regarding the Project, the survey stated that "the proposed undertaking meets the criteria for a finding of no historic properties affected as per 36 CFR 800.4(d)(1)". The cultural resource survey was provided to all listed tribes as well as the AHPP.

The AHPP provided their concurrence on January 4th, 2024 with the finding of "no historic properties affected pursuant to 36 CFR & 800.4(d)(1) for the proposed undertaking". The Quapaw Nation also provided their concurrence on January 3rd, 2024 requesting that if "artifacts or human remains are discovered during project construction, we ask that work cease immediately and that you contact the Quapaw Tribe Historic Preservation Office."

All tribal and SHPO correspondence can be found in Appendix H, along with a communication log of attempts to reach the tribes. As of today's date, no further response was received by the Apache Tribe of Oklahoma, Caddo Nation of Oklahoma, Coushatta Tribe of Louisiana, Osage Nation, Choctaw Nation of Oklahoma, and Santee Sioux Nation.

Given the above discussion, we conclude the proposed undertaking will have no effect on historic properties or cultural resources.

3.8 AESTHETICS

AFFECTED ENVIRONMENT

The site is located on fallow land previously disturbed for logging activities and currently owned by VNA. The proposed solar array will be located on rural tracts of land outside of any aesthetically sensitive location such as a scenic area or park.

ENVIRONMENTAL CONSEQUENCES

The Project will place photovoltaic panels over the approximately 40 acres shown on the APE, outside of any scenic or otherwise aesthetically sensitive area. Due to the limited height of these structures, the existing substation of a taller height that is located adjacent to the Project, and being surrounded by forested land, no significant adverse impact upon the aesthetics of the area is anticipated by the Project.

3.9 AIR QUALITY

AFFECTED ENVIRONMENT

The attached report, located in Appendix I, using the EPA provided NEPAssist tool shows that the proposed Project is not within EPA-designated non-attainment or maintenance areas for air quality criteria pollutants.

ENVIRONMENTAL CONSEQUENCES

As shown in the above referenced report, the Project is outside of any EPA-designated non-attainment or maintenance areas for air quality criteria pollutants.

Short term increases to dust due to construction for the Project will be negligible due to the usage of BMPs, such as silt fences and stabilization, which will be used during and after construction as needed to minimize any indirect adverse environmental effects.

Short-term increases in emissions from construction vehicles may also be expected during the construction phase of the project, but this incidental increase is not anticipated to have any noticeable effect due to the short duration of construction. Additionally, long-term air quality in the area should benefit given the lower emissions anticipated due to the implementation of a significant renewable energy source for the existing power grid.

3.10 SOCIO-ECONOMIC & ENVIRONMENTAL JUSTICE

Applicants are required to determine if their proposal has or may have a disproportionately high and adverse human health or environmental effects on minority and low-income populations under E.O. 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* and USDA Departmental Regulation DR 5600-2, *Environmental Justice*.

AFFECTED ENVIRONMENT

The U. S. Census Bureau data for Clark County, AR was reviewed and is provided in Appendix J. It shows a population of 72.5% white, with a 20.3% poverty rate, and reported growth of -0.9%.

Per the attached report, also located in Appendix J, using the EPA-provided EJScreen tool, the proposed project generates a report with values of N/A due to its small size and sparse population.

The proposed Project is within an undeveloped, previously cleared area already owned by VEC. The development of the Project is not anticipated to impact the lives of the population. There are no known environmental issues within the APE that would be expected to pose an environmental justice risk. The surrounding area, local services, and public facilities will not be affected by the Project beyond being provided with the availability of a renewable, solar source of electric energy.

ENVIRONMENTAL CONSEQUENCES

The proposed Project is being designed to meet the future power needs for the growth and stability of all residents in the area by providing them with clean, renewable energy.

Based on the small size and rural location of the project, it is believed that no new jobs would be created and that unemployment rates for the area would not be impacted by the project. The proposed project is located in a rural area and is not located in a minority or low-income area. As a result, the proposed project would not have any disproportionate effects on minority or low-income populations located in the area. The proposed Project is not anticipated to have any change on the population or economy of the area. It is further anticipated that the proposed project would not have any impact on, or be influenced by, the civil rights, ethnic origin, sex, or social status of the people located near the project area. The Project is not considered an environmental risk or controversial and will not displace any current residents, nor will it adversely impact local public facilities or public services.

The proposed project is within a rural area and within land and easements already possessed. The proposed project is being designed to meet the future power needs for the growth and stability of all residents in the area.

Financial assistance for this Project is not anticipated to have any major Environmental Justice or civil rights impact.

3.11 MISCELLANEOUS ISSUES

3.11.1 NOISE

AFFECTED ENVIRONMENT

The site is located on land previously cleared and is currently owned by VEC. The proposed solar array will be located near the city of Gum Springs, Arkansas in Clark County at the intersection of Highway 26 and Highway 17. Current noise levels for the site are typical of a rural, forested area located beside a roadway. Based on aerial images of the site, the nearest residences are located approximately 0.25 miles away.

ENVIRONMENTAL CONSEQUENCES

Any noise produced by the construction of the facility will be localized and temporary for the extent of the construction activity. Manual equipment installation will be utilized whenever possible to reduce the need for mechanized equipment that would increase noise during the construction phase and no specialized equipment that would generate loud noise is proposed to be used at the site. The level of noise that is anticipated to be produced by the proposed solar facility will not be greater than the current ambient noise levels in the area. The proposed Project is anticipated to have no effect on the noise pollution in the area.

3.11.2 TRANSPORTATION

3.11.2.1 FEDERAL AVIATION ADMINISTRATION

AFFECTED ENVIRONMENT

The attached map, located in Appendix K, using FAA-provide data, shows that the proposed Project is approximately 3.32 linear miles distant from the nearest airport.

ENVIRONMENTAL CONSEQUENCES

As site developments are not expected to be 200 feet above the ground surface, no official notice must be filed with the Federal Aviation Administration and no impact to air traffic is expected as a result of this Project.

3.11.2.2 TRAFFIC

AFFECTED ENVIRONMENT

The site is located in Arkansas near the city of Gum Springs, Arkansas in Clark County at the intersection of Highway 26 and Highway 17, along asphalt highways.

ENVIRONMENTAL CONSEQUENCES

The construction activities for the Project do not propose to impact traffic patterns, nor have any impact upon the existing roadway. In total, project construction is anticipated to last for 2 months and no obstruction to traffic is anticipated during construction. Periodic inspection of the site and maintenance activities for the site will be required once built but will be negligible in terms of long-term impact to current traffic patterns and amounting to less than one average daily trip. No impact upon traffic is anticipated as a result of this Project.

3.12 HUMAN HEALTH AND SAFETY

3.12.1 ELECTROMAGNETIC FIELDS AND INTERFERENCE

AFFECTED ENVIRONMENT

The proposed Project will be located on rural, agricultural tracts of land in Gum Springs, Arkansas in Clark County at the intersection of Highway 26 and Highway 17 on land currently owned by VEC. The proposed Project location site is located approximately 0.15 miles outside of the city of Gum Springs and approximately 0.25 miles away from the nearest occupied residence.

As the Project will involve the construction of a solar panel array that will generate electricity, Electromagnetic Fields (EMFs) may be generated. Studies (Tell, 2015) based on similar facilities suggest that any EMFs generated will be below permissible exposure thresholds. Publicly available studies used for reference are included in Appendix L.

ENVIRONMENTAL CONSEQUENCES

Current scientific literature suggests that electromagnetic fields that are generated from similar solar facilities operate below acceptable exposure levels, with the highest EMFs present at three feet of distance from the inverter units used. The solar facility is proposed to be located over 1000 feet away from any occupied residence and will be fenced off to prevent unauthorized access. As a result, no impact to human health and safety is anticipated as a result of exposure to EMFs due to this Project.

3.12.2 ENVIRONMENTAL RISK MANAGEMENT

AFFECTED ENVIRONMENT

The attached report, located in Appendix M, using the EPA-provided NEPAssist tool shows that the proposed Project is not within EPA-designated areas for existing hazardous waste facilities, toxic release inventories, or TSCA sites.

The proposed Project will be located on previously cleared tracts of land in Arkansas on land without any existing facilities that is currently owned by VEC. The site is not anticipated to have any hazardous material, lead, or petroleum products within the APE.

ENVIRONMENTAL CONSEQUENCES

As shown in the above-referenced report, the Project is outside of any existing RCRA facilities, toxic release inventories, or TSCA sites, and will not produce any hazardous material or waste or consist of a new RCRA hazardous materials handling facility. No effect on environmental risk management is anticipated.

3.13 CORRIDOR ANALYSIS

AFFECTED ENVIRONMENT

Connection to the existing electrical grid will be completed by VEC to the utility lines located adjacent to the Project and within the 40-acre area of the project. There is no current corridor or impact beyond that already listed for building and connecting to the existing electrical grid at this project location.

ENVIRONMENTAL CONSEQUENCES

The interconnection point will take place toward the existing lines along Highway 26 and within the project's area of potential effect, therefore the future interconnection is anticipated to have no impact outside of those listed for the existing Project.

4.0 CUMULATIVE EFFECTS

4.1 SUMMARY OF ENVIRONMENTAL EFFECTS

Environmental Resource	Determination of Effect
Land Use	No known development plans for the area, Veolia North America currently owns the property. No Effect Anticipated.
Farmland	Conversion of approximately 40 acres of previously forested land, USDA consultation concluded. No Effect Anticipated.
Formally Classified Land	No known Formally Classified Lands within project area.
Floodplains	No Floodplains within project area. No Effect Anticipated.
Wetlands	No Wetlands within project area. No Effect Anticipated.
Water Resources	No well-heads, watershed protection areas, or Sole Source Aquifers within the project area. Project will not alter existing topography, excavate to any appreciable depth, nor add any effluent discharge to the drainage area. BMPs will be utilized for construction. No Effect Anticipated.
Coastal Resources	No coastal areas or aquatic habitats in this region. No Effect Anticipated.

Biological Resources – Fish, Wildlife and Vegetation	Little to no suitable habitat for native vegetation currently within the project area. USFWS concurrence granted. No Effect Anticipated.
Biological Resources – Threatened and Endangered Species	No suitable habitat for listed threatened and endangered species is currently within the project area. No Effect Anticipated.
Biological Resources – Migratory Bird Treaty Act	Little suitable habitat for birds of concern within project area. No Effect Anticipated.
Biological Resources – Bald and Golden Eagle Protection Act	Little suitable habitat for Bald or Golden Eagle within project area. Neither is a bird of concern in the project area. No Effect Anticipated.
Biological Resources – Invasive Species	Minimized fill required from offsite and no surface water at project site. Project will not promote the introduction or growth of invasive species. No Effect Anticipated.
Cultural Resources and Historic Properties	The survey concluded “no historic properties affected”. AHPP and Quapaw Nation concurrence provided. Consultation concluded for all other tribes. No Effect Anticipated.
Aesthetics	Project is outside of any aesthetically sensitive area. Project will be of limited height. No Effect Anticipated.
Air Quality	Project is outside of any EPA-designated non-attainment or maintenance areas for air quality criteria pollutants. Short term increases to dust will be mitigated by BMPs and short term increases to emissions will be negligible during construction. No Adverse Effect Anticipated. Long-term Benefit Anticipated due to clean, renewable energy source.

Socio-Economic & Environmental Justice	Project is not an environmental risk nor controversial and will not displace any current residents, nor will it adversely impact local public facilities or public services. No Effect Anticipated.
Noise	Short-term noise during construction will be controlled by using manual installation methods where possible. Post-construction noise levels will be equivalent to current ambient noise levels in area. No Effect Anticipated.
Transportation	Project is 3.32 miles from nearest airport. No significant short-term obstruction to traffic planned for construction. No significant long-term increase to traffic during Project life. No Effect Anticipated.
Human Health and Safety	Highest EMFs would be present at approximately three feet of distance from the inverter units used. Project location is over 1000 feet from occupied residences and will be fenced off to prevent unauthorized access. No Effect Anticipated.

4.2 CUMULATIVE EFFECTS

Environmental Resource	Past	Proposed Action	Future Action	Cumulative Effect
Land Use	Previously Forested, Rural Area	Convert 40-Acres To A Solar Facility	No Effect Anticipated	No Significant Effect Anticipated
Farmland	Previously Forested, Rural Area	Convert 40-Acres To A Solar Facility	No Effect Anticipated	No Significant Effect Anticipated
Formally Classified Land	None Existing Near Project Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Floodplains	None Existing Near Project Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Wetlands	None Existing Near Project Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Water Resources	No Known Wells, Or Protection Areas Near Project Area. Receiving Stream ± 2500 Feet Distant. Project does not involve actions which would impact Sole Source Aquifer.	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Coastal Resources	None Existing Near Project Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Biological Resources – Fish, Wildlife And Vegetation	Little Suitable Habitat Within Project Area. No Indirect Effects to Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated

Biological Resources – Threatened And Endangered Species	No Suitable Habitat Within Project Area. No Indirect Effects To Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Biological Resources – Migratory Bird Treaty Act	No Suitable Habitat Within Project Area. No Indirect Effects To Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Biological Resources – Bald And Golden Eagle Protection Act	No Suitable Habitat Within Project Area. No Indirect Effects To Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Biological Resources – Invasive Species	None Known Within Project Area Or Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Cultural Resources And Historic Properties	None Known Within Project Area Or Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Aesthetics	Previously Forested, Rural Area	Will Convert 40-Acres Of Potential Farmland To Solar Facility	No Effect Anticipated	No Significant Effect Anticipated
Air Quality	Outside Of EPA-Designated Non-Attainment Or Maintenance Areas For Air Quality Criteria Pollutants	Long-Term Benefit Anticipated	No Effect Anticipated	Long-Term Benefit Anticipated
Socio-Economic & Environmental Justice	No Public Facilities Or Services, Nor Residential Or Commercial Properties In the Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Noise	Rural, Ambient Noise Level	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated

Transportation	Light, Rural Traffic. No Airport In the Surrounding Area	No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated
Human Health And Safety	Vacant Farmland	EMF Potential At Project Area. Project Will Prevent Unauthorized Access. No Effect Anticipated	No Effect Anticipated	No Significant Effect Anticipated

In general, no significant effects are anticipated either individually or cumulatively as a result of the Project both within the approximately 40-acre area of potential effect for the project and for the immediately surrounding area within the next 20 years. No future masterplans for the area are known, nor are in development and no known future developments in the area are anticipated to have a significant effect on the environmental resources of the area.

Land Use, Aesthetics, and Farmland will change from a rural, previously forested area to a solar facility as a result of the proposed construction. The solar facility will generate potential EMFs, but the amount that will be generated by such a facility is within safety standards, and the area will also be restricted from unauthorized access. Air Quality is expected to increase in quality over the lifespan of the Project, as the Project will provide cleaner energy than the current alternatives. No other effects are anticipated to provide a significant cumulative effect on the area.

5.0 SUMMARY OF MITIGATION

The initial criteria for site selection, the use of BMPs such as silt fences and stabilization are anticipated to effectively minimize the potential effects of the Project upon the environment. Conditional approval measures were requested by interested Agencies, such as the appropriate actions to be taken in case of incidentally encountering human remains or artifacts in the Project area. All mitigation issues are discussed above as well as in the appropriate appendices, and additional mitigation measures beyond those listed do not appear warranted at this time.

6.0 COORDINATION, CONSULTATION AND CORRESPONDENCE

The following agencies or agency websites were consulted as part of the preparation of this EA, all supporting documentation and agency correspondence is provided in the Appendices:

Apache Tribe of Oklahoma

Arkansas Archaeological Survey

Arkansas Historical Society: State Historic Preservation Office

Caddo Nation of Oklahoma

Choctaw Nation of Oklahoma

Coushatta Tribe of Louisiana

EPA

FEMA Floodplain Map

NEPAssist

Osage Nation

Quapaw Nation

Santee Sioux Nation of Nebraska

US Census Data

USDA – NRCS

US Fish and Wildlife Services

7.0 REFERENCES

All supporting documentation and agency correspondence is provided in the Appendices.

EPA EJScreen, last accessed November 6th, 2023. https://ejscreen.epa.gov/mapper/

EPA NEPAssist tool, last accessed November 7th, 2023. https://nepassisttool.epa.gov/nepassist/nepamap.aspx

FEMA Flood Plain Map, last accessed October 23rd, 2023. https://msc.fema.gov/portal/home

Flat Earth Archeology, LLC. "A Phase I Cultural Resources Survey for the AR Solar – Clark County – VNA, LLC Project Area in Clark County, Arkansas" 1 December, 2023.

Tell RA, Hooper HC, Sias GG, Mezei G, Hung P, Kavet R. Electromagnetic Fields Associated with Commercial Solar Photovoltaic Electric Power Generating Facilities. *J Occup Environ Hyg.* 2015;12(11):795-803. doi:10.1080/15459624.2015.1047021

Tribal Directory Assessment Tool (TDAT), last accessed January 11th, 2023. https://egis.hud.gov/tdat/

US Census Data, last accessed October 24, 2022. https://www.census.gov/quickfacts/pontotoccountyoklahoma

US Fish and Wildlife Services– Information for Planning and Consultation, last accessed January 3rd, 2024. https://ipac.ecosphere.fws.gov/

US Fish and Wildlife Services – National Wetlands Inventory, last accessed October 23rd, 2023. https://www.fws.gov/wetlands/data/mapper.html

USGS National Map, last accessed November 17th, 2023. https://apps.nationalmap.gov/viewer/

8.0 LIST OF PREPARERS

This EA was prepared by:

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Vice President, Toth & Associates

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Engineer, Toth & Associates

Kathrine Alvarez

Intern, Toth & Associates

Trenton Johnson

Intern, Toth & Associates

APPENDIX A

T8S R19W
County: Clark

Source: Copyright© 2013 National Geographic Society, i-cubed

Project Boundary

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph. 417-888-0645
Fax: 417-888-0657
www.tothassociates.com

DISCLAIMER: This map is for illustrative purposes, and should only be used as such.

Today's Power
Your Energy Partner

MAP BY: scasagrand

DATE: 10/23/2023

Veolia Solar Facility Environmental Impact Map

Map Title: Topographic

Map Number: SC - 002

Client:
TODAY'S POWER
NORTH LITTLE ROCK, ARKANSAS
PULASKI

N W E S

0 2,750 5,500 Feet

O:\Today's Power\GIS\ArcGIS Pro\Today's Power - Arkansas Sites\Today's Power - Arkansas Sites.aprx

APPENDIX B

Kathrine Alvarez

From: Grishanova, Greta - FPAC-NRCS, AR <Greta.Grishanova@usda.gov>
Sent: Thursday, November 9, 2023 1:47 PM
To: Kathrine Alvarez
Subject: RE: [External Email]Farmland Conversion Impact Rating Request - Today's Power Inc, Veolia Solar Facility
Attachments: Clark - Veolia Solar Project - AD-1006.pdf; Clark Veolia Solar map.pdf; Clark Veolia Solar Project Letter.pdf

EXTERNAL EMAIL

Hi Kathrine,

I've reviewed your request for information related to Prime Farmland and Farmland of Statewide Importance for the Veolia Solar Project located in Clark County, Arkansas. Some of the project area is classified as Prime Farmland and Prime Farmland if drained. However, this type of project will not result in a direct conversion, so this activity will not affect the use of Prime Farmland or Farmland of Statewide Importance.

Attached, please find completed form AD-1006, a Farmland Classification Map of the area for your reference, as well as a corresponding letter.

Should you have any questions or need additional information, please let me know!

Best Regards,

Greta Grishanova
Soil Scientist
USDA - Natural Resources Conservation Service
700 West Capitol Avenue, Suite 5317
Little Rock, Arkansas 72201
Office: 501.301.3140

NRCS
Helping People Help the Land

From: Kathrine Alvarez <kalvarez@tothassociates.com>
Sent: Monday, November 6, 2023 8:04 AM
To: Grishanova, Greta - FPAC-NRCS, AR <Greta.Grishanova@usda.gov>
Cc: Fox, Rebecca - FPAC-NRCS, AR <rebecca.fox@usda.gov>
Subject: [External Email]Farmland Conversion Impact Rating Request - Today's Power Inc, Veolia Solar Facility

Good Morning Greta!

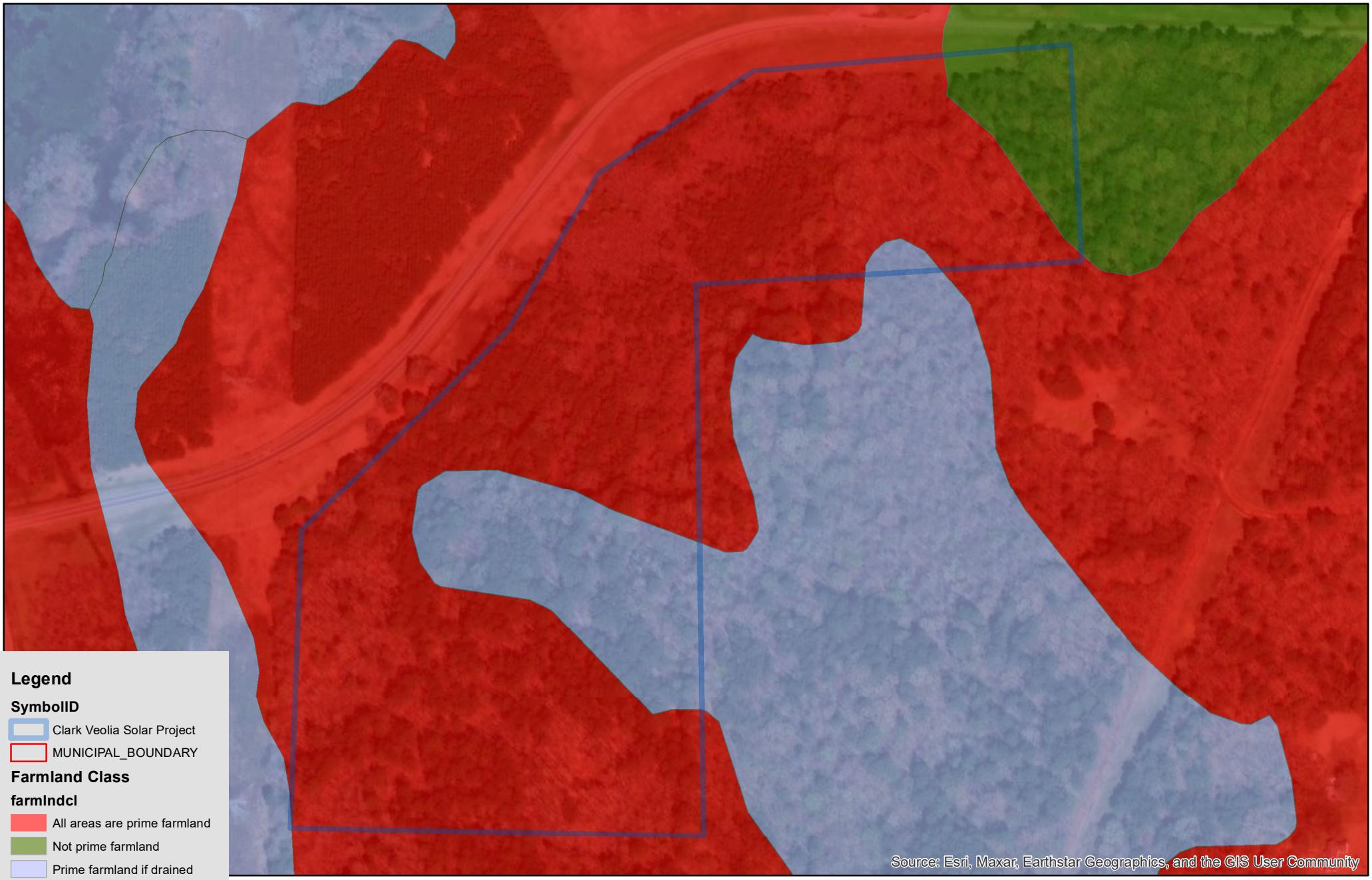
I hope that you are doing well! I have attached the shapefile, project location map, and the Farmland Conversion Impact Rating form for the proposed Veolia Solar Facility. Please let me know if you require additional information or if you need it in a different format.

Warm Regards,

Kathrine Alvarez
Intern

1550 East Republic Road
Springfield, MO 65804
Office: 417.888.0645
Mobile: 417.733.3815
Fax: 417.888.0657
tothassociates.com

Farmland Classification of Soils
Clark-Veolia Solar Project
Clark County, Arkansas



VIA EMAIL

November 9, 2023

Kathrine Alvarez
Intern
Toth Associates
1550 East Republic Road
Springfield, MO 65804

Dear Ms. Alvarez,

This letter is in response to your request for information related to Prime Farmland and Farmland of Statewide Importance for the Veolia Solar Project located in Clark County, Arkansas. Some of the project area is classified as Prime Farmland and Prime Farmland if drained. However, this type of project will not result in a direct conversion, so this activity will not affect the use of Prime Farmland or Farmland of Statewide Importance. Please find enclosed form AD-1006 and a Farmland Classification Map of the area for your reference.

Should you have any questions or need additional information, please call me at (501) 301-3140 or email at greta.grishanova@usda.gov.

Sincerely,

Greta Grishanova
Soil Scientist

Enclosure

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 11/06/2023
Name of Project Veolia Solar Facility	Federal Agency Involved USDA - Rural Utilities Service
Proposed Land Use Power Generation	County and State Clark County, Arkansas
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 11/06/2023 / Person Completing Form: Greta Grishanova

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐	NO ☑	Acres Irrigated	Average Farm Size

Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	0			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)				
2. Perimeter In Non-urban Use	(10)				
3. Percent Of Site Being Farmed	(20)				
4. Protection Provided By State and Local Government	(20)				
5. Distance From Urban Built-up Area	(15)				
6. Distance To Urban Support Services	(15)				
7. Size Of Present Farm Unit Compared To Average	(10)				
8. Creation Of Non-farmable Farmland	(10)				
9. Availability Of Farm Support Services	(5)				
10. On-Farm Investments	(20)				
11. Effects Of Conversion On Farm Support Services	(10)				
12. Compatibility With Existing Agricultural Use	(10)				
TOTAL SITE ASSESSMENT POINTS	160				
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100				
Total Site Assessment *(From Part VI above or local site assessment)*	160				
TOTAL POINTS ***(Total of above 2 lines)***	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☐

Reason For Selection:

Name of Federal agency representative completing this form:	Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map**,** or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Clark County, Arkansas

January 19, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Map Scale: 1:4,410 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clark County, Arkansas
Survey Area Data: Version 5, Sep 8, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 23, 2019—Jan 27, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (Soils Map for VNA, LLC)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Bowie fine sandy loam, 1 to 3 percent slopes	17.1	46.6%
12	Cahaba fine sandy loam, 3 to 6 percent slopes	3.1	8.6%
31	Kipling silt loam, 0 to 2 percent slopes	8.2	22.2%
32	Kipling silty clay loam, 2 to 5 percent slopes	0.4	1.1%
45	Oktibbeha fine sandy loam, 3 to 8 percent slopes, eroded	1.9	5.3%
50	Ozan fine sandy loam, occasionally flooded	0.0	0.0%
69	Savannah fine sandy loam, 1 to 3 percent slopes	0.5	1.5%
85	Trebloc silt loam, 0 to 2 percent slopes	5.4	14.7%
Totals for Area of Interest		**36.7**	**100.0%**

Map Unit Descriptions (Soils Map for VNA, LLC)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Clark County, Arkansas

9—Bowie fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2wdl2
Elevation: 150 to 550 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 195 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Bowie and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bowie

Setting

Landform: Interfluves
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy marine deposits

Typical profile

Ap - 0 to 6 inches: fine sandy loam
E - 6 to 17 inches: fine sandy loam
Bt - 17 to 42 inches: sandy clay loam
Btv1 - 42 to 52 inches: sandy clay loam
Btv2 - 52 to 80 inches: sandy clay loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 42 to 46 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (1.0 to 3.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

Minor Components

Sacul

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F133BY003TX - Loamy Over Clayey Upland
Hydric soil rating: No

Smithdale

Percent of map unit: 3 percent
Landform: Interfluves
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

Savannah

Percent of map unit: 2 percent
Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

12—Cahaba fine sandy loam, 3 to 6 percent slopes

Map Unit Setting

National map unit symbol: lym3
Elevation: 70 to 660 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F
Frost-free period: 190 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Cahaba and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cahaba

Setting

Down-slope shape: Convex

Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 5 inches: fine sandy loam
E - 5 to 9 inches: fine sandy loam
Bt - 9 to 41 inches: sandy clay loam
C - 41 to 72 inches: sandy loam

Properties and qualities

Slope: 3 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F133BY013TX - Terrace
Hydric soil rating: No

31—Kipling silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: lyms
Elevation: 160 to 410 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F
Frost-free period: 190 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Kipling and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kipling

Setting

Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Cretaceous clayey marine deposits derived from chalk

Typical profile

A - 0 to 5 inches: silt loam

Bt - 5 to 24 inches: silty clay loam
Btss - 24 to 45 inches: clay
Css - 45 to 72 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F135BY001AR - Poorly Drained Clayey Upland
Hydric soil rating: No

Minor Components

Mayhew

Percent of map unit: 5 percent
Landform: Stream terraces
Ecological site: F135BY001AR - Poorly Drained Clayey Upland
Hydric soil rating: Yes

Aqualfs

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: Yes

32—Kipling silty clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: lymt
Elevation: 160 to 410 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F
Frost-free period: 190 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Kipling and similar soils: 95 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kipling

Setting

Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey marine deposits derived from chalk

Typical profile

A - 0 to 5 inches: silty clay loam
Bt - 5 to 24 inches: silty clay loam
Btss - 24 to 45 inches: clay
Css - 45 to 72 inches: clay

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 12.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F135BY001AR - Poorly Drained Clayey Upland
Hydric soil rating: No

Minor Components

Aqualfs

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: Yes

45—Oktibbeha fine sandy loam, 3 to 8 percent slopes, eroded

Map Unit Setting

National map unit symbol: lyn8
Elevation: 180 to 440 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F

Frost-free period: 190 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition
Oktibbeha and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Oktibbeha

Setting
Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Acid clayey marine deposits derived from chalk

Typical profile
Ap - 0 to 3 inches: fine sandy loam
Bt - 3 to 43 inches: clay
C - 43 to 49 inches: clay
Cr - 49 to 60 inches: bedrock

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 50 inches to paralithic bedrock
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: F135BY001AR - Poorly Drained Clayey Upland
Hydric soil rating: No

50—Ozan fine sandy loam, occasionally flooded

Map Unit Setting
National map unit symbol: lyng
Elevation: 100 to 240 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F
Frost-free period: 190 to 220 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Ozan and similar soils: 90 percent

Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ozan

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 7 inches: fine sandy loam
Eg - 7 to 17 inches: fine sandy loam
Btg - 17 to 72 inches: sandy clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 30 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F133BY012TX - Wet Terrace
Hydric soil rating: Yes

Minor Components

Iuka

Percent of map unit: 5 percent
Ecological site: F133BY014TX - Creek Bottomland
Hydric soil rating: No

Aquents

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: Yes

69—Savannah fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tzrs
Elevation: 50 to 250 feet
Mean annual precipitation: 38 to 61 inches
Mean annual air temperature: 52 to 73 degrees F
Frost-free period: 220 to 260 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Savannah and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Savannah

Setting

Landform: Interfluves
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy marine deposits

Typical profile

Ap - 0 to 9 inches: fine sandy loam
Bt - 9 to 24 inches: loam
Btx - 24 to 59 inches: loam
BC - 59 to 72 inches: sandy loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: 16 to 32 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

Minor Components

Amy

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F133BY017TX - Loamy Bottomland
Hydric soil rating: Yes

85—Trebloc silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: lypp
Elevation: 980 to 2,200 feet
Mean annual precipitation: 48 to 61 inches
Mean annual air temperature: 50 to 74 degrees F
Frost-free period: 190 to 220 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Trebloc and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Trebloc

Setting

Landform: Stream terraces
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loamy marine deposits

Typical profile

A - 0 to 6 inches: silt loam
Btg1 - 6 to 61 inches: silty clay loam
Btg2 - 61 to 72 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 6 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F133BY001TX - Depression
Hydric soil rating: Yes

Minor Components

Kipling

Percent of map unit: 5 percent
Ecological site: F135BY001AR - Poorly Drained Clayey Upland
Hydric soil rating: No

Aquults

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: Yes

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IPaC **U.S. Fish & Wildlife Service**

Endangered Species Act Review

DETERMINATION KEY

AFO Arkansas Multi-Species Determination Key

Release date: December 5, 2023

You completed the latest version of this key, published December 5, 2023, and reached a determination of not applicable for species or critical habitats covered by the key.

This decision key is intended for projects or actions funded, authorized or carried out by federal agencies to help you make effect determinations for listed species and designated critical habitat that may occur in your project area. This decision key is not applicable to after-the-fact project coordination.

The U.S. Fish and Wildlife Service Arkansas Ecological Services Field Office (ARFO) has completed consultations with the Corps of Engineers Little Rock, Memphis and Vicksburg districts and the Farm Service Agency regarding proposed, recurring actions and effects to listed species. The resultant Standard Local Operative Procedures for Endangered Species (SLOPES) and Programmatic Informal Consultation evaluations form the basis of this key. See the links below for detailed information on these consultations.

SLOPES with Little Rock District 2018
Farm Service Agency Statewide Programmatic Consultation 2019
USFS Ouachita National Forest Programmatic Biological Opinion 2010
USFS Ozark St. Francis National Forest Programmatic Biological Opinion 2010
Cooperative Agreement Between USFWS and Arkansas Game and Fish Commission
Arkansas Game and Fish Commission Indiana Bat Programmatic Biological Opinion 2019
Arkansas Species Determination Key Standing Analysis

For projects that meet incorporated criteria, your responses to questions in this key will allow you to make effect determinations for species included in these consultations. More information about section 7(a)(2) and effect determinations is available here and on the Service's website. Reaching an effect determination in the key indicates a project proponent can rely on the above consultations and the Service's concurrence with the resulting determinations. For those species with a resulting determination of "no effect" or "may affect, not likely to adversely affect", the project proponent has satisfied consultation requirements under section 7(a)(2) of the Endangered Species Act for the project. For projects that reach a "may affect" or "may affect, likely to adversely affect" determination for a species, further consultation with ARFO will be required to meet consultation requirement.

Species covered by this key

This key covers the following species, and critical habitat for these species, expected to occur in this project area:

BIRDS
- **Eastern Black Rail** Laterallus jamaicensis ssp. jamaicensis
- **Piping Plover** Charadrius melodus
- **Red-cockaded Woodpecker** Picoides borealis
- **Rufa Red Knot** Calidris canutus rufa

CLAMS
- **Ouachita Rock Pocketbook** Arcidens wheeleri
- **Pink Mucket (pearlymussel)** Lampsilis abrupta
- **Rabbitsfoot** Quadrula cylindrica cylindrica
- **Spectaclecase (mussel)** Cumberlandia monodonta
- **Winged Mapleleaf** Quadrula fragosa

MAMMALS
- **Indiana Bat** Myotis sodalis

The following species, also covered by this key, are not expected to occur in this project area:

- **American Burying Beetle** Nicrophorus americanus
- **Arkansas Fatmucket** Lampsilis powellii
- **Benton County Cave Crayfish** Cambarus aculabrum
- **Curtis Pearlymussel** Epioblasma florentina curtisii
- **Fat Pocketbook** Potamilus capax
- **Geocarpon minimum**
- **Gray Bat** Myotis grisescens
- **Harperella** Ptilimnium nodosum
- **Hell Creek Cave Crayfish** Cambarus zophonastes
- **Least Tern** Sternula antillarum
- **Leopard Darter** Percina pantherina
- **Missouri Bladderpod** Physaria filiformis
- **Neosho Mucket** Lampsilis rafinesqueana
- **Ozark Big-eared Bat** Corynorhinus (=Plecotus) townsendii ingens
- **Ozark Cavefish** Amblyopsis rosae
- **Ozark Hellbender** Cryptobranchus alleganiensis bishopi
- **Pallid Sturgeon** Scaphirhynchus albus
- **Pondberry** Lindera melissifolia
- **Running Buffalo Clover** Trifolium stoloniferum
- **Scaleshell Mussel** Leptodea leptodon
- **Snuffbox Mussel** Epioblasma triquetra
- **Speckled Pocketbook** Lampsilis streckeri
- **Whooping Crane** Grus americana
- **Yellowcheek Darter** Etheostoma moorei

Critical habitats covered by this key

This key covers the critical habitats for the following species expected to occur in this project area:

None

For more information about this determination key, including a list of all potential questions, refer to the detailed overview.

Qualification interview

1. Have you made an effects determination of "no effect" for all species in the area of the project? A "no effect" determination means the project will have no beneficial effect, no short-term adverse effects, and no long-term adverse effects on any of the species on the IPaC-generated species list for the proposed project or those species habitat. A project with effects that cannot be meaningfully measured, detected or evaluated, effects that are extremely unlikely to occur, or entirely beneficial effects should not have a "no effect" determination. (If unsure, select "No").

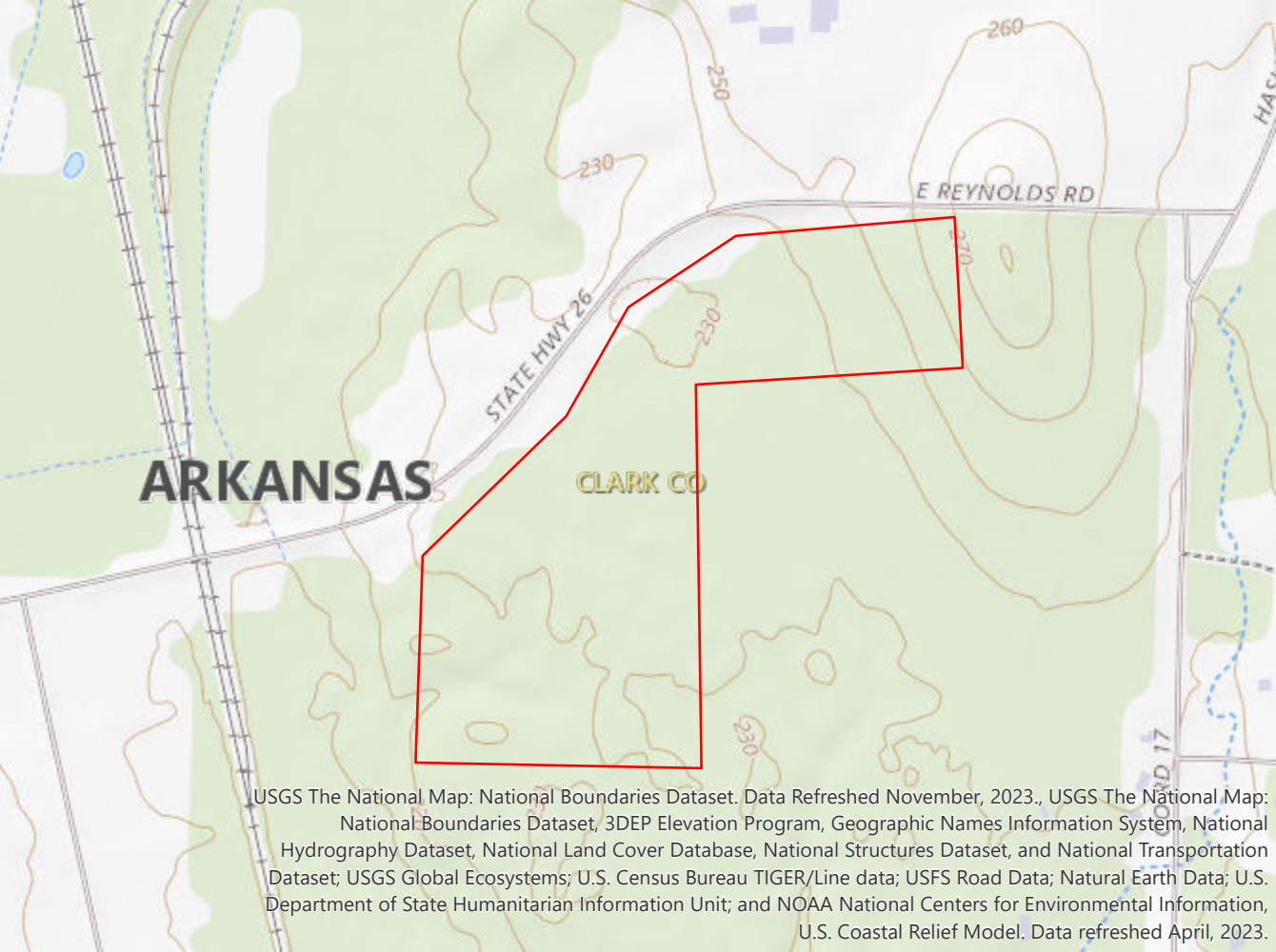
   ⊘ Yes

When the action agency determines its proposed action will not affect a listed species, there is no need to coordinate further with the Service. If listed species will not be directly or indirectly exposed to the proposed action or any resulting environmental changes, an action agency may conclude "no effect" and document the finding, thus completing the section 7 process. For example, if the species or its suitable habitat is not present in the action area and the project does not otherwise present any effects to the species, action agencies typically conclude and document “No Effect - species not present" as their finding."

As documentation of this “no effect” determination print this screen, add it to your project files, and select “exit review” on the progress ribbon to return to the project home page.

If you no longer wish to use this key for your project, you can delete your evaluation.

APPENDIX C

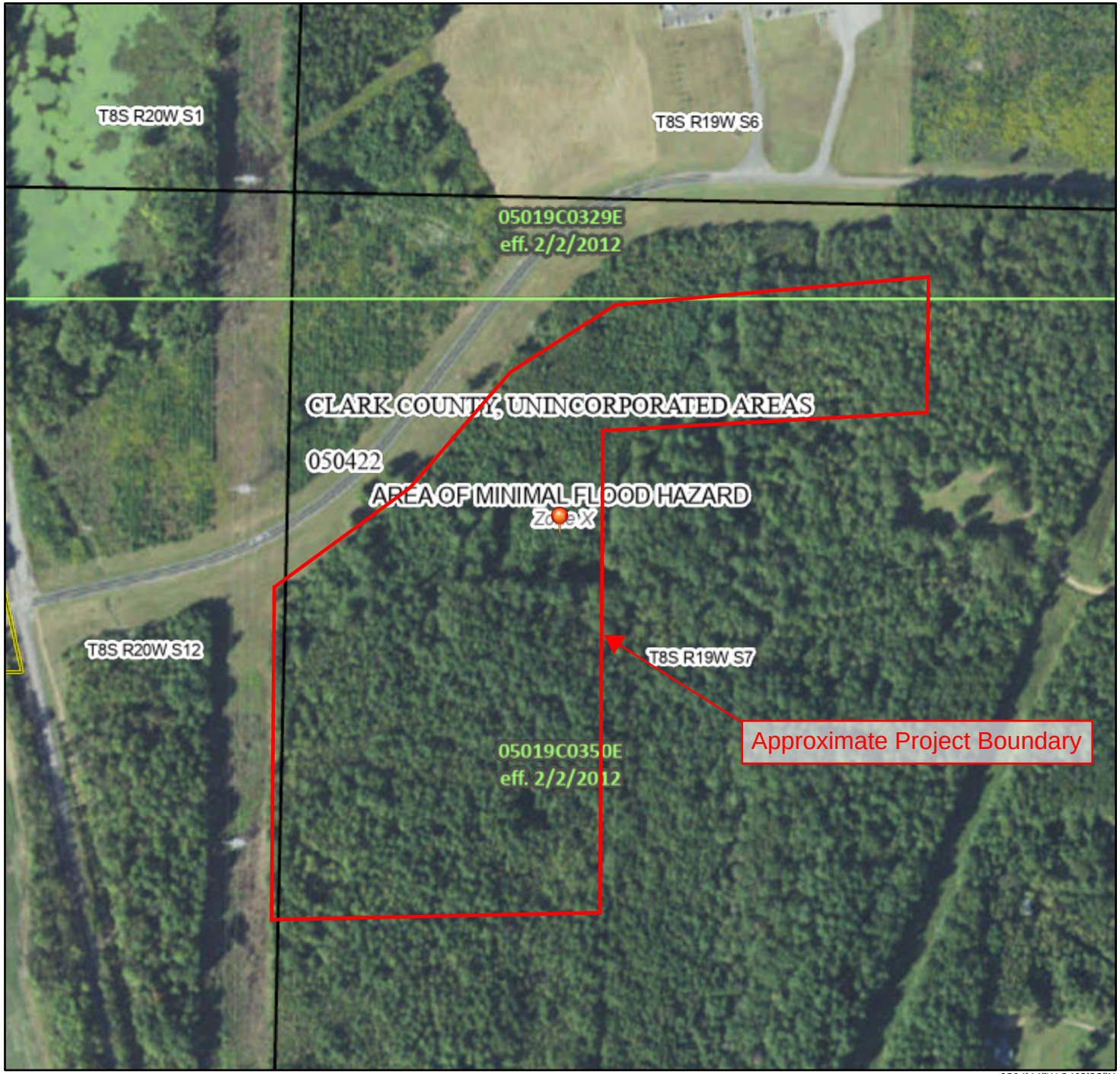


USGS The National Map: National Boundaries Dataset. Data Refreshed November, 2023., USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed April, 2023.

APPENDIX D

National Flood Hazard Layer FIRMette

93°5'21"W 34°3'53"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

93°4'44"W 34°3'23"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

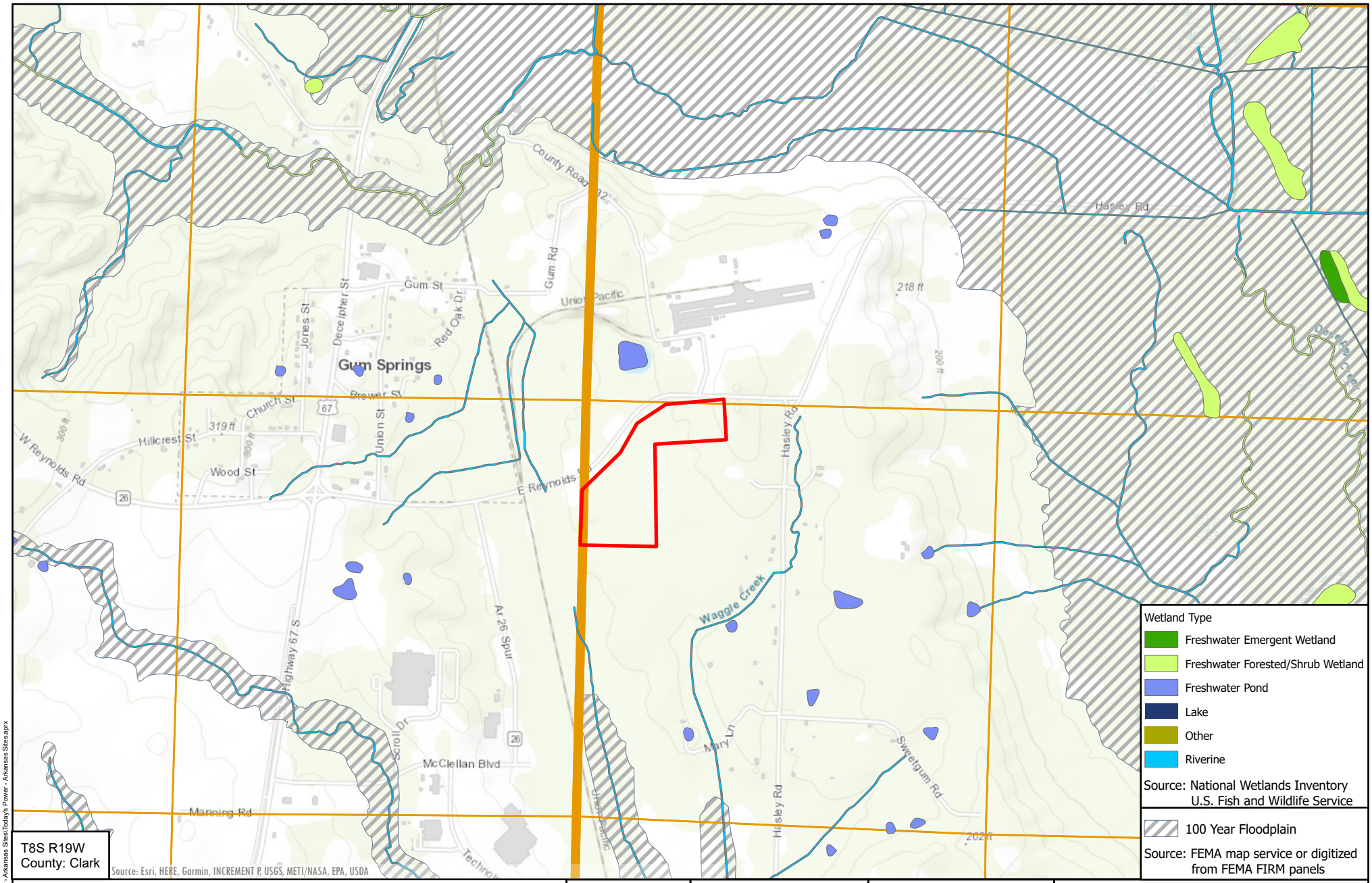
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/23/2023 at 5:15 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX E



T8S R19W
County: Clark

Wetland Type
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Source: National Wetlands Inventory
U.S. Fish and Wildlife Service

100 Year Floodplain

Source: FEMA map service or digitized from FEMA FIRM panels

- Project Boundary
- Township
- Section
- County

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph. 417-888-0645
Fax: 417-888-0657
www.tothassociates.com

DISCLAIMER: This map is for illustrative purposes, and should only be used as such.

Today's Power
Your Energy Partner

MAP BY: scasagrand

DATE: 10/23/2023

Veolia Solar Facility Environmental Impact Map

Map Title: Wetlands

Map Number: SC - 001

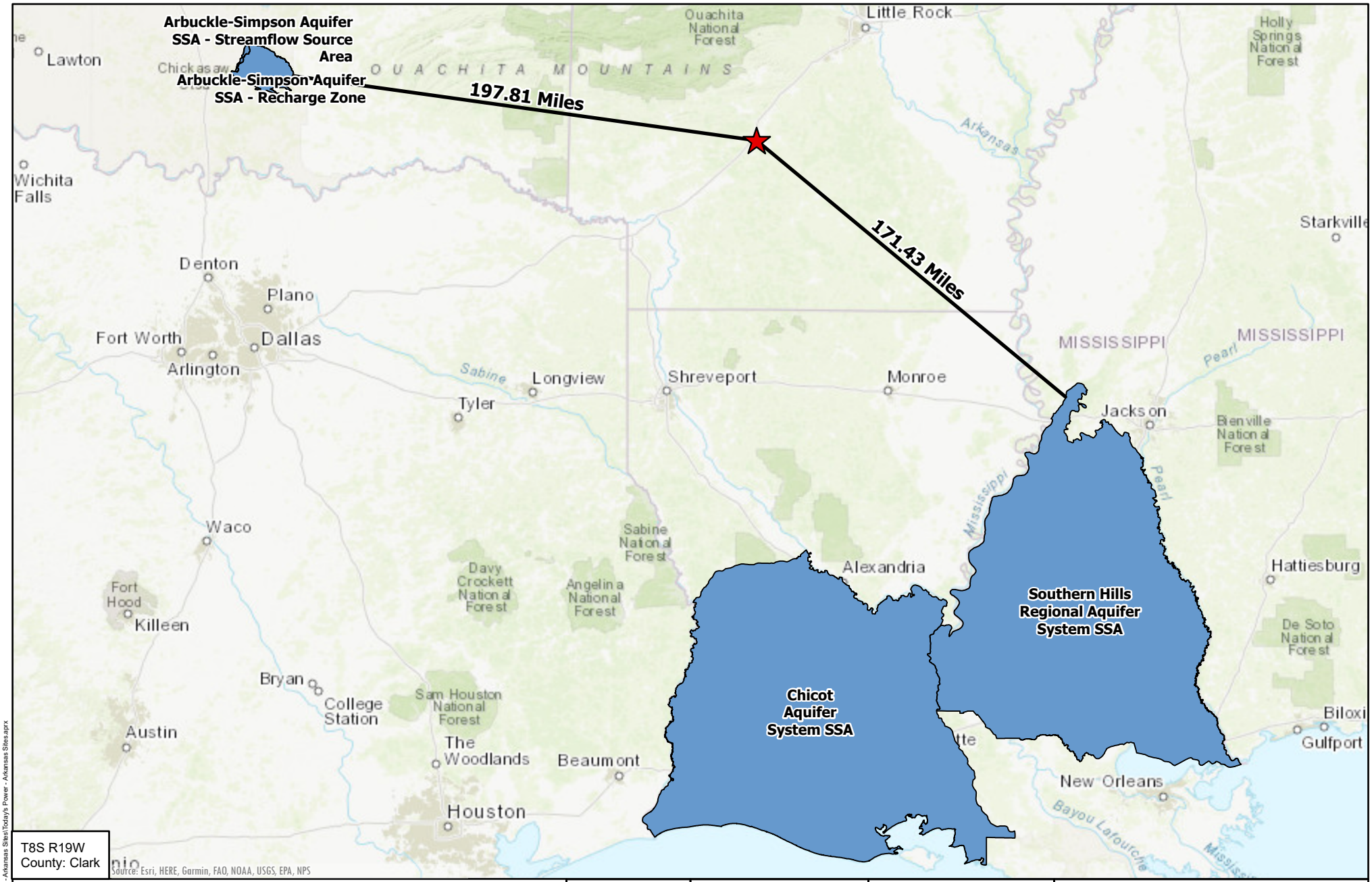
Client:
TODAY'S POWER
NORTH LITTLE ROCK, ARKANSAS
PULASKI

N W E S

0 1,000 2,000 Feet

O:\Today's Power\GIS\ArcGIS Pro\Today's Power - Arkansas Sites\Today's Power - Arkansas Sites.aprx

APPENDIX F



Project Site

Distance

EPA Sole Source Aquifer (2019)

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph. 417-888-0645
Fax: 417-888-0657
www.tothassociates.com

DISCLAIMER: This map is for illustrative purposes, and should only be used as such.

Today's Power
Your Energy Partner

MAP BY: scasagrand

DATE: 10/23/2023

Veolia Solar Facility Environmental Impact Map

Map Title: Sole Source Aquifer

Map Number: SC - 004

Client: TODAY'S POWER
NORTH LITTLE ROCK, ARKANSAS
PULASKI

N W E S

0 175,000 350,000
Feet

O:\Today's Power\GIS\ArcGIS Pro\Today's Power - Arkansas Sites\Today's Power - Arkansas Sites.aprx

APPENDIX G

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480

In Reply Refer To: January 11, 2024
Project Code: 2024-0017827
Project Name: AR Solar – Clark County – VNA, LLC

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
(501) 513-4470

PROJECT SUMMARY

Project Code: 2024-0017827
Project Name: AR Solar – Clark County – VNA, LLC
Project Type: New Constr - Above Ground
Project Description: Solar Facility
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.060790850000004,-93.08470357159493,14z

Counties: Clark County, Arkansas

ENDANGERED SPECIES ACT SPECIES

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Piping Plover *Charadrius melodus* Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red-cockaded Woodpecker *Picoides borealis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered
Rufa Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

REPTILES

NAME	STATUS
Alligator Snapping Turtle *Macrochelys temminckii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4658	Proposed Threatened

CLAMS

NAME	STATUS
Ouachita Fanshell *Cyprogenia sp. cf. aberti*	Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.	
Species profile: https://ecos.fws.gov/ecp/species/10889	
Ouachita Rock Pocketbook *Arcidens wheeleri*	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/4509	
Pink Mucket (pearlymussel) *Lampsilis abrupta*	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/7829	
Rabbitsfoot *Quadrula cylindrica cylindrica*	Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.	
Species profile: https://ecos.fws.gov/ecp/species/5165	
Spectaclecase (mussel) *Cumberlandia monodonta*	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/7867	
Winged Mapleleaf *Quadrula fragosa*	Endangered
Population: Wherever found, except where listed as an experimental population	
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/4127	

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9743	

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Rural Utilities Service
Name: Trenton Johnson
Address: 1550 E Republic Rd
City: Springfield
State: MO
Zip: 65804
Email tjohnson@tothassociates.com
Phone: 4178880645

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arkansas Ecological Services Field Office
110 South Amity Suite 300
Conway, AR 72032-8975
Phone: (501) 513-4470 Fax: (501) 513-4480

In Reply Refer To:
Project code: 2024-0017827
Project Name: Veolia Solar Facility

November 17, 2023

Federal Nexus: yes
Federal Action Agency (if applicable): Rural Utilities Service

Subject: Record of project representative's no effect determination for 'Veolia Solar Facility'

Dear Trenton Johnson:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on November 17, 2023, for 'Veolia Solar Facility' (here forward, Project). This project has been assigned Project Code 2024-0017827 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A

consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Alligator Snapping Turtle *Macrochelys temminckii* Proposed Threatened
- Eastern Black Rail *Laterallus jamaicensis ssp. jamaicensis* Threatened
- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Ouachita Fanshell *Cyprogenia sp. cf. aberti* Threatened
- Ouachita Rock Pocketbook *Arcidens wheeleri* Endangered
- Pink Mucket (pearlymussel) *Lampsilis abrupta* Endangered
- Piping Plover *Charadrius melodus* Threatened
- Rabbitsfoot *Quadrula cylindrica cylindrica* Threatened
- Red-cockaded Woodpecker *Picoides borealis* Endangered
- Rufa Red Knot *Calidris canutus rufa* Threatened
- Spectaclecase (mussel) *Cumberlandia monodonta* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Winged Mapleleaf *Quadrula fragosa* Endangered

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/ coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical

habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Arkansas Ecological Services Field Office and reference Project Code 2024-0017827 associated with this Project.

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Veolia Solar Facility

2. Description

The following description was provided for the project 'Veolia Solar Facility':

Solar Facility

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.06072915,-93.0847413683671,14z

DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (Myotis septentrionalis). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

   Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   No

2. The action area does not overlap with an area for which U.S. Fish and Wildlife Service currently has data to support the presumption that the northern long-eared bat is present. Are you aware of other data that indicates that northern long-eared bats (NLEB) are likely to be present in the action area?

   Bat occurrence data may include identification of NLEBs in hibernacula, capture of NLEBs, tracking of NLEBs to roost trees, or confirmed NLEB acoustic detections. Data on captures, roost tree use, and acoustic detections should post-date the year when white-nose syndrome was detected in the relevant state. With this question, we are looking for data that, for some reason, may have not yet been made available to U.S. Fish and Wildlife Service.

   No

3. Does any component of the action involve construction or operation of wind turbines?

   Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   No

4. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   Yes

5. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   No

6. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   No

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   No

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   No

9. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the effects of any activities that would not occur but for the proposed action.

   If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

   Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of Effects of the Action can be found here: https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions

   Yes

PROJECT QUESTIONNAIRE

Will all project activities by completed by April 1, 2024?

Yes

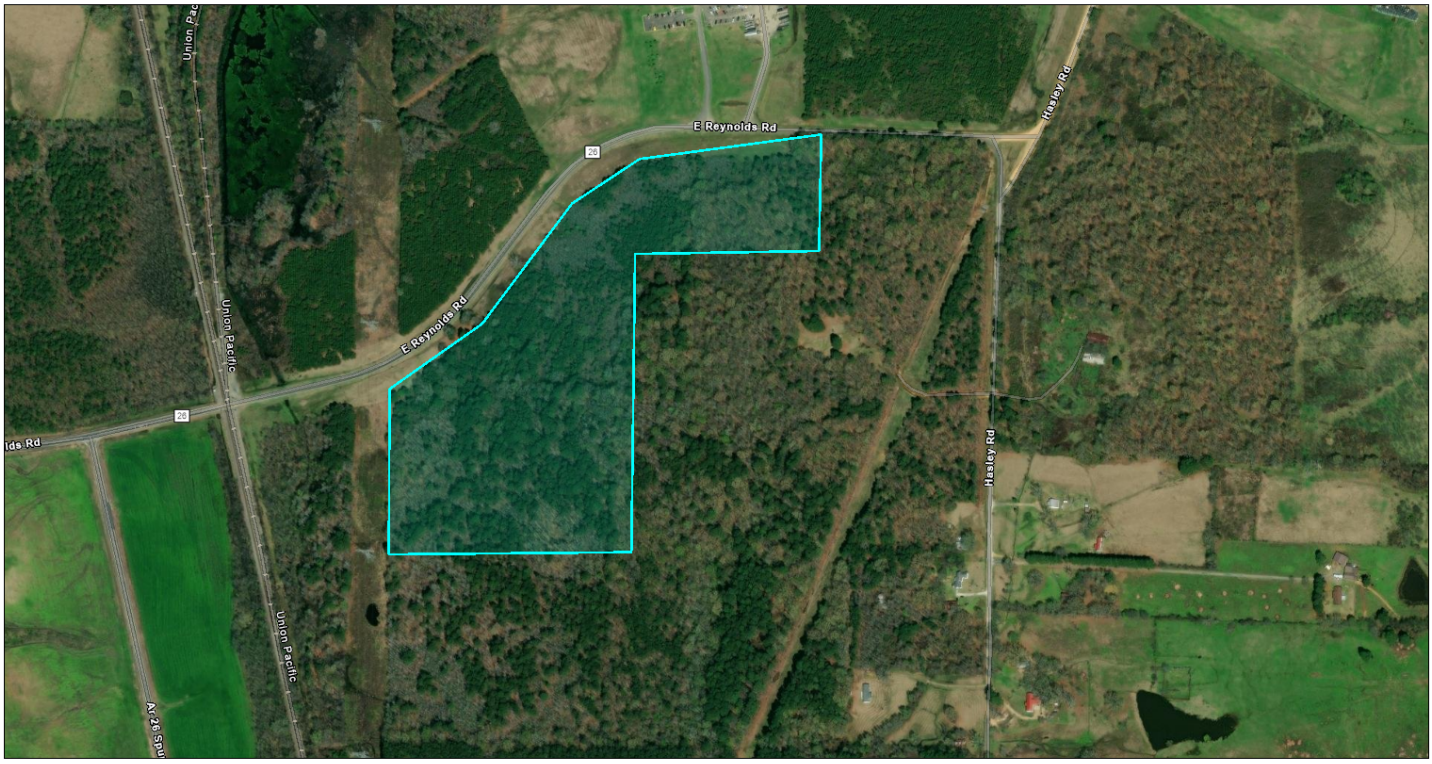
IPAC USER CONTACT INFORMATION

Agency: Rural Utilities Service
Name: Trenton Johnson
Address: 1550 E Republic Rd
City: Springfield
State: MO
Zip: 65804
Email tjohnson@tothassociates.com
Phone: 4178880645

APPENDIX H

NEPAssist Report

A3 Landscape



November 7, 2023

Project 1

1:5,733

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

Input Coordinates: 34.058333,-93.086865,34.060315,-93.086855,34.061098,-93.085514,34.062537,-93.084215,34.063071,-93.083239,34.063364,-93.080611,34.061969,-93.080643,34.061933,-93.083303,34.058360,-93.083357,34.058333,-93.086865

Project Area	0.06 sq mi
Within an Ozone 1-hr (1979 standard) Non-Attainment/Maintenance Area?	no
Within an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within an Ozone 8-hr (2015 standard) Non-Attainment/Maintenance Area?	no
Within a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within a CO Annual (1971 standard) Non-Attainment/Maintenance Area?	no
Within a NO2 Annual (2071 standard) Non-Attainment/Maintenance Area?	no
Within a Federal Land?	no
Within an impaired stream?	no
Within an impaired waterbody?	no
Within a waterbody?	no
Within a stream?	no
Within an NWI wetland?	Available Online
Within a Brownfields site?	no

Within a Superfund site?	no
Within a Toxic Release Inventory (TRI) site?	no
Within a water discharger (NPDES)?	no
Within a hazardous waste (RCRA) facility?	no
Within an air emission facility?	no
Within a school?	no
Within an airport?	no
Within a hospital?	no
Within a designated sole source aquifer?	no
Within a historic property on the National Register of Historic Places?	no
Within a Land Cession Boundary?	yes
Within a tribal area (lower 48 states)?	no
Within the service area of a mitigation or conservation bank?	no
Within the service area of an In-Lieu-Fee Program?	no
Within a Public Property Boundary of the Formerly Used Defense Sites?	no
Within a Munitions Response Site?	no
Within an Essential Fish Habitat (EFH)?	no
Within a Habitat Area of Particular Concern (HAPC)?	no
Within an EFH Area Protected from Fishing (EFHA)?	no
Within a Bureau of Land Management Area of Critical Environmental Concern?	no
Within an ESA-designated Critical Habitat Area per U.S. Fish & Wildlife Service?	no
Within an ESA-designated Critical Habitat river, stream or water feature per U.S. Fish & Wildlife Service?	no

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APPENDIX I

United States Census Bureau

QuickFacts

Clark County, Arkansas

QuickFacts provides statistics for all states and counties. Also for cities and towns with a ***population of 5,000 or more***.

All Topics	Clark County, Arkansas
Population estimates, July 1, 2023, (V2023)	NA
PEOPLE	
Population	
Population estimates, July 1, 2023, (V2023)	NA
Population Estimates, July 1, 2022, (V2022)	21,250
Population estimates base, April 1, 2020, (V2023)	NA
Population estimates base, April 1, 2020, (V2022)	21,447
Population, percent change - April 1, 2020 (estimates base) to July 1, 2023, (V2023)	NA
Population, percent change - April 1, 2020 (estimates base) to July 1, 2022, (V2022)	-0.9%
Population, Census, April 1, 2020	21,446
Population, Census, April 1, 2010	22,995
Age and Sex	
Persons under 5 years, percent	5.3%
Persons under 18 years, percent	20.0%
Persons 65 years and over, percent	16.7%
Female persons, percent	52.0%
Race and Hispanic Origin	
White alone, percent	72.5%
Black or African American alone, percent (a)	23.7%
American Indian and Alaska Native alone, percent (a)	0.7%
Asian alone, percent (a)	0.8%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.5%
Two or More Races, percent	1.9%
Hispanic or Latino, percent (b)	5.4%
White alone, not Hispanic or Latino, percent	68.0%
Population Characteristics	
Veterans, 2018-2022	933
Foreign born persons, percent, 2018-2022	2.2%
Housing	
Housing units, July 1, 2022, (V2022)	10,057
Owner-occupied housing unit rate, 2018-2022	62.4%
Median value of owner-occupied housing units, 2018-2022	$143,300
Median selected monthly owner costs -with a mortgage, 2018-2022	$1,158
Median selected monthly owner costs -without a mortgage, 2018-2022	$388
Median gross rent, 2018-2022	$690
Building permits, 2022	4
Families & Living Arrangements	
Households, 2018-2022	7,955
Persons per household, 2018-2022	2.38
Living in same house 1 year ago, percent of persons age 1 year+, 2018-2022	82.6%
Language other than English spoken at home, percent of persons age 5 years+, 2018-2022	4.2%
Computer and Internet Use	
Households with a computer, percent, 2018-2022	87.5%
Households with a broadband Internet subscription, percent, 2018-2022	77.7%
Education	
High school graduate or higher, percent of persons age 25 years+, 2018-2022	89.7%
Bachelor's degree or higher, percent of persons age 25 years+, 2018-2022	26.4%
Health	
With a disability, under age 65 years, percent, 2018-2022	16.0%
Persons without health insurance, under age 65 years, percent	10.4%

Economy	
In civilian labor force, total, percent of population age 16 years+, 2018-2022	57.9%
In civilian labor force, female, percent of population age 16 years+, 2018-2022	53.6%
Total accommodation and food services sales, 2017 ($1,000) (c)	55,875
Total health care and social assistance receipts/revenue, 2017 ($1,000) (c)	76,863
Total transportation and warehousing receipts/revenue, 2017 ($1,000) (c)	21,905
Total retail sales, 2017 ($1,000) (c)	376,931
Total retail sales per capita, 2017 (c)	$16,953
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2018-2022	21.3
Income & Poverty	
Median household income (in 2022 dollars), 2018-2022	$48,071
Per capita income in past 12 months (in 2022 dollars), 2018-2022	$24,532
Persons in poverty, percent	⚠ 20.3%

BUSINESSES

Businesses	
Total employer establishments, 2021	531
Total employment, 2021	6,394
Total annual payroll, 2021 ($1,000)	251,043
Total employment, percent change, 2020-2021	-5.0%
Total nonemployer establishments, 2020	1,326
All employer firms, Reference year 2017	482
Men-owned employer firms, Reference year 2017	225
Women-owned employer firms, Reference year 2017	S
Minority-owned employer firms, Reference year 2017	S
Nonminority-owned employer firms, Reference year 2017	385
Veteran-owned employer firms, Reference year 2017	S
Nonveteran-owned employer firms, Reference year 2017	331

GEOGRAPHY

Geography	
Population per square mile, 2020	24.8
Population per square mile, 2010	26.6
Land area in square miles, 2020	865.97
Land area in square miles, 2010	866.07
FIPS Code	05019

About datasets used in this table

Value Notes

⚠ Methodology differences may exist between data sources, and so estimates from different sources are not comparable.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info ⓘ icon to the left of each row in TAI learn about sampling error.

The vintage year (e.g., V2023) refers to the final year of the series (2020 thru 2023). Different vintage years of estimates are not comparable.

In Vintage 2022, as a result of the formal request from the state, Connecticut transitioned from eight counties to nine planning regions. For more details, please see the Vintage 2022 release notes available here: Release Notes.

Users should exercise caution when comparing 2018-2022 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2022 5-year ACS Comparison Guidance page.

Fact Notes

(a)	Includes persons reporting only one race
(c)	Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data
(b)	Hispanics may be of any race, so also are included in applicable race categories

Value Flags

-	Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ende
F	Fewer than 25 firms
D	Suppressed to avoid disclosure of confidential information
N	Data for this geographic area cannot be displayed because the number of sample cases is too small.
FN	Footnote on this item in place of data
X	Not applicable
S	Suppressed; does not meet publication standards
NA	Not available
Z	Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, Stat Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

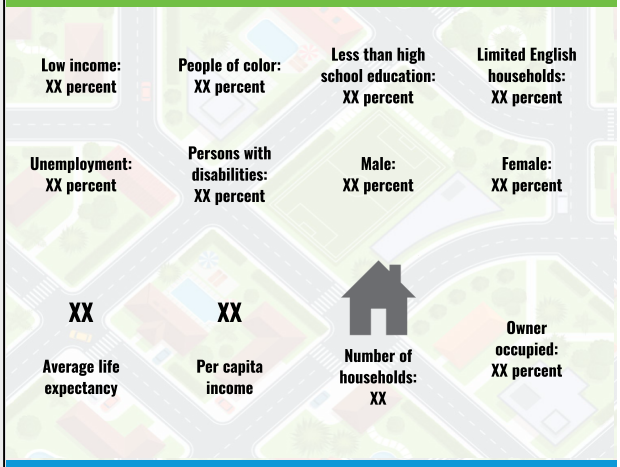
EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

The area is too small or sparsely populated, or these data are not available in the national dataset. Cannot generate an EJScreen chart or report.

Area reserved for map

COMMUNITY INFORMATION



BREAKDOWN BY RACE

White: XX%
Black: XX%
American Indian: XX%
Asian: XX%
Hawaiian/Pacific Islander: XX%
Other race: XX%
Two or more races: XX%
Hispanic: XX%

BREAKDOWN BY AGE

From Ages 1 to 4	XX%
From Ages 1 to 18	XX%
From Ages 18 and up	XX%
From Ages 65 and up	XX%

LIMITED ENGLISH SPEAKING BREAKDOWN

Speak Spanish	XX%
Speak Other Indo-European Languages	XX%
Speak Asian-Pacific Island Languages	XX%
Speak Other Languages	XX%

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	XX%
Spanish	XX%
French, Haitian, or Cajun	XX%
German or other West Germanic	XX%
Russian, Polish, or Other Slavic	XX%
Other Indo-European	XX%
Korean	XX%
Chinese (including Mandarin, Cantonese)	XX%
Vietnamese	XX%
Tagalog (including Filipino)	XX%
Other Asian and Pacific Island	XX%
Arabic	XX%
Other and Unspecified	XX%
Total Non-English	XX%

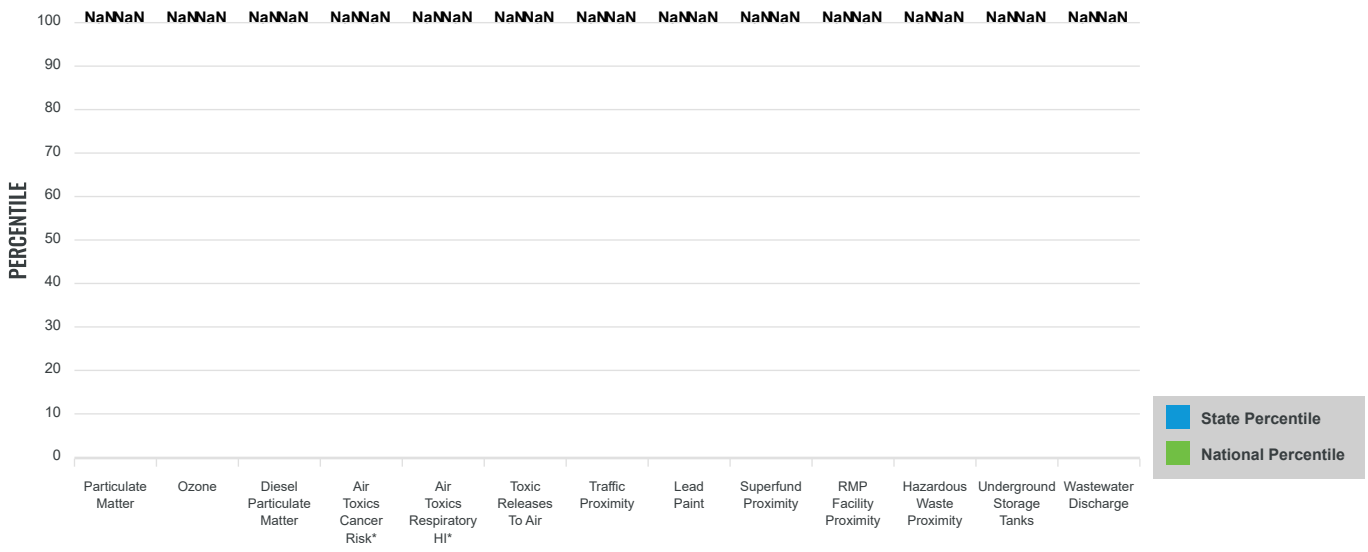
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

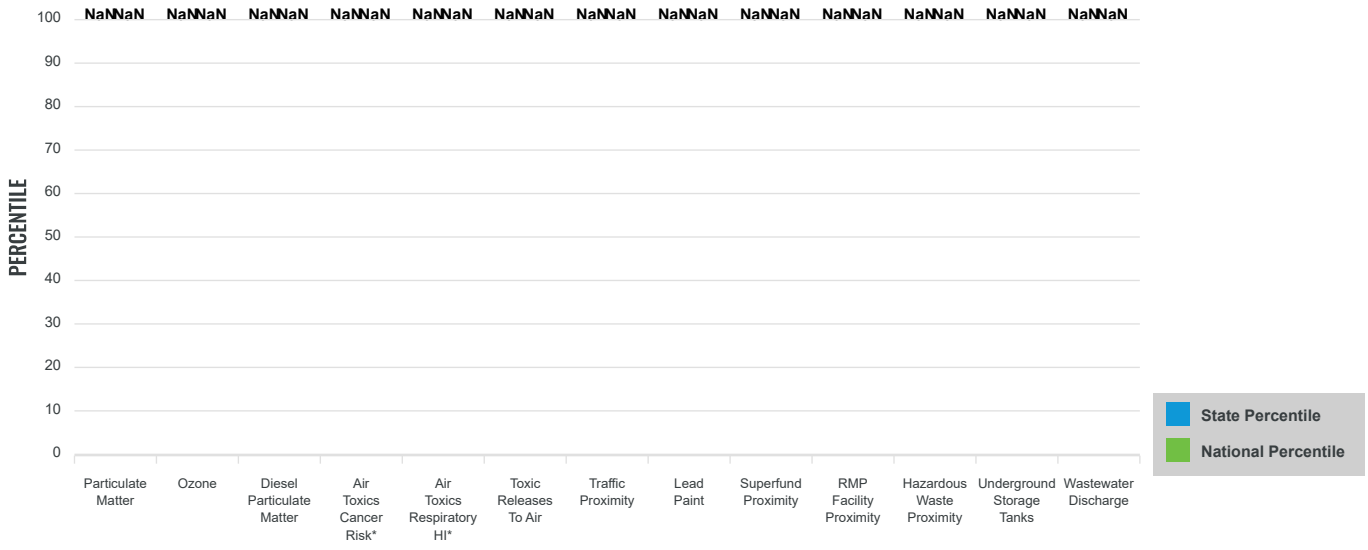
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for XX

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	XX	XX	XX	XX	XX
Ozone (ppb)	XX	XX	XX	XX	XX
Diesel Particulate Matter (µg/m^3)	XX	XX	XX	XX	XX
Air Toxics Cancer Risk* (lifetime risk per million)	XX	XX	XX	XX	XX
Air Toxics Respiratory HI*	XX	XX	XX	XX	XX
Toxic Releases to Air	NaN	NaN	NaN	NaN	NaN
Traffic Proximity (daily traffic count/distance to road)	NaN	NaN	NaN	NaN	NaN
Lead Paint (% Pre-1960 Housing)	XX	XX	XX	XX	XX
Superfund Proximity (site count/km distance)	XX	XX	XX	XX	XX
RMP Facility Proximity (facility count/km distance)	XX	XX	XX	XX	XX
Hazardous Waste Proximity (facility count/km distance)	XX	XX	XX	XX	XX
Underground Storage Tanks (count/km^2)	XX	XX	XX	XX	XX
Wastewater Discharge (toxicity-weighted concentration/m distance)	XX	XX	XX	XX	XX
SOCIOECONOMIC INDICATORS					
Demographic Index	XX%	XX%	XX	XX%	XX
Supplemental Demographic Index	XX%	XX%	XX	XX%	XX
People of Color	XX%	XX%	XX	XX%	XX
Low Income	XX%	XX%	XX	XX%	XX
Unemployment Rate	XX%	XX%	XX	XX%	XX
Limited English Speaking Households	XX%	XX%	XX	XX%	XX
Less Than High School Education	XX%	XX%	XX	XX%	XX
Under Age 5	XX%	XX%	XX	XX%	XX
Over Age 64	XX%	XX%	XX	XX%	XX
Low Life Expectancy	XX%	XX%	XX	XX%	XX

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

Sites reporting to EPA within defined area:

Superfund XX
Hazardous Waste, Treatment, Storage, and Disposal Facilities XX
Water Dischargers XX
Air Pollution XX
Brownfields XX
Toxic Release Inventory XX

Other community features within defined area:

Schools XX
Hospitals XX
Places of Worship XX

Other environmental data:

Air Non-attainment XX
Impaired Waters XX

Selected location contains American Indian Reservation Lands* XX
Selected location contains a "Justice40 (CEJST)" disadvantaged community XX
Selected location contains an EPA IRA disadvantaged community XX

Report for XX

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	XX	XX	XX	XX	XX
Heart Disease	XX	XX	XX	XX	XX
Asthma	XX	XX	XX	XX	XX
Cancer	XX	XX	XX	XX	XX
Persons with Disabilities	XX	XX	XX	XX	XX

CLIMATE INDICATORS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	XX	XX	XX	XX	XX
Wildfire Risk	XX	XX	XX	XX	XX

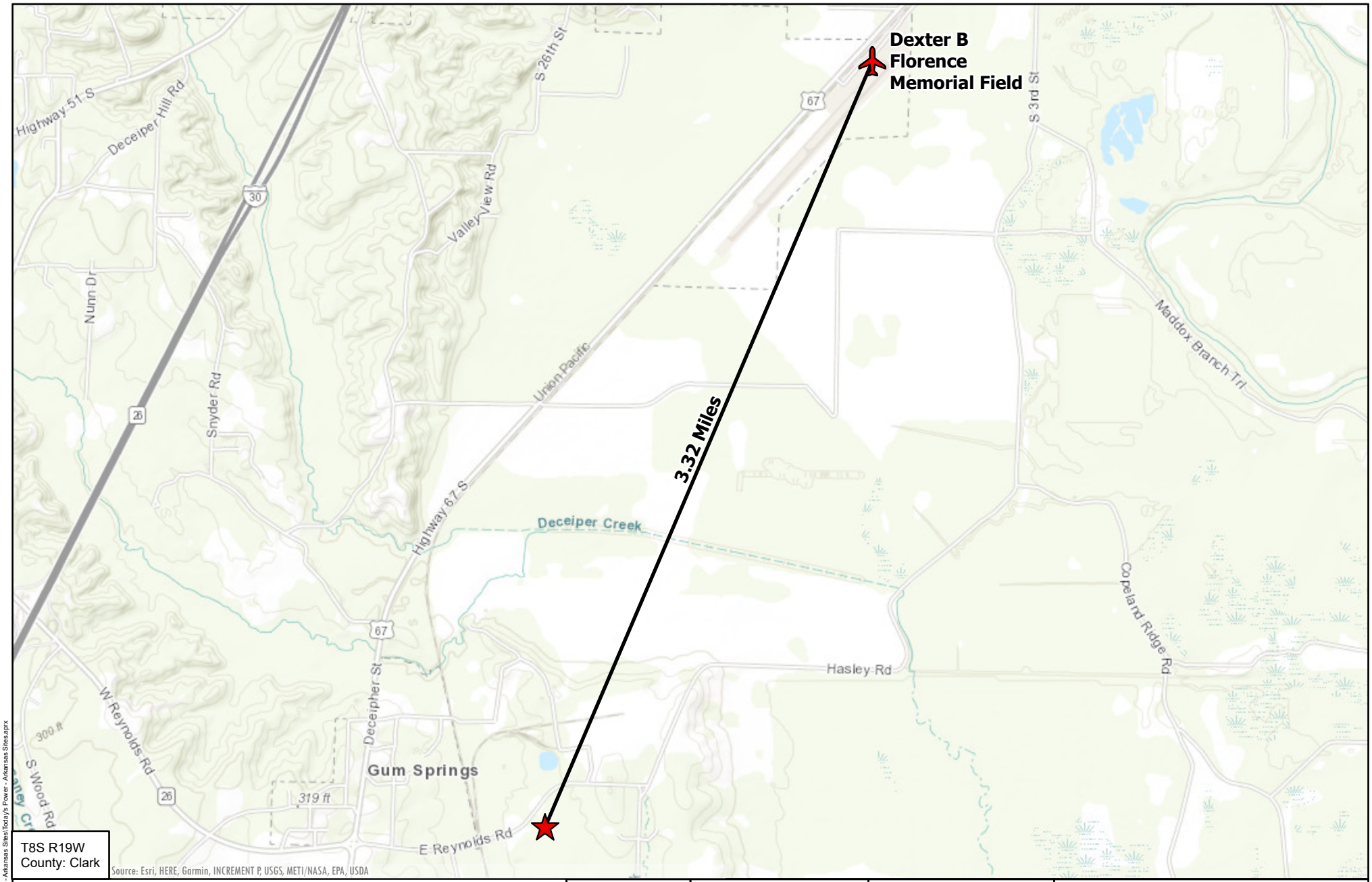
CRITICAL SERVICE GAPS

INDICATOR	HEALTH VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	XX	XX	XX	XX	XX
Lack of Health Insurance	XX	XX	XX	XX	XX
Housing Burden	XX	N/A	N/A	N/A	N/A
Transportation Access	XX	N/A	N/A	N/A	N/A
Food Desert	XX	N/A	N/A	N/A	N/A

Footnotes

Report for XX

APPENDIX J



T8S R19W
County: Clark

Airport
Project Location
Distance

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph. 417-888-0645
Fax: 417-888-0657
www.tothassociates.com

DISCLAIMER: This map is for illustrative purposes, and should only be used as such.

Today's Power
Your Energy Partner

MAP BY: scasagrand

DATE: 10/23/2023

Veolia Solar Facility Environmental Impact Map

Map Title: Airport Proximity

Map Number: SC - 003

Client:
TODAY'S POWER
NORTH LITTLE ROCK, ARKANSAS
PULASKI

N W E S

0 1,650 3,300
Feet

O:\Today's Power\GIS\ArcGIS Pro\Today's Power - Arkansas Sites\Today's Power - Arkansas Sites.aprx